

Miniature War Game Rules

Playing Miniature War Games in Scale

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Michael Cady



Introduction

Michael Cady



Acknowledgements: I want to acknowledge the help I have had from many war gamers over the more than sixty-year evolution of these rules. Their patience was appreciated as we tried out (and continue to try out) variations of these rules.

I especially need to recognize the contribution of Bob McClure, to whom I dedicate these rules. Much of the playability found in these rules comes from Bob's willingness to try endless variations of the rules, as I adjusted and refined them. Although we played hundreds of games together no two were ever identical.

I also need to thank *Joseph Morschauser* ([How to Play War Games in Miniature](#), 1962) and *H.G. Wells* ([Little Wars](#), 1913) for these two books that put me on the path of miniature war gaming.

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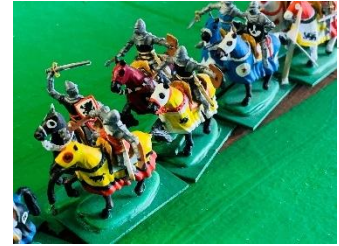
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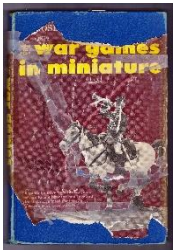
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The Genesis of These Rules:

"Mounted French Knights shift their lances to the attack position. Their horses paw the soft earth. Suddenly, with a roar, the knights charge! Across the field stands a line of English bowmen. They draw back the strings of the longbows and let fly the first hail of arrows."



This is how the first chapter of How To Play War Games in Miniature, by Joseph Morschauser III begins. At the age of twelve I received a copy of this book from my older brother. After reading it I stopped "playing with toy soldiers" and began to play *Miniature War Games*. The evolution of the rules you have before you began over sixty years ago, with the simple rules I found in Joseph Morschauser's excellent book.

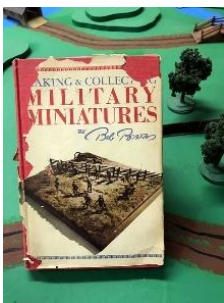


Although the rules you find here have been significantly expanded over the years, the basic structure of How To Play War Games in Miniature can still be found within - figures operate in *units*; a roll of *six* is a *hit*, and to survive a melee you must roll your *melee point* or less.

I am indebted to Mr. Morshauser III for starting me on the path toward miniature war gaming. I especially support following the recommendation he makes in the book:

"The rules and regulations of war gaming in miniature in this book are meant to be only a start . . . if you develop like most war gamers you will not be satisfied with basic essentials. You will want to go farther, to make up your own rules or make changes in those in this book." Morschauser, Joseph. How To Play War Games in Miniature. (p.88)

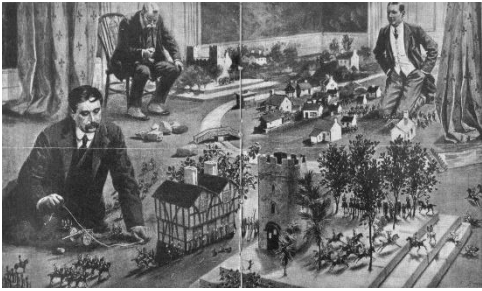
This is a recommendation which I have followed! Over many years of play, my rules have evolved as our war games became more sophisticated. **New rules became required as we added elements to the game. I encourage you to do the same. Add to these rules - subtract from them - change them as you see fit, after all - it's your game!**



Another influence on the development of my war gaming came from Bob Bard's book, Making and Collecting Military Miniatures. From his great photographs of war games figures in action, I found the encouragement to buy and paint better miniatures, and to attempt to present a more attractive war game table. The aesthetic aspects of miniature war gaming should never be underestimated. Finely painted miniatures, on a well-crafted game table, will always offer a more aesthetically pleasing game than any two-dimensional cardboard *boxed* war game.

Another acknowledgement must be made to the famous writer and war gamer - H.G. Wells. Wells has had the greatest influence of all on modern war gaming. In Making and Collecting Military Miniatures Bob Bard calls H.G. Wells, the "dean of War Games as they are played today." After reading H.G. Wells' book, Little Wars, you can see why. All the basic concepts found in miniature war gaming today seem to be described first by H. G. Wells.

Little Wars is an interesting and fun book to read and is clearly the genesis of modern table-top war gaming. The book also provides some wonderful photos of H.G. using small breech-loading cannons firing "inch long wooden cylinders, to take out his opponent's figures," in his backyard. In it he brags that he can hit a toy soldier "nine times out of ten!"



(Photo of "Little Wars" from Wikipedia: It has a very good article titled: "war game." Another good article: Scribner's Magazine December 1898 "Stevenson At Play", by Lloyd Osbourne, regarding Robert Louis

Stevenson's enthusiasm for War Gaming. You might also look for "The New York Times, May 3, 2013, article "Basic Training" by Mark Wallace. It discusses H.G. Wells "Little Wars" and war gaming at the Royal Military Academy in Sandhurst, England.)

The book also provides some important historical perspectives on the development of miniature war gaming. In the foreword of the 1970 reprint of Little Wars, science writer Isaac Asimov discusses the innocence of the age in which the book was written (1913). Asimov reminds us that Little Wars was written before an entire generation of young men died in the trenches of Europe. The book represents an example of the innocence of the *pre*-Great War age.

Sadly, within one year of the publication of Little Wars the Great War/World War One (1914-1918) began. It would not end until it devastated much of the world. After it ended the world would never be quite the same. Mr. Asimov comments upon how H.G. Wells encouraged others to play his Little War, despite his *own ardent opposition to war*. Wells wrote a book on miniature war, says Asimov, although he was "*a famous writer of science fiction, social novels, and popular history - and an ardent pacifist and humanitarian.*"

How does one explain the dichotomy of a pacifist playing war games? Simple, **Asimov responds**, "*In an age where the threat nuclear weapons is as real as ever,*" he asks, "*why can we not innocently play once again in the fashion of an older day . . . harmlessly expend the aggressive passions we must somehow control? To replace war and perhaps . . . even do a micro-bit to prevent them.*"

Why not indeed?

War gaming does not promote war. It is a game that encourages the study of history. It is a

social game which encourages artistic expression and lots of historical discussions. It is a logical game that encourages the development of strategic thinking. As H.G. Wells observes, on page 96 of Little Wars:

"It is for you, dear reader, now to get a floor, a friend, some soldiers and some guns . . . How much better is this amiable miniature than the Real Thing! Here is a homeopathic remedy for the imaginative strategist. Here is the premeditation, the thrill, the strain of accumulating victory or disaster - and no smashed nor sanguinary bodies, no shattered fine buildings nor devastated country sides, no petty cruelties, none of that awful universal boredom and embitterment, that tiresome delay or stoppage or embarrassment of every gracious, bold, sweet, and charming thing, that we who are old enough to remember a real modern war know to be the reality of belligerence."

"You have only to play at Little Wars three or four times to realize just what a blundering thing Great War must be." Little Wars (p.100.)

Commentary:

Workable war game rules are difficult to create. **It is always easier to write rules (and more rules, and more rules) than it is to really make your rules work on the game table!**

Before you attempt to use the rules provided here, I offer an important quote from Little Wars. It was an accurate comment regarding the difficulty of writing war game rules in 1913, and it still rings true today.

H.G. Wells states,

"At last our rules have reached stability, and we regard them now with the virtuous pride of men who have persisted in a great undertaking and arrived at precision after much tribulation. There is not a piece of constructive legislation in the world, not a solitary attempt to meet a complicated problem, that we do not now regard the more charitably for our efforts to get a right result from this apparently easy and puerile business of fighting with tin soldiers on the floor." (Little Wars, p. 36)

This could not be more true - or better said. Rules, including these rules, are guidelines when playing miniature war games. All rules must be interpreted by the players in a reasonable manner in unusual situations. Adjustments should be made based upon authenticity, the intent of the rules, and what would be fair for both sides (and therefore make for a more enjoyable game.)

Today, in 2026, there are hundreds of sets of rules for playing war games. Many are very specific, covering a brief period of history or even a single engagement. The rules you have here are intended to be general. They can be used for battles from ancient times up to Napoleonic Period. Being more general in nature they are not as tuned to very specific times and places. The benefit of this is that you can have tabletop battles using a great variety of

figures from different historical periods. The more specific a set of rules the more authenticity you might find but they also become more complicated and that complication can take away from the enjoyment of the game. The philosophy behind these rules is to create a framework that once used can be quickly adapted to other time periods. This approach also tends to keep the game moving. I have seen very specific and complex rules where armies don't seem to do anything for hours. Our games take three to six hours depending on the size of the armies and experience of the players.

If fighting a miniature war game sounds interesting, you already have the most important requirement for a successful war game - the desire. Next you will need some figures and a set of rules. The rules I offer are designed to produce a game that while maintaining sufficient realism to support a sense of authenticity and yet are relatively fast paced and easy to learn.



What is miniature *historical* war gaming?

A miniature wargame attempts to recreate the strategy and tactics of historical battles, or period of history on a table using miniature hills, rivers, forests, and scale figures. Figures represent units of infantry, cavalry, artillery and other types of soldiers and weapons. A rule book (such as this one) prescribes the abilities and weaknesses of each of the miniature figures used in the game. Dice are used to introduce an element of chance when determining the likelihood of results. (*For example: What would be the likelihood of an archer firing at 2/3rds their maximum range and hitting a cavalry piece?*)

If you enjoy chess, war gaming may be of special interest to you. Chess is the ancestor of all modern war games, but as demanding as chess is it offers a very controlled type of game. A war game can be at least as challenging as a game of chess, while also being a lot *less* restrictive. In both chess and miniature war gaming pieces represent aspects of an army and act according to established rules which simulate aspects of their historical capabilities. A war game uses larger numbers of figures, figure-types, and combines them with the effects of terrain and adds the element of chance. This produces a game which offers a challenge equal to, or greater than, any other game of strategy.

No two war games need ever be the same. There are endless varieties of war game scenarios which you can play. You may attempt to recreate an actual historical battle, or you may make up one of your own. You can experiment with different armies and rules, as you wish.

Although a little luck on your die rolls is always helpful, most of the success of your miniature army will depend upon the skill of the player. Your ability to effectively coordinate pieces, take advantage of the geography, and to focus on the objective, will usually determine your

success or failure - *not* the die roll.

In scale, a miniature war game can encompass an entire battle, or just a small skirmish. Many figure scales (typically between 15 mm. and 54 mm.) are available commercially. At one time the traditional 54 mm. figures were common. Today the less expensive, yet finely detailed, smaller scales are more popular. **These rules were developed using 20/25 mm figures, however if each side is using the same scale figures, these rules should work with 15 mm to 28 mm. If desired, the ranges used and movement factors would be adjusted to accommodate smaller figures.** A quick way to do this would be to reduce everything by a percentage such as 10%, (or another ratio of your choice) where 30 cm becomes 27 cm. (30 cm - 10% or 3 cm becomes 27 cm.)

A miniature wargame can be played with any number of players if you have enough time and experience. You can even play with different players arriving at different times. (This works well when one of your players isn't going to arrive until after the game has begun.) You can play using only two armies, or you can have two main armies supported by several allies. The possibilities are only limited by your imagination.

How long does it take to learn?

I have found that with as little as ten minutes a beginner can jump into this game and enjoy it with help from a more experienced player. Like chess, the basic rules (*describing how pieces move and how to take your opponent's pieces*) are relatively easy to learn (or look up). It's learning to play the game *well* that takes more time. Experienced game players will pick it up right away and most novice war game players feel confident by their third game.



Using these rules, a typical game may take from two to six hours depending upon the experience level of the players, and the size of the armies (or "cost") being used. You may find that a war game, using these rules, can be played in less time than some other rules that may be much more complex.

What if something isn't covered by a rule?



It is very important to acknowledge that these rules are *guidelines*. **They are not - and could never be - totally inclusive of every possible situation!** (Just consider the difficulty of making a rule to cover every possible contingency, in a game with so many variables - different types of figures, terrain, weapons and more - and yet having a game that is still playable!) These rules are a framework within which you play *your* war game.

Every set of war game rules is a compromise between authenticity and playability. No set of rules ever be completely *authentic*. As a game becomes more authentic it becomes more complicated. Rules can become so complicated that players become so bogged down in the complexity of the rules that they are no longer able to *play* the game!

One way of dealing with the complexity of so many different types of figures on the board, the variations of geography and other considerations, is to attempt to write rules that cover every possible contingency without debate. This attempt would result in a set of rules that are the size of an encyclopedia! (*I almost wrote "the size of the phone book", but we don't have phone books anymore! But, multi-volume, printed sets of encyclopedias are not common today either!*) I have found that the game works better to have basic rules that cover most things, but when situations come up that are not clearly covered by rules, **the players must decide what happens in that specific case.**

If an answer to any question is not clear when looking at the rules, the players should resolve the issue with a short discussion (perhaps including a die roll or two to resolve any impasse) and find a reasonable solution while considering the following guidelines:

- 1) What is the intent of the rule, or the action, under discussion?
- 2) How have similar situations been resolved in the past?
- 3) What resolution would be both fair and reasonable, for both sides?
- 4) Is the action proposed historically defensible?

As you fine tune the rules to your own liking, you may wish to write down your changes (or your own "home rules") and use them to avoid disputes in the future. A good rule of thumb is that any debate which takes more than thirty seconds to discuss, should be resolved by rolling the dice. As Joseph Morschauser says, "*Let the dice decide.*" The higher roll decides the issue for that game.

Must you use all the rules?

Of course not!

It is suggested that you start with a basic game - especially if this is your first war game or if you are introducing new players to the game. After reading the rules through you might play your first game using a limited number of figures. (For example: In the Musket Period game - one artillery piece, one unit of cavalry and three units of infantry.) Rules can be added as players become more familiar with the game.

Is there a judge or referee?

In general, players must work out issues between themselves. **Being able to do this is essential for a fun game.**

However, if you have enough players, it can be helpful (although not essential) to have someone familiar with the rules, but not playing in the game, acting as the judge or referee. They decide any issues of judgment or interpretation which might arise. It is a simple solution to the questions which will arise such as "is this artillery shot a direct hit?" or "can his cavalry see me from the hilltop?" If a judge or referee is used their decision must always be considered final.

Another interesting option is to have the judge or referee read each unit's orders, written by the player, and the judge or referee moves the figures "as ordered." In some cases, the orders may not be possible to implement "as written" in which case the judge or referee makes the decision as to what occurs on the board for that unit in that move. For Example: A general orders a unit, which is in a formation six figures wide, to go through a gap in a stone wall that only allows a unit that is formed with two figures abreast. Does the unit reform before reaching the wall, and take the 1/3rd loss in movement, or do they attempt to climb over the wall (also costing 1/3rd move) and hold up the entire unit's progress. Assuming they have the movement needed to do either, they will either end up crossing the gap in a new formation or maintaining the old formation but be spread out across a larger area of the wall. Complications could also occur if they attempt to melee with figures on the other side of the wall or if fire is also taking place. The issue can be discussed between the players, but if you have a judge or referee, they make the final decision based upon existing rules and the exact wording of the orders as written. This is an example of the importance of careful, and precise, order writing just as it would be historically.

Commander Meetings:

Another alternative to system would be to have the two commander figures (each player/commander must have a figure on the board representing them) on the same side, next to each other (withing melee range) on the game board. In this case the two commanders can leave the room for a few minutes to discuss the game out of hearing from the rest of the players (on their side or not). They then can write down the orders on the order sheet as usual. In general such discussions between players, regarding the game, should not take place unless the figures on the board are next to each other.

Game Philosophy:

Over more than sixty years of war gaming I have found that one rule is by far the most important for a successful war game: **Each game should be played in such a way that both sides enjoy themselves.** That is what produces a good game! Everyone plays to win, but more important than winning is that each player enjoys the game so that they will *want to play again!* **Please keep in mind that constant arguing over rules and micro measuring fractions of a millimeter on the game board simply does not produce a good game.** Now let's begin!

Preparing Figures:

Although these rules were developed using 20/25 mm figures, the rules can also work with other scales. When I first started war gaming the most common figures being used were 54 mm., but smaller scale figures are more popular today. Smaller figures are not only less expensive, but they allow you to play a much larger game on a smaller game board. Many types of historical figures are available, most often on-line. Precise scale seems to vary from one manufacturer to another.

War game figures were traditionally made of lead (or lead combined with other metals such as tin). Some of today's metal figures are made of pewter, but most are less expensive plastic figures. These are available in a great number of versions.

In my first attempts at war gaming, I used old 54 mm figures. When I went to Airfix figures, with a few lead figures that were available from Jack Scruby. Today, there are nearly endless types of scales and figures are available, and players can even make their own figures with 3-D printers!

Plastic figures offer an economical alternative to metal figures. Figures made from lead should always be painted if you decide to use them. ***Lead is a toxic metal and the less exposure you get to it the better. Young children should never be allowed to play with any small war game figures, and certainly not with anything made of lead.***

Painting and preparation of war game figures is an art form that can take years to master. You will find that certain types of paints and glues work best on certain types of figures and surfaces. If you are just beginning, you may wish to consult a good hobby store (or more likely today, the internet) before you start building your army.

I prefer water-based paints, applied to a primed surface. If you are using plastic figures (Airfix, Revell, ESCI, etc.) wash/brush the figures with liquid detergent soap before priming and the paint will stick to them a *little* better, but you can expect to see paint chips from your plastic figures with handling. To reduce paint chipping from my plastic figures I glue a toothpick upright in the center of each stand. Usually, two figures are mounted on a stand. You can handle the toothpick instead of the figures themselves, when moving them around. (The stick is also useful for hanging unit number tags.)

For attaching figures to bases I often use hot melt glue. I find that it is best for quick fixes and attaching small items, such as a sword to a figure's hand. I have often also used Elmer's white glue to fix the figures to bases. It is inexpensive and if you put a good amount on the figures base, it can create a mechanical hold that holds the figure to the mat board base below. Other glues I've found useful are Beacon 527, Devcon "Weld It" and Duco Plastic Model Cement. Some folks like super glue but I have not had much luck with it myself.

Accessories:



Buildings, bridges, trees, and other accessories can be built from scratch or bought as kits. Scale figures work well with HO/20 mm./25 mm. scale model trees, buildings, and accessories. Colored matting boards can be used for making roads and rivers. Matt board or paper can be attached to the game table using small pieces of double-sided tape. I found that two-inch-wide colored masking or gaffers' tape (brown and blue) also works well for roads and rivers.

Scale model hills can be formed from a variety of materials including carpeting, painted wood and even green felt draped over old books. For years I used hills made from dark green carpeting cut in irregular shapes. I now use irregular shaped pieces of wood. These are easy to make and can be stacked to create hills of various sizes. Concentric pieces of carpeting, or painted wood, can create a hill.

Bases:

Once painted, figures should be glued to bases. This makes the figures much easier to move, and the base should preserve the figures better over time. Matting board (green) works well for bases, and it is available at most art stores. I like to put a half toothpick glued in the middle of the stand. It is convenient to hold unit numbers and to put "dead caps" on when one figure is removed. The following are suggested base sizes for this game. The first measure indicates the direction the figures are facing. Example: Archers *face* the long side (4 cm) and cavalry *face* the short side (2 cm).

Base Sizes: Ancient & Medieval Periods:

Infantry:

Type of Stand	Figures per Stand	Size of Stand
Peasants	2	4 cm. x 2 cm.
Light and Medium	2	2 cm. x 2 cm.

Men-at-Arms	1	2 cm. x 2 cm.
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Missile:

Type of Stand	Figures per Stand	Size of Stand
Crossbow	2	4 cm. x 2 cm.
Slingers	2	4 cm. x 2 cm.
Light Bowmen	2	4 cm. x 2 cm.
Long Bowmen	2	4 cm. x 2 cm.

Cavalry:

Type of Stand	Figures per Stand	Size of Stand
Light	1	2 cm. x 4 cm.
Medium	1	2 cm. x 4 cm.
Heavy	1	2 cm. x 4 cm.

Artillery:

Type of Stand	Figures per Stand	Size of Stand
Ballista	1 ballista & 2 crew	4 cm. x 4 cm.
Onager / Catapult	1 catapult & 4 crew	5 cm. x 10 cm.
Trebuchet	1 trebuchet & 6 crew	6 cm. x 12 cm.

Base Sizes: Musket Period:

Infantry:

Type of Stand	Figures per Stand	Size of Stand
Infantry	2	4 cm. x 2 cm.

Cavalry:

Type of Stand	Figures per Stand	Size of Stand
All Cavalry	1	2 cm. x 4 cm.

Artillery:

Type of Stand	Figures per Stand	Size of Stand
6-pound cannon	1 cannon, crew of 4	5 cm. x 5 cm.
8-pound cannon	1 cannon, crew of 6	6 cm. x 8 cm.

8-pound howitzer	1 cannon, crew of 6	8 cm. x 8 cm.
12-pound cannon	1 cannon, crew of 6	8 cm. x 8 cm.
Rockets	1 rocket, crew of four	8 cm. x 8 cm.

If you have miniatures that are already placed on fixed bases, you can probably use them as they are, if they are consistent for both players. If each side uses different bases, you can find significant differences during melee or musket fire, which would be unfair. Putting figures on bases provides for ease in moving large numbers of figures, and it establishes the proper interval between the figures (and it helps keep the figures from falling over!)

COMMON RULES - FOR ALL PERIODS

The Common Rules, which you will read first, are used with all historical periods (Ancient/Medieval and Musket). After reading the Common Rules pick the period in which you wish to play and then read the section which applies to that period (Ancient/Medieval or Musket.)

Materials Needed to Play:

1. Dice: 6, 10 and 12-sided. You will need a good handful of six-sided shock dice, 10-sided (missile/musket dice) and 12-sided (melee) dice. The more you have the faster the game will go.



2. Meter sticks or measuring tapes (metric) and protractors: (two or three of each).

3. A table or flat area for play: A large table is excellent. The floor can work if you are young and spry and don't mind getting up and down, and you can keep people (and animals) from walking on your figures.

4. A hand calculator: (or today - *your phone!*)

5. Miniature figures: (20 mm to 25 mm)

6. Miniature buildings: fences, hills, roads, trees, and some poster board (or colored tape) for roads and rivers.



7. A magnetic compass or two: Each game board should have compass directions indicated on the game board for reference when writing orders, but you can also use a real compass. All directions given in orders should correspond to the actual compass directions of the game board.

8. Copies of documents: The War Game “Roster” (used to select your army before the game begins); the “Order Sheet,” (this will be used the most.); “Artillery Order Sheet,” (if you have artillery) and any other specialty sheets needed such as “War Elephants”, “Chariots” etc. (Copies of all sheets are found in the index to these rules.)

8. Hit Area Forms: Various hit area forms need to be made. They can be cut out of matting board or some similar material. You will need them with 6 cm, 8 cm and 12 cm size circles cut out of the center. (See the artillery sections in Ancient & Medieval and the Musket Period sections.)



9. Two or more war-gamers, some snacks . . . and a free afternoon.

To Begin the game:

First: Decide how advanced a game you wish to play. (Unless you are an experienced war gamer you should start with the Basic Game.)

The Basic Game:

1. Do not use the three-dice morale test (called the 3-DT) or any of the Optional rules.
2. All units are used individually and are not formed into larger regiments, brigades, or battles.
3. Hidden troop movements are not allowed.

The Intermediate Game:

1. The 3-DT is used, and . . .
2. Hidden troop movements are allowed.

The Advanced Game:

1. Units can be combined into Brigades and Battles
2. All optional rules are available for use, if agreed upon ahead of time.

Measuring Distances:

In the periods of history reflected in these rules, commanders did not have the advantage of

a bird's-eye view of the battlefield (tabletop) so in our game, **measuring is only allowed when movement or firing is taking place.** You may not measure the board unless you are in the process of firing or moving, following orders already written and then you may only measure for the unit involved. **You may not pre-measure move or shot.**

If you fire at something which turns out to be out of your range, you wasted your shot (hopefully it didn't fall on your own men!) *A variation of this rule can be used with newer players who are not used to measuring in metric; You might let them measure ranges for the first game to get more experience.*

Scale:

Scale is one of the most difficult factors to deal with when writing rules and the least important once the game begins. Once the game begins the scale used in the rules becomes irrelevant anyway.

Using a scale based upon the actual height of the miniatures is impractical unless you have a game board the size of a parking lot! In such a scale, a 3 cm. tall rifleman (or long-bowman) figure might fire three or four meters, on the board, and artillery ranges might be four or five times that! The scale in a war game is always a compromise between the size of the pieces and the playing area available.

For the purposes of these rules - three centimeters, on the game board, equals (approximately) 10 yards in real life.

In Real Life: On the Game Board:

10 yards = 3 cm.
50 yards = 15 cm.
100 yards = 30 cm.

In Real Life: On the Game Board:

200 yards = 60 cm.
300 yards = 90 cm.
400 yards = 1 meter, 20 cm.

Figure Representation:

You may consider that each miniature figure represents a formation of twelve men, (four across and three deep). **However, in the game most figures will move, fire and melee as part of a unit.** Each artillery piece can be thought to represent a battery of two cannons in scale, but they are treated like a single figure/piece in the game.

Stands:

It is useful to have all figures permanently placed on stands, and to have all stands grouped permanently into units - with each unit with its' own permanent identification number.



If you wish, these units can then be grouped into *national/historical* armies [Example: Austrian, English, American, etc.] Each national/historical army might consist of units which conform to what might have been found in that army. [For example - in the medieval game - Edward the Black Prince's army might have several units of longbow and one unit of men-at-arms.]

In a game you might have one national/historical army pitted against its actual historical counterpart (King Harold v. Duke William at the Battle of Hastings in 1066, for example) or you might wish to match armies which never actually met in history. [For example: the Vikings and the Swiss pike might take on King Edward - the Hammer of the Scots.]

Time:

Each complete turn (which might take from five minutes to half an hour to complete) represents **approximately twenty minutes of battle**, however this is a very difficult factor to accommodate so it is not to be taken too precisely. When creating the rules we had to use a rough approximation that worked playing the game.

Time is not suggested to represent the fastest a person could load and fire a musket or move over rough terrain; It is suggested as rough averages for groups of men to receive orders, get ready to move, to move as a group, or to aim/fire or melee, fire when given orders.

Dividing A Move into Thirds:

You may notice that most of the movement allowances and ranges are divisible by three. This is because, at times, you may need to divide movement into thirds, such as when two opposing units are given orders that conflict, such as both being ordered to move to the same location. They can't both occupy the same space at the same time, so the question is, "who got there first?"

Dividing the movement into thirds allows each side to move a third of their movement, until one reaches its ordered location. If the two units have different movement allowances, such as light cavalry vs. medium infantry, the cavalry will probably reach the goal first. This process can also be used with other troops such as missiles and musket units.

Shock, melee, missile fire (musket or bowman) takes place in the final third of the move. Therefore, you can't take a full move and still have time to fire missiles and/or melee. If you wish to melee/fire at the end of the turn you need to only move 2/3rds to get there.

If a unit (missile or musket) does not move it can generally fire twice in the same turn. If it has moved at all it can only fire once. If it moved a full move, it cannot also melee or fire.

En-passant fire takes place only if an opponent's unit comes into range and then out of range before the move is over. In such a case the unit (or unit's) are allowed to fire while the enemy is within range.

Orders:

All units attempt to move as ordered. All orders must be written clearly on the Order Sheet before the move begins. All movements are simultaneous, so adjustments to the orders may be made depending upon what your opponent has ordered their unit to do.

Orders indicate only intent. Your opponent's orders may change what happens to your unit.

Distance:

Movement distances used in the rules **are not suggested to represent the maximum possible distance an army could travel under ideal conditions.** They are suggested as *averages* for large bodies of troops under *realistic* combat conditions and broken ground.

War games are generally fought on a flat game board with a few hills placed here and there, but actual wars are most often fought over broken ground. An uneven battlefield, combined with other factors such as dust, smoke and weather, impact on a figures effective sighting ability and therefore greatly reduces a weapons effective range. **The figures/pieces effective range will, therefore, be far shorter than its theoretical maximum range.** The rules try to simulate the *average* range and effect for the more *typical* shot and not the ideal shot, at the theoretical maximum range.

[Movement and ranges are partially based upon those given in: Macksey, Kenneth. The History of Land Warfare, The Two continents Publishing Group, 30 East 42 Street, New York. 1974. They are also based upon the following calculation: two miles (10,560 feet), divided by thirty-six movement periods (twelve hours, three times moves per hour) equals about 293 feet per 20-minute period. To convert feet to centimeters you multiply 30.48 times and get, 8930.64 cm. This figure, divided by 300 (scale of 300/1) equals about 30 cm. [29.7 cm.]. Therefore, a light infantry figure moves 30 cm. in the game.]

Cost Points:

Figures are assigned an initial cost value on the figure capability chart. This corresponds to that figure's *potential* in the game. (For example: heavy cavalry costs much more than a peasant or militia figure.) This *cost* is only a convenient means of choosing armies which are roughly equal at the beginning of the game. **Once the game begins, cost values have no direct relationship to morale, melee, or any other action except that more expensive figures are potentially more effective troops and will have better morale.**

By using *cost points*, two opponents may choose armies which are very different in composition, but still relatively equal in potential. Your success in the game, however, will primarily depend upon how your pieces are used. Each figure type has strong and weak points. Militia/peasants are good for some things but very poor for others. Your artillery has an important role, but unsupported they might not last very long. Your cavalry is important for finding the enemy, but it won't replace the infantry when taking a defended wall or hill and so on.

Interesting games can be played by giving one side an advantage in cost and the other an advantage in position on the board. **In general, no army should consist of more than one third of its initial point cost made up of artillery or cavalry, unless previously agreed to by both sides;** and no more than one third of its army (in numbers of figures) as missile troops, in the Medieval Rules.

Unit Grouping:

All infantry and cavalry figure stands are grouped in and moved as *units* with all stands of figures in base-to-base contact. All figures in a unit must be of *like type* (all peasants, militia, long-bowmen, rifles, light cavalry, etc.).



A unit is formed at the beginning of the game and generally cannot be divided or combined during the game. [There is an exception to this rule in the Advanced Rules: under Supreme Commander.]



A unit cannot be created with less than six, or more than thirty-six figures. A unit of regular troops generally consists of 30 - 36 figures, but smaller units may be chosen for less cost. (However, the smaller unit will also accept fewer hits before suffering a poor reaction in melee.)

Light troops {light armor in the medieval game (not peasants), light infantry (not militia) in musket period} **may create formations in which each base is up to 2 cm apart from other stands. They are not required to have their bases touching as most units are required to do.**

Units will form with other units and create larger groups called *battles* in the medieval game and *brigades* in the musket period. They are formed out of units. Being part of battle or brigade gives the unit considerable benefit when morale is counted after taking losses.

Broken Units:

All stands in a unit are expected to remain in base-to-base contact so that each stand is no further than 1 cm from another other figure in the same unit. *Units are NOT "broken" if they are light troops in a skirmish formation, or if they are divided by friendly artillery, wall, or a friendly occupied building.* Otherwise, if for any reason, enemy figures divide a friendly unit, it must reestablish base-to-base contact by the end of the following turn. If they do not the unit is broken, **and the part of the broken unit - with the lowest TMV or Total Morale Value (the unit's morale point times the number of figures) - will route off the board on the following turn.**



If the broken unit is part of a battle or brigade, each unit in the battle or brigade, that has not suffered its own morale test that turn, may roll a three-dice morale test (3-DT) to see if the broken unit remains or if the battle or brigade breaks up into separate units. (See: Morale Section)

Selecting armies and sides:

Once the national/historical armies are chosen, each player can select the specific units they wish to use from their national/historical army, (assuming you have a larger number of figures than you will need) to create their army for that game. They may pick units by using cost points up to a maximum number of points agreed to, for the game. [If national/historical armies are not being used simply select the units you wish to use from those you have available.] Any division of units that both sides agree to will be fine.

Each side should have at least a few of each of the basic types of units (infantry, cavalry, and artillery) available to it, although each army does not have to have identical proportions. [Remember: using the unit cost you can build armies of very different types, but still of roughly equal potential.]

Setting up the game board:

The game board should offer an interesting game, for both sides - and both sides must agree

to the arrangement on the board before play begins. If you intend to re-create a specific battle, you will need to duplicate its geography (approximately), in scale. If you are making up your own battle you can be as creative as you like.

A word of caution - too many items on the game board can be as bad as too few. **A crowded game board can restrict your ability to maneuver and produce a very static game.** The number of accessories you should use will depend upon the size of your playing table. All you really need is a hill or two, a small village, a forest, and a bridge crossing a river. This is enough for a good game. As you play more, you can create more complex geography.

You might even let one side set up the game board as they please, and then let the other side select which side, or position, they wish to take.

Order Sheets:

Make copies of the *Order Sheet*, *Artillery Order Sheet* and the *Army Roster Sheet*. You will use many of the *Order Sheets* as each unit needs one. You only need one roster sheet per side per game. There are other specialized order sheets such as war elephants, chariots etc. which you may need depending upon the armies being used.

Each player needs a copy of these rules.

Decide on the cost points:

It is beneficial to limit armies to no more than 800 to 1,000 points per side (in a two-player game) and no more than five-hundred points per player, in a multiple player game. [The more points you use, the longer the game will typically take to play and the larger the playing board you need.]

There may be a tendency to want to create *huge* armies in the expectation that these will produce more exciting war games. This is seldom the case. Unless you have many experienced players, and a lot of time, large armies create confusion and bog down the game in order writing and movement. Large armies also tend to just meet in a line and battle it out. This is seldom very interesting. Smaller armies encourage players to use tactics to achieve their victory. Try some small battles first.

Decide on the Victory Conditions for the game:

Every game should have a clearly defined objective. **"Fighting to the last man" may sound exciting, but it does not make for a good war game.** It takes too long, and it doesn't usually hold the interest of all parties involved. **Each game should be fought for a clear objective, and it should end when victory conditions are met.** Objectives can change with each game,

but they must be understood and agreed to before any units are selected, or orders written. If neither side attains the agreed upon required objectives the game will end in a stalemate.

Some examples of possible objectives:

- *Control of certain terrain areas: hills, a road, or pass through a forest; or a designated number of objectives on the board, (say 3 out of 5).*
- *Capture a certain objective (a town, crossroads or a strategic well) and hold it for a specified number of turns.*
- *Play for a certain number of turns, and the side with the most points, (or units), left at the end of the turn, will be the victor.*
- *Begin with unequal sides and require the larger army to sweep the field in only a few turns.*
- *Play until one side has been reduced by a certain percentage (perhaps 50%), at this point the other side would win.*
- *Each side plays to capture the opponents general, or a designated number of nobility (knights), or officers.*
- *Award points for each enemy unit that is destroyed. The player with the most points accumulated, when a certain turn is completed, wins. (The point" awarded could be the points each unit cost.)*

Be as creative as you wish but **make sure everyone understands and agrees to the victory conditions before play begins.** Write down the victory conditions. Specifically designate the number of points per side, and any other specific restrictions or considerations, before the game begins.

Develop an interesting game scenario:

There can be a tendency for war games to begin with both armies entering from opposite ends of the board and then simply meet in the middle. Those games tend to be less interesting and have a lot of rolling the dice! More creative scenarios can be written, that will make your game much more interesting. Use your imagination. You could have different units enter the board at different points and at different times. You might make some re-enforcements enter the board based upon chance; roll a die to indicate on which turn they arrive.

Game Sequence:

1. If you wish, each player can select a specific miniature (usually cavalry) to represent themselves on the board. You might even assign a higher morale value to the unit which is led by the commander/King/General.

2. **Place** units [or their markers if hidden troop movement rules are being used] on the board.

[An interesting variation on this is to place a tall barrier across the game board, so that each side can view only half of the board. Then each army can then set up, on their side, anyway they wish without the other side knowing their position, until the curtain is raised.]

3. **Write orders.** Every unit [infantry, cavalry, and artillery piece] must have written orders for each turn.

If a unit doesn't have new orders, they will attempt to follow the last order they have been given.

Orders should be specific, indicating movement, direction, any formation changes and so on. Orders cannot be general, such as "follow the enemy wherever they go."

4. **Move all units according to orders as written (both sides move simultaneously).** Any hidden troops, now in view, must be revealed, and any *charge* moves indicated, so that the actual position of the units involved can be determined. [Remember your opponent's unit may have been given orders to move or charge as well.]

Since orders show *intention* and the opponents' actions may change what occurs on the game board. There may be times that the two sets of orders conflict. For example, two units, from different sides, have each been given orders to move across a bridge. To determine who gets to the bridge first, each side can move only a percentage of their move (say 1/3rd). Repeat the process until the two units meet on the board, or one bypasses the other. (You may also end up with *en-passant* fire or other issues to deal with in the process.)

Roll any 3-DT tests that are necessary for charges, receiving a charge, etc. [If one side's Total Morale Value is twice that of the other side in a charge.]

5. **Fire artillery - medieval/ancient or musket period:** Musket or missile fire takes place at the end of a turn, after artillery fire takes place.

6. **Fire small arms:** (muskets, pistols, and rifles) or missile hits (archers). [They may be able to fire before receiving shock or melee.] In the musket period only the first rank can fire, unless the second rank is a hill level above the first. **In the medieval period the first rank of archers**

(slingers etc.) fire and the second rank can also fire but with one reduction in step for firing over the heads of the figures in front. Both must fire at the same target.

7. **Count Shock:** It is possible that both sides may count shock in the same attack. [Shock effect is counted before melees. Stands removed by shock may not participate in melee as they have already been removed.]

8. **Fight melees:** Use twelve-sided melee dice.

9. **Calculate Post-Melee Morale,** as needed. The result may dictate some of the unit's next move.

10. **Continue steps 3 through 8** until one side reaches "victory conditions."

Orders and Sequence:

Everything that takes place during a turn occurs simultaneously. While you are moving your units, your opponent is doing the same. Firing and melee casualties are calculated one side at a time, but the effects are simultaneous. Casualties on your side will fire back that turn.

Moving both sides at the same time saves a lot of time during a game!

Both sides move figures only in accordance with the specific written orders. During the movement phase of the turn each unit will *attempt* to move to the position described by its orders, in the formation and with the facing they have been given.

Orders are written on the Order Sheet and must provide the following information:

- **Direction**
- (*North, east, south, west . . . north-east, south-south-west etc.*)
- **Distance**
- (*How far is the unit to move? full move, one-half move, 10 cm.*)
- **Formation**
- (*Any change in formation must be indicated.*)

If no specific *formation* is ordered, all cavalry figures are in a column - two abreast and all infantry in a column four across. *A change in formation - ranks and files - reduces movement by 1/3 rds. for stands/figures with a Morale Point of two or more. Peasants and militia do not change their ranks and files.*

- If further explanation is required for the order, it must be written on the Order Sheet. [Example: "stop on north side of ford" or "proceed to the fork in the road."]
- **Orders indicate only your intent.**
- Orders may be impossible to carry out, for many reasons: a poor morale reaction, the action of the other players' units, or other factors.
- **You may not write if/then orders.** You may not write orders to "attack enemy unit, on the flank, wherever they go" or to "move off the hill if the enemy moves their cannon." What you can do is simply write new orders for a unit when you see the opposing unit moving, but they react on the following turn.
- You may write a new order for every unit, every turn if you wish. If new orders have not been written, the last order given will still stand.
- Remember: **Units follow (or attempt to follow) orders as written.** Your ability to write clear and direct orders will greatly enhance your success in the game.

I have always played on the honor system where each player generally reads and interprets their own orders. There may be times in which two units have conflicting orders, and each player may need to read their written orders to their opponent to resolve the situation.

An example of an order written: **N 1/3, Col 4 - facing N.**

Direction: N = north

Distance: 1/3 = max. move

Formation: Col 4 = column of four

Facing: N=north

Abbreviations can be used in order writing, but when used they should be used consistently and be able to be explained to their opponent when necessary. Some abbreviations I use include: "F" for facing; "LB" for line of battle; "H" for hold; "ADV" for advance, "N" for north (or "S" "W" or "E") etc. My orders might read: "ADV 30 cm, F N, LB" for "advance 30 cm facing north, in a line of battle. You can use your own abbreviations if they are consistently used.

[More specific orders and drills, for the musket period, can be found in [The American Soldier of the Revolutionary War](#) by A.N. Schultz, Sugarcreek Publishing Co. 1976. This booklet includes excerpts from Baron Von Steuben's "Regulations of 1778" and more details of the drill and marching of the American army in the Revolutionary War.]

Orders & Dispatch Riders:

There are alternative methods for ordering units. One alternative is to use dispatch riders to deliver orders. In this alternative, the orders are not written on the Order writing Sheet but are on another small piece of paper and this is handed to the dispatch rider (Which is usually a light cavalry figure, and we usually put the orders, face down, under the base.) The rider delivers the message to the intended officer but only after the dispatch rider reaches that commanders stand on the game board. If you are using Dispatch Riders, tactical conversations between players are not allowed during the game.

If your dispatch rider is killed and your opponent is close enough to take the message, they will read it instead of the intended unit.

Time Limit:

A time limit **for writing orders** should be agreed upon before the game begins. A timer (egg timer/hourglass/smart phone) can be used to keep track of the time. Two minutes is usually sufficient for order writing, but in a very large game more time may be necessary. One minute per 500 points on a side for experienced players is usually sufficient. **The time limit should be short enough to simulate the urgency of having to make quick battlefield decisions.** No orders may be written after the time has expired.

Another option is to have the Supreme Commander on the field writing orders to units and these being delivered by light cavalry figures. (See "Dispatch Riders")

Compass:

The game board should have at least one magnetic, directional compass, visible to all players. North, east, south, and west, in your orders, should correspond to the actual compass directions on the game table.

Effects on Movement:

A unit is reduced, in movement by 1/3rd, for each of the following:

1. *Changing the direction of march more than 45 degrees*
2. *Crossing a Creek (to cross a ford, at a creek, reduction is not needed)*
3. *Moving **uphill or downhill section**, or across a wall, fence, or other obstacle.*
4. *Any change in formation (change of ranks and files) for Units Morale Point of 2 or above.*
5. *Crossing a **River** at a ford, (Rivers cannot be crossed without a ford or bridge.)*

6. Moving through rough terrain, forest (not on a road) or plowed fields

A unit's movement is increased by 1/3rd for any portion of a move taken on a road. *(Note: only that part of the unit that is on the road may take advantage of this increase, and then only for the portion of their turn they are on the road.)* The charge down a road is increased by only 1/3rd even though it is a *charge move*, and it is on the road.

It may not be possible for every figure in a unit to move its maximum distance and remain in *base-to-base* contact with the rest of the unit (as required by the rules). *In some cases, some stands may not be able to move their full allotment, because the rest of the unit must remain in base-to-base contact. In such a case the entire unit may have to stop.* Units only move at the rate of their slowest figure. No single figure may go farther than their maximum movement.

Effects on Movement		
Reduced by 1/3 rd	Reduced by 1/3 rd	Increased by 1/3 rd
Units of Morale Pt. 2-5 changing formation	Artillery moving over a fence or wall	An ordered "charge" - (movement reduced by 1/3 rd on the following turn)
Crossing a "Creek"	Crossing a "River" at a Ford	Bonus for any portion on a road
Going up <u>or down</u> , one hill level	Moving through a forest, not on a road (unless Native Americans/ Indians)	Musket Period Game: Infantry (Morale 4 or 5) column marching in straight line for entire turn
Unit changing the direction of march, more than 45 degrees	Moving across rough terrain, not on road	A charge down a road.
Infantry crossing over a fence or wall (no reduction for cavalry)	"Passing Through" a friendly unit. (There are other restrictions)	

Charge / Engage and the 3-DT:

Units/figures end up in a *melee* when one (or both) of the units are ordered to **engage**, or **charge**, or **if they end up in contact by following movement orders**. [A 3-DT - "Three Dice Test" - morale test may be necessary for a *charge* or *to hold for a charge*.] Figures may also end up in *melee* when they meet unexpectedly. (See: Morale below.)

In a charge the unit gains 1/3rd movement bonus for the charge, but they are reduced by the same amount on the next move.

A charge move must be declared at the beginning of a movement sequence, so it can be factored into the opponent's order, and it may not include any change in direction (over 45 degrees) or formation, in the final 30 cm. of the charge for cavalry (or 10 cm. for infantry).

A charge may or may not reach its intended target depending on the orders of the defending unit. If a charge does not result in melee the attacking unit will remain at the point where it ended the unsuccessful charge, and it will not be able to melee or fire, in its next turn.



Taking a Three-Dice morale test or 3-DT:

Roll three six-sided dice:

- If the unit has **not** suffered **any** casualties in the game
- At any time in which the supreme commander (general/emperor/king) is personally leading the unit.

Roll two six-sided dice:

- If the unit has taken **some** casualties in the game but has not suffered a poor morale effect [back or back & turn] or if it has failed (back, back & turn) a previous 3-DT.

Roll one, six-sided die:

- If the unit has **suffered a poor morale test** from post-melee morale (back or back & turn) previously.

The player may roll only ONE die, **hoping to get the unit's morale point or less**. This is what they need to pass the test - regardless of whether one, two or three dice are used. If all of the dice allowed (1, 2 or 3) are over the morale point indicated for that type of unit on the Figure Capability Chart, the unit **fails** the test.

Example: Peasants have a morale point of one. A unit of peasants would have to roll a one (one of six possibilities) to pass their 3-DT test. If they are using one, two or three dice, only ONE of the dice must show a "one". If heavy cavalry is taking the same test, they need a five, or less, on any die to pass the 3-DT. (Rolling three 6's, out of three dice, would mean they failed their 3-DT morale test).



NOTE: These morale tests are resolved by using *one*, two or three - six-sided dice. It is referred to as the 3-DT - even though three dice are not *always* used.

A 3-DT is not necessary if neither the attacker, nor defender, has a Total Morale Value of twice that of the opponent.

Example of Total Morale Value: If the defending unit is medium infantry and has only ten figures (five stands with two figures per stand) then they would have a Total-Morale Value of 10X3=30. If the attacking unit has fifteen figures of medium cavalry they would have a Total-Morale Value of 15X5=75 which would be twice (or greater) that of the defender so the defender would have to pass a 3DT to hold for the attack.

[See Chart Below this one for 3-DT and a Charge:](#)

Situations where a Three-Dice Test (3-DT) is required	
To break off from an established melee	Units which are in melee will normally remain in melee until one side breaks due to a Post-Melee Morale test. If one side wishes to withdraw from the melee, and they write orders to withdraw, they must pass a 3-DT. If they attempt to withdraw from an established melee but fail the 3-DT, they will remain in melee with one melee point reduced for the confusion. <i>Each unit is in melee they are reduced one melee point so they could be reduced by two points by trying to withdraw.</i> If they pass the 3-DT, they follow orders to withdraw.
Musket or Missile figures firing at the unit charging them	<p>The unit being charged may have the choice to fire at the unit charging them at close-range (with better odds), mid-range or far range by passing a 3-DT. If they pass a 3-DT they can choose to fire at close range, (for better odds) but then they must accept the opponent's melee at close range without taking any of the opponents figures in melee, as they were firing during the final third of their turn and not able to also melee. They will take casualties but not inflict them (beyond their musket or missile fire.)</p> <p>If they pass the 3-DT they may also choose to fire at midrange and then and fight as infantry. If they fail the 3-DT they automatically fire at the first moment the enemy is visible and within range.</p>

<p>Unit Break Through</p>	<p>A unit of infantry or cavalry may <i>break through</i> an opponent's line when all the figures facing it (in melee range) have been removed. In such a case it can move through/past the formation if it still has some unused movement allowance that turn. The losses may be due to any combination of missile fire, shock and melee.</p> <p>If the broken unit does not reform on the next move, the smaller portion of the unit (by TMV or "total morale value") will rout and be removed from play. In a battle or brigade formation, the other units could save the broken unit with a 3-DT.</p> <p>If the broken unit is part of a brigade (musket period) or battle (medieval period) the rest of the brigade or battle, that has not also suffered a poor morale reaction that turn, can roll a (3-DT) in the attempt to save the battle or brigade. <i>Units with a morale point of "1" (peasants or militia) may not be used in battles or brigades.</i></p> <p>In such a case an unaffected unit, in the brigade or battle, rolls to save the other units in the battle or brigade. If even ONE of the units rolls their morale value or less, the entire brigade or battle stays. If they do not pass, then the entire battle or brigade suffers the same fate as the broken or routed unit and the entire brigade or battle routs on the following turn!</p>
<p>A unit might hold a friendly unit being forced into them due to a poor Morale Reaction test (using the Post Melee-Morale Chart).</p> <p>They must roll a 3-DT to see if it holds the unit suffering the poor reaction (back, back and turn or route) or if it also suffers the same result!</p>	<p>A unit in route is usually removed from the game immediately, but in this circumstance, it is possible that they might be held by a unit behind them.</p> <p>The unit attempting to hold the unit with poor morale reaction has a <u>greater</u> TMV or "total morale value" (the figures morale number times the number of troops left in the unit) they will hold them without having to take a 3-DT - even in a route.</p> <p>If the holding unit has a TMV that is equal to or less the unit suffering the poor morale reaction, they must pass a 3-DT to not suffer the same result. If they fail the 3-DT, they must also go "back", "back and turn" or even "route" with the unit.</p>

The 3-DT and a charge:

<p>If the attacking, or “charging” unit, has twice the “total morale value” of the defender (or more)</p>	<p>If the defending unit has twice the “total morale value” (or more) of the attacker</p>	<p>If neither unit has twice the “total morale value”</p>
<p>The defender takes a 3-DT</p>	<p>The attacker takes a 3-DT</p>	<p>There is no 3-DT</p>
<p>If they pass – they hold for the charge, and the charging unit counts shock on the defender (if it has shock) and melees with each figure in melee range of (1 cm)</p> <p>If they fail the 3-DT, the defending unit turns their backs to the enemy and moves away from the melee 1/3rd of a move.</p> <p>If the attacker has enough movement left to reach the retreating defender, each attacking figure automatically wins its melee. <i>(The defending unit has casualties but takes none against the attacker.)</i></p> <p>When all casualties are taken each side calculates their Morale Effect by multiplying its number of casualties - that turn - times the units Morale Value (before losses) that turn. Then you multiply the number of figures in</p>	<p>If they pass – they make the charge</p> <p>If they fail, they do not make the charge.</p> <p>If it fails, the 3-DT stays where it is and is reduced by one melee point if attacked that turn.</p> <p>If it passes their 3-DT, the charging unit counts shock on the defender as normal (if it has shock) and then melees with each figure that is in melee range.</p> <p>When all casualties are taken, both sides calculate their Morale Effect by multiplying the unit’s casualties - that turn -times that figures/units Morale Value (1-5).</p> <p>Then count the number of figures in that unit before losses, that turn and multiply that number times the figures (units) Morale value (1-5).</p>	<p>The charging unit counts shock on the defender (if it has shock) and then melees with each figure that is in melee range (1 cm)</p> <p>When all casualties are taken for each side, both sides calculate their Morale Effect by multiplying the number of casualties - that turn -times the Morale Value of that type of figure/unit (before losses that turn) and consult the Post Melee Morale Chart.</p> <p>Only the side with the worst effect (B, B+T or R) takes the result.</p> <p>If the attack was a result of a charge the charging unit’s movement is also reduced by 1/3rd on the following turn.</p> <p>If the attack does not result in either side suffering a poor morale reaction (neither side gets a back, back and turn or rout) then the melee</p>

<p>the unit, before casualties were taken (that turn) times its morale value. Then you consult the Post Melee Morale Chart to find out if there was an effect, and if there was, is the effect "back", "back and turned" or "route."</p> <p>If both sides took casualties, you determine the result for each but ONLY side with the worst effect (B, B+T or R) takes the result. The other side has no effect.</p> <p>If the attack does not result in either side suffering a poor morale reaction (<i>neither side gets a back, back and turn or route</i>) then the melee continues the next turn with each side reduced one melee point.</p> <p>Orders can be given for either unit to pull out of the melee, but they must pass a 3-DT to follow the order.</p>	<p>Then consult the chart to see if either side's losses result in a "back", "back and turn" or "route" on the following turn.</p> <p>Only the side with the worst effect (B, B+T or R) takes the result.</p> <p>If the attack does not result in either side suffering a poor morale reaction (<i>neither side gets a back, back and turn or rout</i>) then the melee continues into the next turn with each side reduced one melee point.</p> <p>If the attacker charged, they cannot charge again, on the following turn, and in addition, their movement is reduced by an additional 1/3rd on the following turn.</p>	<p>continues in the next turn with each side reduced one melee point.</p> <p>On the following move the charging unit may not charge again.</p>
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Shock:

Shock is the result of the impact made by contact with the enemy when a charge is received. **Shock only counts after a specific written order to charge.** Shock will not be counted if two units only "engage", or if by unexpected contact end up in melee.

	Unit Attacking with Shock			
<i>Roll one six-sided die per shock - per figure.</i>	Light Cavalry	Medium Cavalry	Heavy Cavalry	Infantry <i>Hoplites, Romans, or Full Plate Men-at-Arms</i>
Unit Receiving Shock				
Light Infantry	2,4,6	1,2,4,6	1,2,4,5,6	2,4,6
Medium Infantry	4,6	2,4,6	1,2,4,6	4,6
Heavy Infantry	6	4,6	2,4,6	6
Light Cavalry	6	4,6	2,4,6	6
Medium Cavalry	---	6	4,6	---
Heavy Cavalry	---	---	6	---
Artillery	6	4,6	2,4,6	----

Shock Reductions	
Charging a unit that is -	Reduction:
Behind a wooden fence	One shock
Behind a stone wall	Two shocks
On the edge of a forest	Two shocks
Swiss pike (2 ranks)	One shock
Swiss Pike (3 ranks)	Two shocks
Infantry in a square	Two shocks
Roman in Testudo	Two shocks
Up each hill level	One shock

Infantry stands require a 6 cm. clear and unobstructed path to count shock.

Cavalry stands must have at least a 10 cm. clear and unobstructed path straight (no more than 45 degrees right or left) into the defending stand to count shock.

Shock casualties are taken after musket/missile fire from the defending unit but before melee. Figures removed due to shock do not have a chance to melee before being removed.

Shock is counted on the first figure in contact with the attacking unit. Roll a six-sided die for each figure in contact. Units which are allowed more than one shock may, after removing one figure for shock, move to the next figure and count shock again if it doesn't exceed its maximum movement allowance.

When losing figures due to shock, the defending unit may move figures from the back ranks up to the front of the column to replace casualties taken. Those figures may take shock and/or melee.

When all shock has been determined, and casualties have been taken, the stands still in contact will melee.

Infantry Shock:

Some infantry units, {Men at Arms (½), Greek Hoplites (1) and Roman Legionnaires (½)} have shock as indicated, and some infantry figures, Grenadiers and Guard, in the Musket Period game.}

Unit Break Through:

A unit of infantry or cavalry may *break through* an opponent's line when all the figures facing it have been removed. In such a case it can move through the formation if it still has some unused movement allowance that turn. The losses may be due to any combination of missile fire, shock and melee.

If the broken unit does not reform on the next move, the smaller portion of the unit (by TMV or "total morale value") will *route* and be removed from play. In a battle or brigade formation, the other units could save the broken unit with a 3-DT.

If the broken unit is part of a brigade (musket period) or battle (medieval period) the rest of the brigade or battle, *that has not also suffered a poor morale reaction that turn*, can roll a (3-DT) in the attempt to save the battle or brigade. *Units with a morale point of "1" (peasants or militia) may not be used in battles or brigades.*

In such a case an unaffected unit, in the brigade or battle, rolls to save the other units in the battle or brigade. If even ONE of the units rolls their morale value or less, the entire brigade or battle stays. **If they do not pass, then the entire battle or brigade suffers the same fate as the broken or routed unit and the entire brigade or battle routs on the following turn!**

Unit Formation:

Any infantry unit (Morale 4 or 5) in the musket period game, which remains in a column, (of either two or four figures abreast) and travels in a straight line (not deviating more than 45 degrees) for their entire turn, (without any obstacles - fences, turning corners, etc.) and not in a charge move - **may add 1/3rd to their movement allowance.** (Medieval armies do

not receive this bonus.)

Facing:

All units will face the direction they last moved unless specifically given orders to do otherwise. **All figures in a unit will face the same general direction until given specific orders to do otherwise.** They will remain in the last stated formation until given an order to change.

Figures can turn on their individual axis, as a unit, without penalty when ordered to do so. **They may be ordered to make the turn "right face /left face" etc. There is no reduction in movement if they do not change ranks or files.**

A change of *facing* does not change ranks or files. **A change in ranks or files is a *formation change* and will reduce movement by 1/3^{rds}.**

Hidden Troop Movement:

With *Hidden Troop Markers* you can simulate the lack of knowledge opponents would have regarding the placement of enemy troops which are not yet in view. Hidden troop movement can only be used when the enemy would not be able to see the unit.

To move a hidden unit, place its numbered tag face down, on a marker stand (a toothpick glued to a 2 cm. sq. piece of matte board works well for this) and move it as if it were the actual unit. Your opponent will only see a blank tag moving across the board, and will not know what it is, (or even if it is real) until it **can be seen, which is typically 90 cm. (Artillery units, in the musket period, have telescopes and can see up to 120 cm.)**

Important: Be sure to leave an adequate distance between hidden units to accommodate the actual figures if they have all been placed there. Hidden troop markers can only be placed in such a position that all figures, in the unit, (and in its formation) would be able to maintain. [An entire unit may not be able to fit on top of a hill, for example, even though its "marker" can fit there just fine.]

The actual position of the hidden troop marker always represents the center-front of the hidden unit formation, and its formation must be designated on the unit's order sheet.)

When a hidden unit marker comes within sight of an enemy unit (which is also in its line-of-sight) the unit must be placed on the board. If two markers, one from each side, are on the board (within 90 cm of each other and in line of sight) both units must be placed on the board.

If only part of a unit, (such as a long column), is within view only the portion of the unit in view must be placed on the board. The rest of the unit may remain hidden, until it is within

sight.

Units which have been revealed may become hidden again (and represented by a marker) if they move to a location where the enemy would no longer be able to see them. At that point a "phantom" marker may also be added so that when both markers begin to move, the opponent will not know which marker represents the real unit.

Figures which are one hill level or more below a unit will not normally be seen if the sighting unit is 5 cm. back from the edge of the hill.

Phantom Troop Markers:

A limited number of phantom markers (which look like real Hidden Troop markers) may be agreed to by both sides before the game begins. These Phantom markers are moved as if they were real units but have only blank tags. If two phantom markers come within sight of each other, both are removed. When an enemy unit comes within sight of an opponent's phantom marker, the phantom must be removed. [The real unit does not have to identify itself, only the fact that a *real* unit is revealed.]

In such a case the opponent must also indicate one of its own units as being a real unit as well, though they don't have to identify what it is.

Any phantom marker which is fired upon or attacked in any way is automatically removed. A hidden unit must be given orders, but phantom markers do not require orders and can be moved around at will.

Pass Through:

Units may pass through other friendly units ONLY when ALL the following requirements are met:

- both units have a *morale* value of 3 or more
- if no charge, forced march, orderly withdrawal or formation change was ordered for either unit.
- if neither unit is in melee nor being fired upon that turn
- if one unit is stationary for that turn
- if neither unit is more than two ranks deep and at least one it only one rank deep (maximum pass through is one rank passing through two other ranks)
- if neither unit has suffered a back and turn or rout

Passing through a friendly unit will cost 1/3rds of the unit's movement allowance.

If one or both units are in skirmish formation, there is no reduction in movement. Only units with a morale points of 4 or 5 may "pass through" or be passed through by another friendly unit.

Artillery may pass through friendly units using the same restrictions above.

Skirmish Line:

All light infantry (light infantry in medieval and musket period) with a morale of two may form a skirmish line. Peasants and militia may not. In a skirmish line each stand may be placed up to two centimeters apart. [This is an exception to the base-to-base rule.]

A unit must be given specific orders to perform this maneuver. No single figure may exceed their maximum movement allowance when forming the skirmish line. A unit, in a skirmish line, may easily be broken. If the is unable to reform on its next move, it will be routed.

Screening:

Screening occurs when a unit of cavalry is placed between a smaller unit of friendly artillery or infantry, and the enemy. The cavalry screening must completely obscure the view of the enemy unit. Positioned correctly, the enemy will be able to see only the cavalry. (You can look from the figures eye level or use a meter stick to see if the troops are adequately screened.) The exact formation of a unit may become very significant when screening.

Infantry and artillery units may be screened by cavalry units only if the opponent's figures are at the same ground level or less. Screened units may remain hidden until they are within 10 cm. of an enemy unit.

Infantry units can screen other infantry units on flat ground, only when a minimum of three ranks of figures is between the screened unit and the opponent.

Archer/Musket Fire Steps:

Whether firing arrows in the medieval game, or firing muskets and rifles in the musket period, each requires rolling a ten-sided die for each figure (usually there are two figures on a stand) that are firing. The odds of hitting the target vary according to the distance, and in the medieval game, the type of armor being worn. Each will be explained in the section that corresponds to the period being played.

The odds of removing a figure, in the Ancient and Medieval game, go up and down according to the armor worn and distance to target:

	Minus steps		10-sided die	Plus steps	
	-2	-1	Far Range ↓	+1	+2
Figure Type					
Light Armor	6	4, 6	2, 4, 6	2, 4, 6, 8	2, 4, 6, 8, 10
Medium Armor	0	6	4, 6	2, 4, 6	2, 4, 6, 8
Heavy Armor	0	0	6	4, 6	2, 4, 6

Kill Shots {ten-sided missile die} MEDIEVAL GAME ONLY (armor)

2, 4, 6, 8, 10

2, 4, 6, 8,

2, 4, 6 ← start here for *lightly* armored troops (infantry, artillery & cavalry)

4, 6 ← start here for *medium* armor (infantry, cavalry)

6 ← start here for *heavy* armor (infantry & cavalry)

0

In the musket period starting odds are based upon the distance the musket is firing. At the far 1/3rd of their range the odds are at 6; at the mid-range the odds begin at 4,6; and at the nearest 1/3rd the odds begin at 2,4,6.

Add a step: (move up the chart one level for each of the following)

1. Firing at less than 2/3rds maximum range (add one step a 6 becomes 4,6 etc.)
2. Firing within 1/3rd. maximum range (add two steps a 6 becomes 2,4,6 etc.)
3. **Firing into a group four (or more) stands deep (add one step)**

Subtract a step: (move down the chart for each of the following)

1. Firing at a target behind a wooden/stone fence or protection (subtract one step)
2. Firing at a target on the edge of a forest (subtract one step)
3. If missile figures are firing *indirect* (subtract one step) Musket Period figures do not fire indirectly.

Remember – defending missile or musket/rifle units being charged or engaged must roll a 3-DT to determine if they fired at the incoming troops as the first range at which the enemy could be seen or at the closest range for better odds. If they fire at the closest range, they do not melee that turn.

Melee:

Melee takes place at the end of movement, firing and shock. Melee only affects figures that are left in base-to-base contact. All artillery and musket/missile fire must be resolved before a melee takes place. All stands, which are left must melee. A figure may only melee once in

a turn as the attacker, but it may have to defend more than once.

Melee is resolved using 12-sided dice. One die is rolled for each figure in melee, and its result would indicate if the figure survived the melee. **Each figure (usually two figures on a stand) must roll a die number equal to, or less than their designated melee point, to survive.** (It is useful to have a box of ten or more of these dice, to quickly decide large melees.)

Each player rolls one die for each of their figures in melee with the enemy. If the **roll indicates the enemy figure's melee point or less, it survives.** If the roll is over its melee point, it is removed.

Results:

- A die roll which is **higher** than the melee value for that figure will remove the figure.
- A die roll which indicates a number **equal to or less** than the melee point for that figure, does **not** remove a figure.

Casualties are simultaneous. Any figure killed from the attacker's roll gets to roll against the enemy before being removed.

[It should be noted that this figure removal represents not only those killed in battle, but also those who would be mortally wounded or wounded such that they would no longer active in the melee.]

Once a unit is in melee it may not be disengaged without passing a 3-DT - and being ordered to do so. [See: Morale Section.]

A unit may not change its formation while in a melee. **Figures directly behind a stand in melee may move up and fill in the gap, immediately when a stand is removed by melee.** Stands may not slide sideways to do this once the melee is started.

Each turn of continuous melee will reduce a unit's melee point by one. A unit with figures that have a "8" melee value, will only be a "7" on the next turn of melee, and then "6" etc. Both sides have this reduction.

One turn of non-movement and non-melee is needed to restore each lost melee point. It is easy to keep track of lost melee points by placing one marker (a large round bead, placed on the unit's number-tag post, works well) each time the unit is in melee; beads can be removed as melee points are regained. At stand reduced to zero melee points will automatically rout if attacked in any way.

Secondary Melee Attacks:

If a unit attacks a defending unit, on the side while they are also engaged in the front, or attacks from both front and back at the same time - secondary attacks will result. To resolve a secondary attack, roll the defender's die one more time. (The attacker's die is not rolled again, for the secondary attack.) In a secondary attack, the attacker cannot lose as they have already rolled for the main melee. If the defender rolls a number more than its melee value, it is removed.

A secondary attack must be from a figure with a melee point equal to or higher than the stand it is attacking. For example, militia (in the musket period game) or peasants (in the medieval game) cannot initiate a secondary attack against cavalry.



Effects on the Melee Point:

To determine the proper melee-point for a unit, check the Figure Capability Chart and look up the melee point for that type of figure. The normal melee point is reduced under the following circumstances:

Subtract a melee point for the following:

1. Attacked on the flank = (down one point)
2. Attacked from the rear = (down two points) and the attacker does not roll, - even if it is a primary attack. The attacker can't lose.
3. Attacking across a wall or fortified position (such as a wall or fence = down one point)
4. Attacking uphill = down one point
5. Attacking across a ford - down one point

Any defending stand which is reduced by more than its original value is automatically removed and no die roll is necessary.

Post-Melee Morale Test:

Morale describes both the psychological and physical ability of a unit to continue obeying orders, especially after taking casualties. A unit which has not taken any casualties - or one with high morale value to begin with - will be more likely to follow orders. A unit which has

already suffered many casualties may rout more easily.

Morale is very important in this game. Historically, armies did not fight to the last man, if they had a choice. Historically, armies often broke and ran after 20% to 30% casualties. This means that you should consider your unit's morale and use it to break the other sides lines with a morale test.

There are two ways that morale is tested. One is a test on a unit's morale before it can take specific actions such as to charge a unit with twice its TMV (total morale value) or greater, or to withdraw from an established melee. This is the Three-**Dice Morale test or the 3-DT is discussed previously in the Common Rules.** The other type of Morale Test is the **Post-Melee Morale Test. It takes place after all movement, firing, shock and melee is resolved.**

Post-Melee Morale:

The post-melee morale test takes place at the end of any turn in which a unit has taken casualties, regardless of the cause. [It is called a post-melee morale test even though some, or all casualties may have been the result of attacks other than melee - such as artillery or missile/musket fire.]

Every unit is required to test morale at the end of any turn in which they have lost any figures.

Each figure type has a morale value, (which is indicated on the Figure Capability Chart.) A higher number indicates a unit with higher morale.

A Post Melee Morale test compares the number of figures **lost that turn** to the size of the unit **before losses were taken - that turn.**

Multiply the figures morale value times the number of troops in the unit before taking casualties - for any reason - that turn. Then take the number of figures lost, that turn and multiply it times the morale value of that type of figure.

The Morale Chart must be consulted to determine if the unit continues to follow orders, on its next turn, or if it suffers a poor morale reaction ("back," "back & turn" or "route.") **The result is the action the unit MUST take on its next turn, regardless of orders.**

The possible morale reactions are as follows: [This will automatically become that unit's next move]

N. E. = "No Effect" - The unit will follow new orders.

B. = Back - Your unit is pushed back 1/2 turn **in good order** in the formation and facing of your choice. (The formation and facing desired must be specifically stated in your orders for the next turn.) The player whose unit is *backed* may choose where it goes, but it must be away from the enemy unless blocked. Blocking a unit behind them could result in that unit having to pass their own 3DT and not being able to fire or melee.

B. & T. = Back and Turn - Your unit retreats **in poor condition** one full turn, with its **backs to the enemy**. If attacked from the rear on the next turn it may not turn to fight. (With "Back and Turn," your unit will retreat away from the enemy to any point of apparent refuge.)

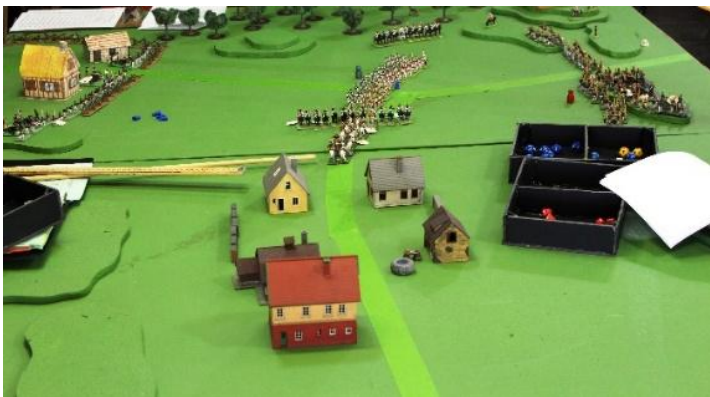
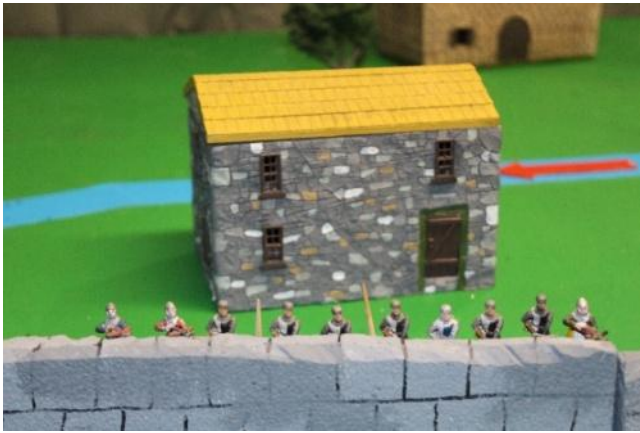
R. = Route - The entire unit is permanently removed from play. It heads to the nearest way off the board.

Since these morale actions (B, B&T, R) take place on the NEXT TURN, the commander may order units out of the way of the routing figures, if possible.

When two units meet in melee the Post-Melee Morale should be figured for both sides, **but only the unit with the worst morale reaction will count it**. The other unit will not be affected.

If, at the end of a melee, side "A" gets a post-melee morale reaction of *back* and side "B" gets *back & turn*; then side "B" is a push back a full move, with backs to the enemy, (back & turn) and side "A" is free to write new orders for the next turn.

If both units have the same reaction (say both receive "B&T" or "Rout"), morale is only **counted on the unit which has the smallest "unit morale value" left**. The unit with the larger value left and the least Morale Reaction does not suffer any reaction. If both units suffer the same morale reaction (B, B&T or R) the unit with the lowest Total Morale Value left on the board takes the result. The unit with the greatest TMV does not.



Cavalry units count morale two extra columns to the right.
Units in a battle or brigade count morale one column to the right.

Post Melee Morale Chart:

UNITS VALUE BEFORE MELEE: {**MORALE** pt. x no. of figs. in unit before losses this turn.}

1-10 11-20 21-30 31-40 41-50 51-60

LOSSES THIS TURN: {**MORALE** pt. x no. figs. lost this turn}

0=NE	0=NE	1=NE	1,2=NE	1-3=NE	1-5=NE
0=B	1=B	2=B	3,4=B	4,5= B	6-8=B
0=BT	2=BT	3,4=BT	5,6=BT	6-8=BT	9-11=BT
1+ =R	3+=R	5+=R	7+=R	9+=R	12+=R

UNIT VALUE BEFORE MELEE: : {**MORALE** pt. x no. of figs. in unit before losses this turn.}

>61-70 71-80 81-90 91-100 101-120 121-150>

LOSSES THIS TURN:

1-7=NE	1-8=NE	1-10=NE	0-20=NE	0-25=NE	0-35=NE
8-10=B	9-12=B	11-16=B	21-25=B	26-30=B	36-55=B
11-14=BT	13-17=BT	17-21=BT	25-32=BT	31-39=BT	56-59=BT
15+=R	18+=R	22+=R	33+=R	40+=R	60+=R

UNIT VALUE BEFORE MELEE: : {**MORALE** pt. x no. of figs. in unit before losses this turn.}

>151-180* 181-220 221-300 301-400.

LOSSES THIS TURN:

0-49=NE	0-59=NE	0-72=NE	0-100=NE
50-65=B	60-79=B	73-99=B	101-150=B
66-89=BT	80-109=BT	100-149=BT	151-199=BT
90+ =R	110+ = R	150+ = R	200+ = R

* Note: Normally, the largest unit allowed in the game has thirty-six figures, and since the highest morale point in the game is five, the maximum total unit morale value would be 180. This chart goes beyond 180 in case the players wish to use optional units which are larger than standard.

Geography:

Forest:

You may not see or fire over a forest.

Movement in a forest slows all units by 1/3rd unless they are on a road or are Indians/Native Americans (musket period game) which move normally in the forest.

Musket/missile fire and sighting in (or into) a forest, is 3 cm Troops within 3 cm of the edge of the forest may be seen by troops outside of the forest if they move or shoot. Troops on the edge of the forest, (like troops behind a wall or in a building), may remain hidden until the enemy comes within 3 cm, if they do not move or shoot. If they shoot or move, they are treated as if they were behind a wall.

Figures that are more than 3 cm. into a forest may not be seen or be fired upon by figures outside of the forest. (Nor may they fire out themselves.)

Trees may be removed at the rate of one tree per four figures, per move of non-movement, firing or melee [or four figure turns per tree.]

Trees may also be cut down and used to barricade a road if the barricade is within 6 cm. of a forest. Such a barricade requires ten "figure turns" to complete. [One figure would take ten turns to complete, or fifteen figures would take one turn, etc.] Once the barricade is in place, it will take the same time to remove.



The outside edge of the forest is defined by the largest area it is possible to create, when connecting the outer most trees in any given group of trees with straight lines from one tree to another. **In our game you need to have at least three trees to indicate a forest.** One or two trees on their own are simply for visual effect.

Rivers:

On the game board rivers can be designed as either a **river** or a **creek**. Rivers are about 4 or 5 cm wide. A creek is one to three cm wide.

Rivers can only be crossed at a designated ford, or at a bridge.

Crossing a *creek* anywhere other than a bridge reduces movement by 1/3rds.

Crossing a *river* at a **ford** reduces movement by 1/3rds.

Crossing a *river* or creek at a bridge entails no penalty.

Cavalry cross rivers and creeks with the same rules as infantry

Wagons, medieval catapults, ballista, elephants, and musket period artillery may ONLY cross at a bridge

Boats may be used on rivers as described in the advanced rules. [See: Optional Rules section.]

Fords:

If a unit requires more than one turn to cross the ford, they will be reduced by the same amount, for both turns.

A unit caught in melee, while any portion of the unit is in a ford, will be reduced by one melee point.

All units must be in a formation no greater than the width of the ford, when crossing a ford.

Bridges:



Units traveling across a bridge suffer no loss in movement if their formation does not change.

Bridges may be of different sizes, but the stand must be able to fit on top of the bridge for it to cross. If the bridge is not wide enough for the stand to cross, then it may not.

A wooden bridge can be destroyed with **three direct artillery rounds** upon the same part of the bridge. A wooden bridge may also be burned down, in the advanced game. [See: optional "catching things on fire" rules.]

A stone bridge may not be burned down or destroyed with artillery.

The center-top part of any bridge is the same height as a one level hill when firing or sighting.

Roads:

All troops add 1/3rd to their move for that portion of their turn which is on the road. Units must be in a column no greater than the width of the road, to count added movement.

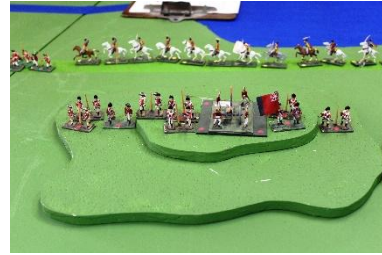
A charge move on a road, will be no faster than a charge move on flat territory.

Hills:

One hill section is the height of a man on horseback, and slows movement by 1/3rd, for each hill section traversed (going either up or down.)

A figure which is 6 cm. or more, away from the edge of a hill, cannot see or be seen, over the edge.

Shock value, for units going uphill, is reduced by one shock.



Extreme Ridge:

Specific areas of a hill can be designated as an extreme ridge. This designation makes the hill section totally impassable to all figures. Two hill sections stacked together (without any steps or levels) make an extreme ridge.

Marsh or Swamp:

No shock value is allowed in a swamp or marsh (as in rough terrain or plowed fields). Infantry, artillery, and cavalry will move at a reduction of 1/3rds in a swamp or marsh.

Troops on the edge (3 cm.) of the marsh may fire out, but once they do, they may also receive fire. Units are more than 6 cm. into a marsh, are hidden from view and may use hidden troop movement rules.

Artillery and other troops, one level or more above a marsh, may fire into it and see over it.

Rough Terrain/Plowed Fields:

Rough terrain or plowed fields must be designated on the board, and it reduces all movement by 1/3rds.

Wooden Fence:

A wooden fence provides some protection from musket/missile fire, but none from artillery fire. A section of wood fence (3 cm) will be removed when it is hit by artillery (any type of projectile).

Small arms fire (or missile fire in the medieval game) against troops behind a wood fence is reduced by one *step* (a "2, 4, 6" becomes "4, 6;" or "4, 6," becomes a "6," for example).

Shock is reduced by one shock against a wooden fence.

Stone Wall:

A stone wall will reduce small arms fire **by two steps**, and a section will only be removed with direct hit from a solid cannon ball. Shock is reduced by two shocks against a stone wall.



Suggestions for a better game:

1. **Consider victory conditions very carefully.** Think about the armies used, geography and cost values before agreeing to the game. A game can be lost or won before either army enters the board. An overconfident (or less than attentive) commander may agree to a nearly impossible objective and not realize it. (*I've done it many times!*) You should be willing to take some chances, and you might even purposely take on a difficult task for a challenge; but be sure your objective is possible with the army you have.
2. Make plans *but don't become married to them*. Each move in the game will present new opportunities and you will have to change your plans quickly to take advantage of them and to react to unexpected situations. **An old saying states that "no plan survives contact with the enemy." It is very true.**
3. **Study the game board geography.** Learn to *read* the board. Consider the exact location of hills, forests, fords, bridges, fortifications, rivers and walls. Geography can make or break your army. Using geography correctly is just as important to your overall success as is the selection of your army. [A few examples: Behind a wall your regular infantry can hold like guard. Your cavalry might be destroyed by attacking light infantry in a forest. An eight-pound cannon on the right hill can become nearly as effective as 12-pound cannon for lower cost. Fords and bridges are good places to hold. You can use less costly units to do this job, while your longbow or riflemen inflict casualties from a far. Never take hills or fortified positions you really don't have to.]
4. **Know your army;** learn the capabilities of each type of unit that is in your army. Use different figures in ways that extend their abilities and lessen their weaknesses. Use the speed of cavalry to find the enemy. Use your heavier infantry to take positions when necessary. Use artillery to weaken the enemy from a distance. Don't leave artillery unsupported, or you might find it taken away from you. Don't expect militia or peasants to wait around very long taking casualties. Your units with higher morale are best for holding and taking important positions; don't waste them.

5. **Always take a small bite if a larger one is not available.** Check every unit, every turn, to see if they are in range of the enemy. Even if only one figure can fire . . . roll the die. Later in the game that one enemy figure might make the difference between a unit routing or not. If that unit were to rout, the whole regiment or brigade might be forced to take a morale test to stop them and could rout as well.

6. Learn to accurately estimate distances in centimeters. This is of great importance in the effective use of artillery and in estimating the time needed to move from place to place on board. {Remember you may not “pre-measure.” **You can only measure when moving or firing.**

7. **Get your artillery up where it can do some good.** Your artillery can take a long time to move into position, especially when you’re moving up a hill. Every turn that the cannon is not taking a bite out of your opponent; you are losing potential casualties. This might not seem as important at the beginning of the game, but they may be crucial towards the end.

8. **Keep your objective in mind.** You don't win by only removing units or taking ground, you win when you have completed the agreed upon victory conditions. You can confuse, or detain your opponent, by giving away positions, units, or ground easily when they are not important to the overall strategy. Keep focused on the objective. (As in chess, a player might give away a piece, just to put their opponent into a position which might ensure a surprise victory.)

9. **Don't worry about - or comment on - the roll of the dice.** The dice will go with you for a while, and then against you. That uncertainty adds realism to the game. If you fire a unit of thirty muskets and don't roll a single hit - just forget it and think about the orders, you need to write for the next turn. The dice will vary so don't worry about them, worry about your strategy, which is where the game will be lost or won.



10. **Know the rules, but don't argue about them. If any situation is unclear, or a rule doesn't specifically cover a situation, try to come to an agreement that makes sense, stays within the spirit of the rules, and is fair to both sides.** If all else fails, roll the dice and let the winner decide.

11. **Be prepared to take calculated chances.** Never make a move that does not have a purpose but be willing to gamble when the odds are in your favor. Being too careless will encourage defeat, but so will an excess of caution. Learn to recognize the difference.

12. **Focus on your attack.** It is better to hit a single unit, taking many casualties, than to spread the losses among an entire brigade. Hitting a single unit with a focused attack might get one unit to route and that might be enough to change the entire direction of the game.

13. Finally: **A war game is not a war; it is a game.** It is fun to win, but **if you play for the fun of playing the game, you can win every time you play.** Arguments and nit-picking do not produce a good war game. Be sure that both sides have a good time, and you can look forward to many good games.



Ancient and Medieval Rules



Acknowledgements: I want to acknowledge the help I have had from many war gamers over the sixty-year evolution of these rules. Their patience was appreciated as we tried out (and continue to try out) variations of these rules.

I especially need to recognize the contribution of Bob McClure, to whom I dedicate these rules. Much of the playability found in these rules comes from Bob's willingness to try endless variations of the rules, as I adjusted and refined them. Although we played hundreds of games together, we seldom played two games with the same set of rules!

I also need to thank *Joseph Morschauser* (*How to Play War Games in Miniature*, 1962) and *H.G. Wells* (*Little Wars*, 1913) for these two books that put me on the path of miniature war gaming.

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Figure Capability Chart

Ancient / Medieval

Infantry:

Figure Type	Armor	Shock	Movement in cm	Melee Pt	Morale Value	Range in cm	Cost
Peasants	light	0	30	2	1	0	1
Light	light	0	30	4	2	0	2
Medium	medium	0	24	6	3	0	3
Men-at-arms	heavy	½	21	8	4	0	4
Hoplites	medium	1	24	6	5	0	5
Roman Aux	light	0	30	4	3	varies	3
Romans	medium	½	24	8	5	3 cm <i>Pilums</i>	8

Missile:

Figure Type	Armor	Shock	Move in cm	Melee Point	Morale Value	Range in cm	Cost
Archer	light	0	30	3	3	40	10
Archer	medium	0	24	4	3	40	10
Crossbow	light	0	30	3	3	40	5
Crossbow	medium	0	24	4	3	40	5
Longbow	light	0	30	3	4	60	20
Longbow	medium	0	24	4	4	60	20
Arbalest	light	0	30	3	3	60	15
Arbalest	medium	0	24	4	3	60	15
Horse Archer	light	1	60	3	4	30	20
Horse Archer	medium	1	60	4	4	30	20
Slinger	light	0	30	2	2	30	5
Supply Wagon*	----	----	30	----	----	----	20

*Supply wagon can carry enough artillery projectiles to equip three ballista or one catapult/onager with twelve more shots. It can also supply enough arrows for twelve more shots, per figure, for a missile unit.

Cavalry: [All cavalry units count morale two columns to the right on the Post-melee Morale Chart.]

Figure Type	Armor	Shock	Move / cm	Melee	Morale	Range / cm	Cost
Light Cavalry	light	1	90	8	5	0	10
Med. Cavalry	medium	2	78	9	5	0	10
H. Cavalry	heavy	3	72	10	5	0	10
Mounts / Inf.	0	0	60	0	0	0	5
Chariot\Archer	medium	1	51	6	---	30	20
Chariot\Slinger	medium	1	51	6	---	21	15
Chariot\Javelin	medium	1	51	6	---	12	10
Chariot\fighter*	medium	1	24	6	---	0	5
War Elephant	medium	0	24	8	-----	Javelin 10cm	50
War Elephant	medium	0	24	8	-----	Archer 30 cm	75

*Chariots take orders individually and do not form units. This chariot carries a fighter to melee and then leaves. The fighter continues as medium infantry with sword and shield.

Artillery:

Figure Type	Armor	Move / cm	Melee	Range	Hit Area	Crew	Cost
Ballista	light	12	2	90	6 cm linear	3	75
Onager/Catapult	light	12	2	100	8 cm diameter	6	100
Trebuchet	light	0	2	120	10 cm diameter	9	120

Gunpowder Artillery

Figure Type	Armor	Movement	Melee	Morale	Range	Crew	Hit Area	Cost
hand cannon	medium	24	4	2	0-14 cm = 2,4,6 15-20 cm = 4,6	----	-----	5
pot d' fer	light	12	2	2	60 cm.	3	6 cm. linear	50
culverin	light	12	2	2	75 cm.	6	6 cm.	75
cannon	light	12	2	2	90 cm.	6	8 cm.	100
bombard	light	10 cm, then Zero, once set up	2	2	120 cm.	9	12 cm	120

Ancient & Medieval Rules

The following rules apply specifically to war games in the ancient and the medieval periods, and *they are used in addition to the common rules.*

Historical Grouping:

There are many ways to play historical war games. You may wish to play only in a specific period. (For example - the War of the Roses, or The Battle of Hastings.) This is the most historically accurate method, but you need to have a lot of figures which fit that specific period. The drawback is that your war game may become less interesting over time. Another method is to collect figures from a general period [such as the early medieval period] and recreate your own battles using a variety of figures. You can use the following as rough guidelines to create general period armies:

Ancient	Early Medieval	Late Medieval
light infantry	light infantry	light infantry
medium infantry	medium infantry	medium infantry
light cavalry	light cavalry	men-at-arms
chariots	medium cavalry	light cavalry
slingers	light bowmen	medium cavalry
light bowmen	Viking Berserkers	heavy cavalry
elephants	light bowmen	long bowmen
hoplites	crossbow	crossbow / arbalest
legionnaires	pole-arms	pikemen
catapults	catapult	catapult /trebuchet
ballista	ballista	gunpowder weapons

Either of these options can be used; it's up to you. I enjoy collecting from all many periods. In this way we can occasionally fight Romans against Swiss Pikemen or fight long bowmen against war elephants! It may not be historically accurate, but it can be interesting. It is your choice.

Army Organization:

It is convenient to form your numbered units between 6 and 36 figures, each of *like type* (a unit of light crossbowmen or medium infantry for example) into permanent armies. (Light troops can be grouped into units of from 6 to 12 stands or 12 to 24

figures if both sides agree.)

For example, an army named *Henry Vth* might contain a few units of men-at-arms and several of longbow. *Duke William of Normandy* might consist of cavalry, medium infantry, and a few light archers. Each side can choose an army and then pick the specific units they want to use, up to the total cost allowance in the game.

Army Roster:

After the board is set up, and victory conditions are agreed upon, you can select specific units to fill out your roster sheet. (On the Roster Sheet you will list the figure type and unit number, for each unit under your command.) The units on your roster can be made up of only units out of the army chosen for that game.

When selecting the units for your roster you should calculate the cost (if you are using this option) to see that you haven't gone over the agreed upon limit. [The column marked: *special information* on the roster, is not used in the basic game, but may be used in the advanced game, to indicate special status such as *imperial*, *mercenary*, *extra throwing axes*, and the like.]

Battles:

A medieval army can be made up of sections called *battles*. (The front battle is the vanguard or **van**; the middle is the **main** and the last was the rearward or **rear**.)

A *battle* is a group of two or more units which take orders, move and fight together. A battle is usually led by a Duke or a Baron. [Designate a specific individual cavalry figure to be the Duke or the Baron.]

Although all figures in each unit must be of the same type, the different units in the battle may be of different types.

Note: It can be effective to put at least one unit with a higher morale point in a battle, to help hold the battle together, when morale is tested. However, putting a unit of Heavy Armored Men-at-Arms will help with morale but it will also slow the unit down when moving.

A battle is formed at the beginning of the game.

A battle can *break*, due to enemy actions, but it may not be changed or added to during the game. If a specific unit in a battle is broken (loss of base-to-base contact) the smaller portion of the unit will rout off the board on the following turn if

contact is not restored. The broken unit may be saved by any units, in the same battle, that have not suffered a poor morale reaction (*back, back and turn or rout*) may roll a 3-DT. If they pass the battle is saved; but if it fails, the entire battle suffers the same fate as the broken unit.

Units in a *battle* may be given orders to separate, but if they do they remain separated for the rest of the game.

Units do not have to be in a battle, but they have significant morale advantages if they are. The danger of forming units into a battle is that the entire *battle* could rout because of a single unit.

All units take orders as a group and are led by a *Knight*. Knights are individual figures put on round (as opposed to square or rectangular) bases, to make them distinct from the rest of the unit. [An optional method for victory conditions is to keep score by counting the number of knights captured for ransom.]



All artillery stands and siege engines are *unattached and not part of a Unit or a Battle*.

An Army can consist of any number of Battles. An army is led by a King, Prince, or a Duke. (You can designate a single cavalry figure for each.)

All units in a battle must stay in base-to-base contact and therefore travel only as fast as the slowest unit in the group.

Units in a battle melee independently. **The morale effect is counted on each unit, but the unit's post-melee morale is enhanced when it is part of a battle.** If a poor morale result occurs to one unit, the other units in the same battle may hold the first unit. (See: 3-DT.)

Effects on a unit in a Battle:

1) **All units in a Battle move across one column when counting Post Melee Morale on the morale chart.** [For example, a unit which had a morale value of 68 would normally use the column 61-70, but when they are part of a battle they would automatically move to the next column, 71-80.]

2) **A unit may be stopped from a poor morale reaction (*back, back and turn, or route*) if any unit, which is part of the same battle, has not suffered a poor morale reaction that turn, can pass a 3-DT** [See: Three-Dice morale test.]

If they do not pass the 3-DT, then both units in the battle take the morale reaction and the battle is broken unless a third or fourth unit can hold with a 3-DT. They must also have not suffered a poor morale reaction in that turn.

A unit which has suffered its own poor morale reaction, in that turn, cannot prevent another unit from having a poor morale reaction.

If all units in a battle each suffer a poor morale reaction, then none of the units can save the battle, and each suffers its own reaction. The battle is broken for the rest of the game.

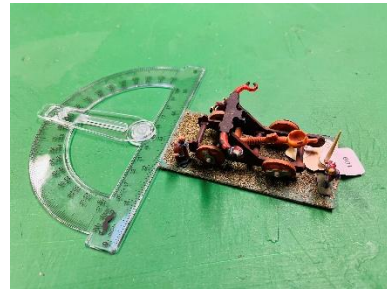
Example: At the end of a turn, you have three units in a battle, and one suffered a "B&T", one suffered a "Back" and one suffered a "Route" that turn. All have suffered a poor morale reaction, so none of them can attempt to hold the entire battle with a 3DT. In this case all units must take their morale reaction independently and the battle is broken for the rest of the game. One-unit routes off the board. One moves back half a turn in good order, (Back), and the other moves back a full turn with backs to the enemy, (B&T) in the next turn.

Artillery:

Artillery/Missile Re-supply:

Artillery (onager, catapult, ballista, trebuchet, and early gunpowder cannon) **and missile units** (archers, crossbow, slingers etc.) **may fire 12 shots before being re-supplied.**

Each stand is assumed to have 12 shots at the beginning of the game. Once these are gone, the missile figure will become infantry if not resupplied.



One wagon (cost: 25 pts.) carries supplies for three Ballista, pot 'd fer, or one catapult or other artillery) or 24 missile shots, per figure, for a unit of missile troops. **[Remember that the contents of each wagon must be designated on the roster sheet at the beginning of the game.]**

Your opponent need not be informed of specific contents unless they capture the wagon!

Catapult:

A catapult fires only once a turn and may not move and fire in the same turn.

Measure distances from the front and center of the catapults base.

Artillery (ballista, catapults, trebuchets, bombardards etc.) may not make up more than 1/3rd of your army, by point value, unless agreed to by both players.

A catapult or trebuchet fires in an arc and may not fire less than 1/3rds of its maximum range.

A ballista has no minimum range and may fire "point blank" up to 1/3rd of their maximum range. **If a ballista is firing less than their 1/3rd maximum range, they do not use the variation wheel.**

Medieval artillery figures are line-of-sight weapons. You can't shoot at what you cannot see. Artillery may fire over the heads of troops only if they can see the target! [A catapult might have the range to fire at units, which are not in sight, but without the players' birds-eye view they would not know the enemy unit was there.]

Artillery casualties are taken *before* missile fire is counted. Then you count shock (if any), then melees are fought. Casualties due to artillery fire are removed immediately, and they may not return fire.

Artillery hits against other artillery may return fire before being removed. If two artillery pieces are going to be fired at each other, each player should write down their range in the orders, before either fires. This way the one who fires "first" is not at a disadvantage as their opponent sees the range called and where it landed.

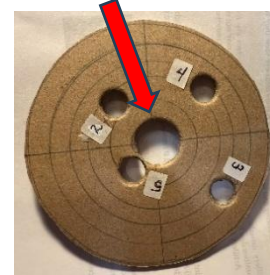
Ancient and Medieval Period Artillery Calculation

1. Point catapult or ballista towards the intended target rotating the piece up to 45 degrees right or left. (Rotating the artillery more than 45 degrees counts as a "move" and it may not fire that turn.)
2. Call the range at which you wish to fire - without measuring.

3. Measure a perpendicular line from the center of the front portion of the artillery stand to the range called.

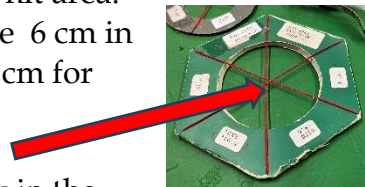


4. Place a marker at the center hit point on the variation wheel, (red arrow below) indicated by the range you called. Note there can be several variation wheels, each with different hole positions. Pick one at random, place the center of it over the point of impact. Then roll a six-sided variation die.



5. A roll of "1" or "6" means a direct hit and you leave the marker in the center of the wheel. Any other roll moves the "hit point" marker to that hole that corresponds to the result on the die.

6. At this point you have the location where the projectile hit. Place a catapult "hit area" centered over the hit area. (For a catapult or medieval cannon this is a circle 6 cm in diameter for pot d' fer, 8 cm for culverin and 12 cm for bombard or trebuchet.)



7. Any figure (including other artillery) hit directly in the center of the hit area (crossed by the center of the red threads) is removed. **If any figures are within the hit area at least ONE figure is removed.** Any figure within the 8 cm circle rolls a six-sided die. A 4 or 6 removes a figure. If an artillery piece is in the hit area (but not directly in the center) it rolls a die and a 6 removes it.

8. There are usually two figures on a stand so unless both are removed you will need to mark the stand with a "dead cap" to indicate that one has been removed. (When you have toothpicks glued to each stand of two figures, small wire-nuts work well as "death caps.")

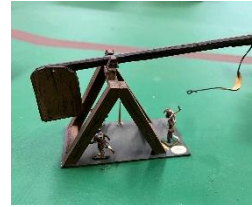


Note: You will want to remove casualties from the unit and leave the figures on the edge of the board as you will need to know the exact losses, to calculate Post-Melee Morale, at the end of the move.

*It is useful to cut out 6, 8 & 10 cm. etc. holes in a piece of matt board or poster board, to use as a template. Crosshairs can be added with thread, indicating the exact center of the hit area.

Trebuchet:

Will follow the same rules as the catapult, except that once in position it may not be moved for the rest of the game. The hit area for a trebuchet is 12 cm.



Ballista:

Ballista may not move and fire in the same turn, but they may be rotated on the axis 45 degrees before firing.

To fire a ballista – point the ballista at your target. (Rotating the ballista over 45 degrees from the center is a move and prevents you from firing that turn.) Call your range, up to its maximum, without measuring. Then measure the path of the bolt. **For the first third of the ballista range, no variable is used.** When firing more than the first third of its range, use the following variation procedure.

Mark the point where the bolt would have hit the ground and place a 6 cm variation wheel over that spot. Roll a six-sided die and move the marker according to the result. A roll of 1 or 6 is a direct hit and the center marker is not moved. Any other roll moves the hit point to the corresponding hole in the variation wheel.



The ballista bolt lands at the point of impact determined above. Any figure **whose head or torso is crossed by the last 6 cm of the path** of the bolt is removed as a casualty.

Ballistae are line of sight weapons and must be able to see what they are shooting at. **A ballista may fire over the heads of friendly units, if they can see the target, if the friendly units are more than 1/3rd of their maximum range.**

A ballista firing from a hill (or a castle wall) at a target beneath them can only shoot at target which is 1/3rd or more away from them.

A ballista does not remove a catapult or trebuchet (even with a direct hit), but it can remove another ballista, wagon or crew from an artillery piece. Two hits from a ballista will remove an elephant.

A catapult/onager may take out a ballista, trebuchet, or other catapult by hitting it directly (cross hairs on template cross the actual machine) or by rolling a 6 when the artillery target is within the hit area of the catapult or trebuchet.

Medieval Artillery Crew:

Ancient and Medieval Artillery: Number of crew:	
Ballista	3
Catapult / Onager / Culverin	6
Trebuchet / Bombard	9

Each piece of artillery is served by a crew. Crew are legitimate targets for melee, artillery and missile hits. Missile hits of any kind (light bow, cross bow, etc.) will remove artillery crew as it would *light infantry*. Casualties should be recorded on the Artillery Order Sheet.

Type of Artillery	Full Crew	Effects of a reduction in crew		
		Reduced to	Fire reduced to half	No longer able to fire
Balista / Pot 'd Fer	3	2 Crew	x	
		1 Crew		x
Catapult / Onager / Culverin / Cannon	6	4 Crew	x	
		2 Crew		x
Trebuchet / Bombard	9	6 Crew	x	
		3 Crew		x

An artillery piece reduced by 1/3 rds of its full complement may only fire at half of its normal rate (*fire every other turn, even if they do not move*). If an artillery piece is reduced by 2/3rds it may not fire or move.

If artillery is captured, and in good shape, they have the same restriction - they may fire at half of its normal rate even if they do not move unless they are replaced with designated artillery crew.

Extra artillery crew may be purchased at the beginning of the game at a cost of 20 pts per full crew. These replacement artillery crew members will function as the original crew and not require extra time to load and fire.

Medieval Artillery Fire: (hill levels)

Artillery (ballista, catapults, trebuchets) increase their effective range, when firing at a target which is one or more hill levels (each level is approximately the height of a man on horseback) below them.

Firing Above Target	Ballista	Catapult	Trebuchet
One hill level adds	10 cm	20 cm	30 cm
Two hill levels add	15 cm	25 cm	35 cm
Figures moving DOWN hill suffer the same 1/3 rd movement loss. Artillery may not go to a third level hill.			

When shooting up hill all ranges are reduced by the same amount.

Moving artillery up-hill levels:

Moving artillery up or down one hill level requires 1/3rds of a move.

Missile Fire: Firing into a massed group:

All missile fire (archers of all types, crossbow) into a formation, or group, of enemy figures which is four ranks or greater, will add one step when casualties are taken. [4, 6 will become 2, 4, 6 etc.]

Firing en passant:

Missile troops have the option of firing at an opponent's unit "in passing." This occurs if the opponent's unit is within range during the move (and the missile unit can fire at them) but ends up out of range of the missile unit at the end of the move. To determine *en passant*, each side moves a portion of their turn (usually 1/3rd) in the normal move sequence and repeat this to the point of one side being in range to fire, melee etc. After fire is resolved, they may move the rest of their move. En passant fire cannot require any unit to exceed their movement allowance for that turn.

Armor Classification:

Each ancient or medieval figure has an armor classification which determines its protection from missile hits. (You must record the armor classification of each unit on your *Army Roster* before play begins.) Usually, the figure's armor class is obvious as the figures being used show the armor class (light, medium or heavy -

Men at Arms), however, your opponent may ask for the armor classification of any unit which is within view. (Sighting ability is 90 cm. on the board.)

The following describes the typical figure for each classification:

Light: Little or no armor; weapons may include farm implements such as a pitchfork dagger, staff, or sword - no shield. Only these troops can be “skirmishers”.

Medium: Steel helmet, mail, or heavy leather armor; minimal plate, if at all; weapons include sword, mace, spear or axe, with shield and open-faced helmet.

Heavy: A man-at-arms in full armor; steel enclosed helm, leg, arm and chest protection. Weapons include swords, mace, spear or ax. No shield is necessary.

Archer/Missile Fire:

All missile troops are either light or medium armor classification. **Each archer, slinger, or crossbow figure rolls a single ten-sided die each time it fires.** Use the following chart to determine additional range when above a target.

To fire the missile unit must not have moved its entire movement allowance that turn. If it moved 2/3rds or less of its maximum, it may fire once (if already loaded). **A unit which has not moved may fire twice but only at in the same general area.**

Additional Range: (missile fire / archers)

Odds are increased or decreased due to various factors such as distance to target, and the type of armor (light, medium or heavy) is significant in medieval games but is not used in the musket period.)

Missile Fire from a Hill

Height Above Target	All Missile Figures
One hill level	Add - 5 cm.
Two hill levels	Add - 10 cm.
Three hill levels	Add - 15 cm.
Missile firing up-hill will suffer the same loss of range.	

The odds given below (for all three armor classes) are for 2/3rds to maximum range. Use the following chart to determine the missile odds against various types of armor and at different distances:

Steps (increases and decreases in odds) when firing:

Kill Shots {ten-sided missile die}

2, 4, 6, 8, 10

2, 4, 6, 8,

2, 4, 6 ← start here for *lightly* armored troops (infantry, artillery & cavalry)

4, 6 ← start here for *medium* armor (infantry, cavalry)

6 ← start here for *heavy* armor (infantry & cavalry)

0

Add a step: (move up the chart one level for each of the following)

1. Firing at less than 2/3rds maximum range (add one step)
2. Firing at less than 1/3rds. maximum range (add two steps)
3. Firing into a group four (or more) stands deep (add one step)

Subtract a step: (move down the chart for each of the following)

1. Firing at a target behind a wooden/stone fence (subtract one step)
2. Firing at a target on the edge of a forest (subtract one step)
3. If missile figures are firing *indirectly or firing behind the first rank that can see the target*, you subtract one step.
4. If firing at a unit that has moved that turn.

If units of different armor types are next to each other and are being fired upon by a single unit of missile troops (example: one unit is *light* infantry, and the other is *heavy* cavalry) the number of figures firing, at each unit, should be determined before any dice are thrown. The units are of different armor types; therefore, different odds are required to remove a figure.

You may not fire at figures that are in melee.

Missile fire is direct or line of sight. You can't shoot at what you can't see. **Indirect fire is permitted only from missile figures which are located directly behind the first rank of missile figures, in the same unit, which are in line of sight of the target.**

The second rank must fire at the same unit (or general location) as the first rank and at one less step. Missile troops may fire down from a hill, into units which are behind other friendly or enemy units, if they would be able to see them.

Missile fire from infantry figures is restricted to an arc of 45 degrees (right or left) from a line drawn perpendicular to the forward facing of the figure. Missile fire from mounted troops [horse-archers] is 180 degrees to the left and only 45 to the right.

Archer Fire: (loaded/unloaded)

MOVEMENT EXAMPLES	Archers / Arrows		Crossbow/Arbalest		Artillery	
	Loaded	Unloaded	Loaded	Unloaded	Loaded	Unloaded
	1/3rd	Aim/Fire	Load	Aim/Fire	Move	Aim/Fire
1/3rd	Load	Move 1/3rd	Move 1/3rd	Load	Load	Move 1/3rd
1/3rd	Aim/Fire	Aim/Fire	Move 1/3rd	Aim/Fire	Load	Move 1/3rd
1/3rd	Move 1/3rd	Move 1/3rd	Move 1/3rd	Move 1/3rd	Aim/Fire	Load
1/3rd	Move 1/3rd	Move 1/3rd	Move 1/3rd	Load	Destroy	Load
1/3rd	Aim/Fire	Load	Aim/Fire	Fire		Aim/Fire
1/3rd	Aim/Fire	Charge	Aim/Fire	Charge	Move	Melee
1/3rd	Load	Melee	Load	Melee	Destroy	Melee
1/3rd	Move 1/3rd	Melee	Aim/Fire	Melee		Destroy

Ancient and Medieval – Archery Steps

- Missile units that have not moved can fire twice, but only at the same target.
- Missile units that have moved a full move, may not fire as they spent the entire turn moving.

- Missile units that have moved up to 2/3rds, may fire once (if loaded).
- Archers generally have a sheaf of twenty-four arrows, unless some other limit has been agreed to ahead of time.
- Missile casualties do not just represent figures that have been killed but also figures that have been put out of the battle due to injuries.
- The second rank of bowmen may fire at the same target as the front row, but they are reduced by one step (4,6 to 6 for example) as it is indirect fire. Crossbows and arbalists do not fire indirectly (from the second rank.)



Remember if you die roll results in “no hits” is not to suggest that no one could be hit by such archer fire. It is to suggest that such missile fire would not be significant enough to calculate. *Broken* missile formations may not fire.

To fire missile figures:

First designate your target. **The specific target does not have to be written on their order sheet; they will fire upon enemy targets of opportunity automatically.** Then measure to see if the target is within range. (If you are out of range, the flight of missiles fell short, missing the target. If your flight fell short and hit your own men, or any other unit, casualties must be taken regardless.) If the target was within the maximum range for that type of figure roll one 10-sided die for each figure firing (and one for each time it fires) that turn; and remove one of your opponent’s figures for each hit rolled.

A small box (like a cigar box) with ten or twenty (10-sided) dice can speed up this process. Figure out how many missiles are being fired, and the odds then roll that number of dice all at once.

If two figures are on a stand, and only one of them is killed a *dead cap* is placed over one of the figures (or toothpick attached to the stand) to indicate that one is missing. Commercially available dead caps can be purchased. Hardware stores carry flexible plastic cups which are made to put on the ends of bolts, but which work just fine to put over the head of a dead figure. Wire nuts as in the photo can be used to put over the toothpick attached to each stand of figures indicating that only one is left.



Missile Units Being Attacked in Melee:

Missile troops being attacked in melee may usually fire before melee begins. **The missile unit must first take a 3-DT to see if they can choose to fire at midrange or close range (for better odds.). If they do not pass the 3-DT they fire at midrange with one bonus step. If they pass the 3-DT, and choose *close range*, they get another bonus step, however if they do, they may not also melee. In such a case the enemy attacks them (after taking the missile fire) but the missile troops may not fight back.**

Losses in Missile Attack:

Losses due to missile fire are simultaneous. Either player may count missile fire first. Figures removed will return fire. Non-missile troops, that are missile casualties, are removed before the melee portion of the turn begins (but will count as losses in Post-Melee-Morale). Missile units may fire according to specific orders, or according to the following target priorities:

Missile Priority:

If given specific orders on which unit to attack, they will attack that unit. If they do not have specific orders, they can fire at any enemy unit within range.

Artillery Piece in Melee:

An artillery piece may fire before melee is counted if it can fire that turn. All artillery crew have a melee value of 2. Artillery stands can be captured and re-manned. [See: Artillery section.]

Shock Effect: (To determine the odds for removing an enemy figure by shock)

[For example: Ten medium cavalry hitting a line of heavy infantry would have two shocks per cavalry figure, or 20 shocks. Each figure will roll a six-sided die and 2, 4, or 6 on any die, indicates a hit and one of the medium infantry figures is removed.]



Unit Attacking - Shock				
Roll one six-sided die per shock - per figure.	Light Cavalry	Medium Cavalry	Heavy Cavalry	Infantry <i>Hoplites, Romans, or Full Plate Men-at-Arms</i>
Unit Receiving - Shock				
Light Infantry	2,4,6	1,2,4,6	1,2,4,5,6	2,4,6
Medium Infantry	4,6	2,4,6	1,2,4,6	4,6
Heavy Infantry	6	4,6	2,4,6	6
Light Cavalry	6	4,6	2,4,6	6
Medium Cavalry	---	6	4,6	---
Heavy Cavalry	---	---	6	---
Artillery	6	4,6	2,4,6	----

Shock is reduced: (*shock use six-sided dice*)

One Shock: against polearms, troops in a ford, up a hill, or behind a wooden fence.



Two Shocks: attacking through stakes, caltrops, pike, or a stone wall.

When shock has been determined and casualties have been taken, stands left in contact will melee.

Movement:

The chart below indicates the time needed for various actions.

Effects on Movement		
Reduced by 1/3rd	Reduced by 1/3rd	Increased by 1/3rd
Units of Morale Pt. 3, 4, 5 changing formation . (Morale Pt. 1,2 may not change formation)	Moving through a forest, not on road (except Indians or Forester)	An ordered "Charge"
Crossing a "River" at a Ford or a Creek anywhere	Crossing a "River" at a Ford	Bonus for any portion of movement on a road
"Passing Through" a friendly unit	Moving across "rough terrain" not on road	

Going up OR down, one hill level	Crossing a “creek” anyplace other than a Ford or Bridge	Musket Period Game: Infantry (Morale 4 or 5) column marching in straight line for entire turn
Unit changing the direction of march, more than 45 degrees	Artillery moving over a fence or wall	
Infantry crossing over a fence or wall (no reduction for cavalry)		

Additional Ancient Period Figures & Rules

Romans: (special order sheet not required)

Type	Armor	Shock	Move	Melee	Morale	Range	Cost
Infantry/auxiliary	Light	0	30 cm	4	3	----	3
Infantry Legion	Medium	1/2	24 cm	8	5	3 cm Pilum	8
Missile/Bow	Light	0	30 cm	2	2	42 cm	5
Missile/Bow	Medium	0	24 cm	4	2	42 cm	8
Cavalry	Light	1	90 cm	6	5	----	10

Infantry: Each Roman Legionnaire (excluding auxiliaries such as cavalry and bowmen) carry pilums. [A pilum is a throwing javelin with a range of 3 cm.] When a unit of Romans **engages in their first melee**, they will throw pilums at the enemy before they make melee contact. Each Legionnaire figure rolls for pilums before a melee begins. [Roll one ten-sided dice per Legionnaire; 4 or a 6 is a hit against all troops.]

A second rank of figures, behind the front rank, may also fire pilums at the enemy, if they are also within 3 cm. range. **These pilums must be thrown on first melee contact or not at all.**

The Roman pilum was also designed to penetrate the enemies’ shield and drag it down to reduce the enemies’ defense. **When a unit receives a volley of pilums (aimed at 1/3rd or more of its figures) they will melee at one less melee point for**

the next turn, due to the pilums sticking into their shields.

Roman Legionnaires (excluding auxiliary units, bowmen, or cavalry) can form a *testudo* (turtle) in the shape of a square or rectangle. This formation requires 1/3rd of a turn and reduces movement to 1/3rd normal. The formation must be at least four figures deep. Once in a *testudo*, Roman Legionnaires are protected from missile fire, but not from artillery fire.

There is also **no shock effect** against a *testudo*. Romans may not fire pilums while in a *testudo*.

It has been said that the Roman Legionnaires "won more battles with the spade and shovel than by the sword." They were very efficient at making defensive fortifications. Each figure can produce one centimeter of entrenchments per turn when it is not otherwise moving, in melee, or firing. These entrenchments (trenches with embankments) are treated as stone *fences* in the rules.



Each Roman legionnaire may also put up **one centimeter of defensive stakes per turn per figure** (if not moving, in melee or firing, or digging). This uses up their stakes. Extra stakes can be purchased at the beginning of the game at a cost of 2 pts. per figure.

Roman Cavalry:

Roman cavalry is lightly armored. They do not construct bridges, stakes or trenches nor do they form the *testudo*.

Roman often used auxiliary troops as cavalry and missile troops. They count the same as other figures of the same type - so Roman cavalry is the same as other light cavalry; their bowmen are the same as other light bowmen. Only the infantry Legionnaire can fire pilums, form a *testudo*, or dig emplacements.

Roman Legion cohorts (up to 36 figures) may also be subdivided into centuries of up to eight figures each. These centuries can then be given independent orders. When they are no longer in base-to-base contact with the rest of their cohort they will be treated as a separate unit. They can reform with previously assigned units without penalty.

Any Legionnaire unit which suffers a poor morale test (*back & turn or rout*) in melee with any unit having a melee point of six or less, will automatically be **decimated!** *Every tenth Roman figure in the unit is immediately removed, as punishment!*

War Elephants: (special order sheet required)

Armor Class	Move	Melee	Number of Missiles	Range	Cost
Heavy Javelin	24 cm	8	12	Javelin - 12 cm	50
Heavy Archer	24 cm	8	24	Archer- 30 cm	75

- Elephant figures move individually, not in units. Each figure will use the special *war elephant* order sheet.
- Each war elephant includes: one archer or javelin thrower, and one mahout or driver.

The javelin thrower has 12 javelins, and the archer has 24 arrows. **They may fire twice each turn (fire/load/fire) regardless of how far the elephant has moved,** as



the elephant is moving and not them. This gives them more time to fire. You may have to consider the elephant's location when the archer or javelin thrower fired their first missiles and their second.

Elephants **do not "charge"**. They engage the enemy in melee and with missile fire.

The elephant has a melee point of 8. When it has a combination of six missile/melee hits it will **rampage**. Consult the following chart, to see what happens.

Rampage: Roll two six-sided dice:

2-9 Moves forward 6 cm, destroying everything (within the width of its base) up to six figs.)

10-11 Moves backwards 6 cm, (possibly doing the same to your own troops if they

are too close)

12 - It crushes everything within 6 cm of the elephant's stand, destroying itself in the process.

Elephants are *removed* by:

- 1) By missile fire and melee accumulating six kills, resulting in a rampage. A rampage will result in the removal of the elephant.
- 2) With a direct hit from a catapult the elephant is removed immediately.
- 3) If the elephant has received two direct hits from a ballista it is removed. One ballista hit counts as two missile hits.
- 4) A rampage happens instantly during any turn in which the elephant has accumulated six hits.

When counting missile hits against an elephant: (On a ten-sided missile die.)

Odds at far range: 4, 6

Odds at midrange: 2, 4, 6

Odds at close range: 2, 4, 6, 8

- An elephant may break or split a unit. These broken or disrupted units (regardless of which side they are on) must reform on the next turn or they will be routed.
- The elephant driver or mahout can destroy the elephant if a specific order, was written for that turn. (The mahout then drives an iron spike into the elephant's brain with a hammer.) Only the mahout can do this! This stops the elephant immediately.
- Horses do not like elephants. If a war elephant gets within 10 cm of any cavalry unit that cavalry unit **MUST** move away from the elephant in the next turn.
- Slings have no effect on war elephants.
- A war elephant can both melee and fire missiles in the same turn.
- Losses are recorded on the Elephant Order Sheet

An elephant attacks enemy troops in the following manner:

1. Missile Fire: from the javelin thrower or archer from the Howdah
2. Melee: It melees at an 8 against all troops attacking it. It can melee more than once against each of the opponent's troops within melee range.
3. Rampage The elephant will rampage when it reaches 6 "hits" from missile fire or melee.

Greek Hoplite Phalanx: (special order sheet not required)

Armor	Shock	Move	Melee	Morale	Cost
Medium	1	24 cm.	6	5	5

A phalanx is only formed by Greek Hoplites. Greek Hoplites are formed into a phalanx when they are **two ranks deep** and in a (fairly) straight line. In the phalanx the unit may move forward at normal speed.

When a phalanx meets an enemy unit, or when two phalanxes meet each other, they roll for the melee. The side that has lost the greatest number of figures that turn, is pushed back 3 cm by the other unit. Then each side checks its post-melee-morale. This process continues until one side breaks due to post-melee-morale.

With long spears, hoplites can count the second rank of figures in the melee.

A phalanx will not push back war elephants. They may push back cavalry only IF they outnumber the cavalry units TMV (Total Morale Value - the number of figures times their morale value) by 1/3rd or more.

Once formed you may not break phalanx formation while in contact with the enemy. In phalanx formation, cavalry shock effect is reduced by two shocks - when attacking from the front.

The phalanx does NOT have to pass a 3DT to make a charge.

A phalanx, (two ranks deep) count shock in a "charge." In a charge the phalanx counts one shock per figure against the enemy. The phalanx may count figures two ranks deep for shock as they carry long spears.

A phalanx is not very maneuverable. While in a formation it may not wheel, turn

corners, or move right or left.

Out of the phalanx formation Greek Hoplites will react as normal medium infantry.

Missile fire against phalanxes is reduced by one step, when attack is from the front. Missile fire to the side or rear, counts normally.

Slingers: (special order sheet not required)

Armor	Shock	Movement	Melee	Morale	Range	Cost
Light	0	30 cm	2	2	21 cm	5

Slingers count missile hits against all troops except full plate (infantry men-at-arms) Greek phalanxes, or elephants for which they have no effect.

Slingers may fire one stone/lead slug per each 1/3rd of a move, or fire three stones per figure in one location.



A single line of slingers may start in front of a line of other friendly troops in a skirmish formation (up to two cm apart), fire twice, and then retreat behind the friendly troops if given specific orders to do so.

This movement must be *specifically ordered* on their order sheet, and it consumes part of their movement allowance and must be considered when measuring their move.

Ranks of slingers behind the first rank may fire, over a single line of men directly in front of them with one reduced step. Example: 2,4,6 becomes 4,6

Each slinger carries a bag of 24 stones (or lead) projectiles. Keep track of the number used each turn.

Chariot: (special order sheet IS required)

Chariots operate individually. The chariot order sheet reflects this. The front orders are for a group of individual chariots. (Example: Chariots 10-15) On the back you can give individual orders to specific chariots. Chariots take casualties

as individual figures, not as a unit. Each chariot has a driver and either an archer or a javelin thrower.

Armor	Shock	Movement	Melee	Morale	Range	Cost
Medium	2	51 cm	6	---	Archer 30 cm	20
Medium	2	51 cm	6	---	Slinger 21 cm	15
Medium	2	51 cm	6	---	Javelin 10 cm	10
Medium*	0	24 cm	6	---	Zero / Melee fighter only	5

* The Celtic or Egyptian Chariot carries a fighter who dismounts to fight. It has no missile figure but may have a driver. The chariot is used simply to arrive at the melee. It travels 51 cm but has no shock. The fighter melees like medium infantry (6) and moves 24 cm.

An archer has 24 arrows, a slinger 24 stones and a javelin thrower has 12 javelins.

Figures are removed due to melee or missile fire in the following order:

- 1) archer, slinger or javelin thrower
- 2) fighter (if a Celtic or Egyptian chariot)
- 3) driver

Missile hits against the chariot begin at a 4, 6 for long range, on a ten-sided die (but may go up or down due to range and other factors).

When rolling against a missile or melee hits, a roll of a "1" indicates that a horse was killed, and the chariot may not move for the rest of the game, but missile figures may still fire.

The archer, slinger or javelin thrower may fire twice in a turn but only at a target they were in range of. They can't, for example, move their entire movement allowance and then fire two shots at the end. They would not have the time. They might fire at different targets along the way, however. Remember they would have to be loaded at the beginning of the move, fire, reload and fire again.

Since the chariot is moving and not the archer or javelin thrower, they can fire twice in each turn even if they move.



The chariot impacts the enemy with shock (2 per chariot) if it hits the enemy's line in a charge. It may not fire and melee in the same turn as the driver and missile figure are both busy with either firing or the melee and can't do both at the same time.

They may fire as they meet the enemy in a melee, or as they pass by an enemy. [See: "en passant"]

Each archer has a limit of 24 arrows, each slinger 24 projectiles, and each javelin thrower has a limit of 12 javelins. [Mark off on the order sheet.] Mark off losses for each on the Chariot Unit Order Sheet.

Greek Fire: ("sea fire", "Roman Fire" etc.)

Thucydides comments on a long tube on wheels blowing flames, 424 BCE. It was used by Byzantium in the 7th century CE and Europeans picked it up during the Crusades.



It was used mostly in ship battles.

Most were permanently installed on ships or battlements. There were different formulas - petroleum, pine resin, sulfur, naphtha, quicklime etc. It was not a ship killer like the ram. Could only work in quiet seas and calm winds. It had a short range - maybe 50 ft.

Some sources describe tanks used to heat the fuel first and that it made a loud roar when fired.

Each Greek Fire unit can fire only every other turn. Everything within the hit area (determined with a cut out flame template) is destroyed. If a ship or wooden structure is within the hit area use the fire rules.

When given orders to fire - roll a six-sided die:

One: Greek fire unit explodes and destroys it and anything within a five cm range of it.

Three: Misfire - you may try again on the next turn

Two, Four, Five or Six: destroys target and reloads for next shot in two turns.

Mounted Infantry: (special order sheet not required)

Armor	Shock	Movement	Cost
-----	0	60 cm	5 pts each

Infantry figures with a morale point higher than one can become mounted. They do not become cavalry by doing so, but they do gain extra movement.

Mounted infantry will always dismount to fight or shoot. There is a loss of 1/3rd of their normal movement allowance, to mount (and leave firing positions) or dismount and take up firing positions.

One horse figure is required per infantry figure. Mounts may be captured by the enemy. Mounted troops move an additional 60 cm. maximum per turn when mounted. Mounts may be left behind when the infantry advances.

To return to infantry they must move to where the horses were left before proceeding. A unit may have split its move between the time that it is mounted and the time it is on foot. When a mounted unit is attacked its losses will be reflected in the losses of mounts (one mount lost per four figures lost), only if they are either on the mounts at the time or are with them when being attacked.



Mount indicators can be made from pieces of balsa wood or heavy poster board (one-inch square.) If mount markers are placed in front of the figures on the board, that indicates they are mounted. If dismounted, the indicators are placed behind the line of figures.

Mounted figures may not fire or melee from horseback.

Swiss Pike: (special order sheet not required)

Armor	Shock	Movement	Melee	Morale	Cost
Light	½	30 cm	6	5	6
Medium	½	24 cm	8	5	6



Pike can be light or medium and be in units up to 36 stands. All pikes, (up to three ranks deep) count on the defender when attacking. In defense, only the first row of pikes will take casualties (unless attacked by pikes or pole arms.) Shock against pike, two ranks deep or more, is reduced by two shocks.

Pole Arm / Spear: (special order sheet not required)

Armor	Shock	Move	Melee	Morale	Cost
Medium	½	24 cm	7	4	6



Pole arms include a long pole ax, glaive, maul, spear, and flail. Pole arms may be used to strike from behind a rank of men (other pole arms or another friendly unit), in which case the defender must count an additional melee attack. The pole arm figure does not count the attack (or roll his melee die), in this secondary attack. When not behind a rank of men the figures melee as usual.

Samurai: (special order sheet not required)

Figure	Armor	Shock	Movement	Melee	Range	Cost
Infantry	Medium	0	24 cm	*	-----	25
Archer	Medium	0	24 cm	*	30 cm	30
Cavalry	Medium	1	72 cm	*	-----	35

A samurai fights individually, not in units. They do not count morale. They accept missile hits as medium infantry. In melee they count differently depending upon the type of unit they are fighting:



Against heavy armor	8 (or other samurai)
Against medium armor	9
Against pikes	9
Against light troops	10

Mongol Horse-Archers: (special order sheet not required)

Armor	Shock	Movement	Melee	Morale	Range	Cost
Light	1	60 cm	6	4	30 cm	30



1. When enemy cavalry comes within sight of Mongols the defending unit must pass a 3DT. If they fail this test, they will rout.
2. Mongols may fire three times per turn, but only at the same target.

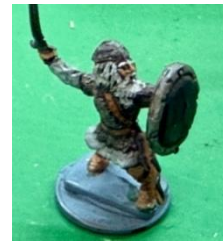
Viking Berserker: (special order sheet not required)

Figure	Armor	Morale	Movement	Melee	Cost
Infantry	Medium	-----	30 cm	8*	40

* The Berserker figure fights individually and not as part of a unit. It begins melee at 8.



Each time it is *killed* (by melee or missile hits) it is reduced one melee point until it reaches zero and is removed. (An artillery direct hit will remove it immediately as well.)
A maximum of three berserkers are allowed per army without agreement from both sides.



Berserkers will melee with their nearest enemy figure each turn. They do not require orders, nor would they follow them. They cannot be recalled once they have engaged in a melee and will only stop fighting when all enemy figures are gone. They will move toward the closest enemy figure each turn until removed. Once in a melee they cannot be called.

Hussite War Wagon: (with figures described below)

Armor	Shock	Movement	Melee	Morale	Range	Cost
-----	0	30 cm	varies	varies	varies	varies

These are complicated battles and need to be agreed to and discussed thoroughly ahead of time. In the early 15th century, a type of combat using armored wagons, cannons, polearms, and pike, was used in Bohemia. Lead by the blind - Jan Ziska, this combination was used successfully against armies of armored knights.

Each armored wagon may include:



One culverin, and 12 figs. of either: crossbow, hand cannon, men-at-arms or polearms/pike, and four figures of crossbow, or hand cannons, can fire from

inside the wagon.

The cost of each unit needs to be determined by the number of and type of troops it contains.

Pike usually fills in between the gaps between the wagons. While moving, troops inside the wagons are safe from missile fire and shock, (but not from artillery). Wagons can form defensive positions. Wagons are chained together in combat, and all enemy shock is prevented, and their melee is reduced by one point. Pole arms can strike from behind ranks of other figures. All troops behind the wagon are reduced one step in missile attack.

Gunpowder:

Crew:

	Number of crew:
Pot-d'fer / Culverin	3
Cannon	6
Bombard	9

Gunpowder weapons remove any cavalry, missile, or infantry figure they hit - regardless of armor worn.

All shots are line of sight only. (Medieval gunpowder projectiles do not bounce as they do in the Musket Period Rules.)

Hand cannons: (special order sheet not required)

Armor	Movement	Melee	Morale	Range	Cost
Medium	24 cm	4	2	45 cm	5

Hand cannon figures require 2/3rds of a turn to reload.



Since hand cannon penetrates any armor, you don't calculate steps for the type of armor when firing. When calculating range, the far range odds (final 1/3rd) are 4,6 for all figures; medium range odds (middle 1/3rd) are 2,4,6 and close range (1/3rd or less) the odds are 2,4,6,8.

Gunpowder Artillery: (Use “Artillery Order Sheet – Medieval Game”)

Figure Type	Armor	Movement	Melee	Morale	Crew	Range	Hit Area	Cost
Hand Cannon	Heavy	24	4	2	1	45 cm.	----	5
pot d’ fer (fires a bolt)	light (crew)	12	2	2	3	90 cm.	Last 6 cm. linear	50
Culverin	light (crew)	12	2	2	6	90 cm.	6 cm. hit area (diameter)	75
Cannon	light (crew)	12	2	2	6	100 cm.	8 cm. hit area (diameter)	100
bombard	light (crew)	0	2	2	9	120 cm.	12 cm. hit area (diameter)	120

All shots are “line of sight.” To fire hand cannons, use the same procedure as you do with the arbalist.



To fire **pot d’ fer** use the same procedure as with ballista. Ballista may not move and fire in the same turn, but they may be rotated on the axis 45 degrees before firing.

To fire a pot d’ fer – point it at your target. (Rotating the ballista over 45 degrees from the center is a *move* and prevents you from firing that turn.) Then, call your range, (up to its maximum plus any additional due to hill levels) without measuring. Then measure the path of the bolt.

For the first third of the range, no variable is used. When firing more than the first third of its range, use the following variation procedure.

Mark the point where the bolt would have hit the ground and place the same variation wheel used with the catapult over that spot. Roll a six-sided die and move the marker according to the result. (A roll of “1” has no effect. A roll of “6” is a direct hit and the center marker is not moved.)

The bolt lands at the point of impact determined above. Any figure **whose head or torso is crossed by the last 6 cm of the path** of the bolt is removed as a casualty.

The pot d’ fer is a line-of-sight weapon and must be able to see what they are

shooting at. **It may fire over the heads of friendly units, if they can see the target, (unobstructed). They can fire over friendly units that are more than 1/3rds of their maximum range.**

Firing from a hill (or a castle wall) at a target beneath them can only shoot at a target that is 1/3rd or more away from them.

A pot d' fer does not remove a bombard, culverin, catapult or trebuchet (even with a direct hit), but it can remove another ballista, wagon or crew from an artillery piece. It can remove an elephant with two hits.

A **catapult/onager, culverin, bombard**, may take out a ballista, trebuchet, or other catapult by hitting it directly (cross hairs on template cross the actual machine) or by rolling a 6 when the artillery target is within the hit area of the catapult or trebuchet.

To fire culverin, turn the cannon in the direction you wish to shoot (up to 45 degrees) and call your range, (up to the maximum permitted). Roll the dice for variation (as with the catapult). All infantry or cavalry figures within the hit area [indicated above] must roll to see if they are removed. A 4, or 6 removes a figure.



To fire a bombard, use the same procedure as the culverin except that it may not turn pivot once it is set up. Gunpowder weapons - artillery and hand cannon figures - come with enough projectiles to fire twelve times during a game without resupply.

Medieval gunpowder artillery fires stone shot and had a reputation for blowing up occasionally.

Before you fire roll **two six-sided dice**:

Roll	Effect
2,3	Misfire / cannot fire this turn
7,11	Good shooting / no variable used
4,5,6,8,9,10	Calculate shot normally
12	Stand blows up taking all figures within 3 cm

Artillery pieces may destroy objects when they are hit.

To determine how many hits are required to destroy each object, consult the chart below or work out issues before the game begins.

Castle Tower	2 hits with bombard / 4 with cannon (hits must fall within 5 cm. of the same spot)
Castle wall section	2 hits with bombard / 4 hits with cannon (hits must fall within 5 cm. of the same spot)
Stone Bridge / Castle Gate	One hit with bombard, 2 with cannon (hits must fall within 5 cm. of the same spot)
Wooden Bridge	One hit with bombard, one hit with cannon, (hits must fall within 5 cm. of the same spot)

Remember the following items are automatically destroyed, when hit by a direct hit from an artillery piece:

1. Other artillery,
2. Fences,
3. Supply wagons

This destruction takes place in addition to the casualties normally taken by figures in the artillery "hit area."

Caltrops: (special order sheet not required but must be designated on the unit's order sheet and roster)

Caltrops may be purchased for 10 points per 10 cm. Any infantry figure may carry them. Each figure may carry enough to cover two square centimeters of ground. Caltrops require one third of a movement phase to put into place, and one turn to remove, (at a rate of one figure per two square centimeters / per turn.)

Caltrops reduce both cavalry and infantry shock by one shock. Enemy troops will not generally know that caltrops are in place until they reach the area. If a unit moves, charges, or otherwise passes through an area in which caltrops have been placed each figure crossing over them has to roll a six-sided die to determine casualties.

If the unit (cavalry or infantry) has moved -

1/3rd of its maximum or less	=	no caltrop losses are taken
1/3 rd to 2/3rds of its maximum	=	roll of 6 is a hit
2/3rds to 100% of its maximum	=	roll of 4, 6 is a hit
charge (full move plus 1/3 rd)	=	roll of 2, 4, 6 is a hit

These losses are taken before melee or shock is calculated.

Defensive Stakes: (Special order sheet not required but must be designated on unit's order sheet.)

Each figure can carry 1 cm. of defensive stakes. **The cost is 2 points per figure.** [Long-bow and Romans will carry them without additional cost.] Stakes require one turn of non-movement, melee, or firing, to set up. Once in place they may be removed by either side. [This also requires one turn per fig./per cm.] Once removed, the troops removing them may set them up at another location.

Shock value against troops behind defensive stakes is reduced by two. Infantry and cavalry traveling through stakes unopposed, are reduced in movement by 1/3rd. Artillery or wagons, not on a road, are reduced by 2/3rds. All troops in melee with an enemy positioned behind stakes are reduced by one melee point.

Throwing Ax: (Special order sheet not required but must be designated on unit's order sheet.)

The cost is **1 point per figure**, and they can only be thrown once. Axes count as missile hits at close range (plus 2 steps) and have a maximum range of 6 cm. An infantry figure may carry a maximum of one throwing axe or javelin. Figures throw axes as they reach the enemy, in a charge or *engage* move, and then melee normally.

Javelin / Dart: (Special order sheet not required but must be designated on unit's order sheet.)

Javelins or darts count the same as throwing axes, but they have a range of 12 cm. and cost **2 points per figure**. Each figure (infantry or cavalry) may carry a maximum of two javelins or darts. Javelins may be thrown as the unit closes for melee, *or* they may be fired from 10 cm without melee.

Pavise:

A Pavise is a large shield used by archers and crossbowmen for missile protection. The cost is 2 points per Pavise. Each Pavise can offer protection to two figures. A Pavise will reduce missile hits one step.

Ransom:

Each side can begin with a specific number of *royalty figures*. [Typically, each player in the game chooses a single figure to represent themselves in the game - always royalty of course!] Each army is led by a King (or ruling Queen) or Prince. Each *battle* is led by a Duke or Baron. The number of Knights can be negotiated - but ten on a side usually makes for a good game - or one per unit. Each Knight must be attached to a specific unit and each Duke or Baron to a specific *battle*.



In a game with two sides, but many players; or in a game with several sides, each player can assume the role of one of the noble figures and be represented by the figure of their choice. Each side attempts to capture the other nobles in the game. When a certain value or nobility has been reached (say 1,000 points) the game is won. To capture Nobility, you must:

1. Rout the unit they are attached to
2. Kill off every other figure in their unit
3. Melee with the figure and win

Since the royalty are *noble and brave (you know - sort of stupid?)* They will not rout with the rest of their unit. Nobility will stand their ground and be captured by the other side. You don't want to kill them, you want to sell them back to their relatives for *ransom*, so nobility do not die from artillery or missile fire.

Under any circumstances in which any other figure would have been removed, (such as due to missile or artillery fire) the nobility is just wounded and subject to capture. Once captured, the noble figure must remain with the unit which captured it. If that unit is later routed or destroyed, the figure is released and may attempt to return to the closest friendly unit before being recaptured.

Some suggested point values for these figures:

Figure	Point Value
King / Queen	1,000
Prince	800
Duke	500
Baron	300
Knight	10

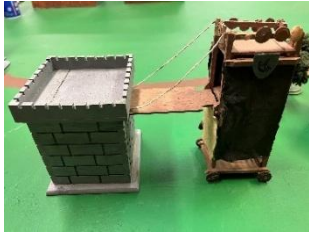
Siege Warfare:

The siege of a castle is the most complicated type of battle to simulate, on a game board, but it can be an enjoyable game to play. It requires the highest degree of cooperation on both sides to work properly. The following rules can offer *some* help in playing such a game.

Attacking a Castle Wall:

Six figures can carry a ladder which can be placed against the castle wall when the figures reach their base. The figures, at the base, must then melee with any figure at the top of the wall. They may take their place if they win the melee. The figures, at the base, are reduced by two melee points when making such an attack. Figures at the base of the wall are fair targets for missile troops from the top and there is no indirect fire against figures that are visible. Figures on a castle wall are reduced one step, when being fired at by missile troops below.

Siege Towers:



Troops cannot go over a castle wall without the aid of either a ladder, or siege tower. A siege tower can be moved into place at the rate of 10 cm. per move across level ground. Once in place, a siege tower can lower its platform into place and figures inside it and behind it can then melee with figures, on the castle wall.

Rams:



The front door of a castle can be destroyed with a ram. A ram moves 10 cm. per turn. Once in place it requires two turns to break down a castle gate. It comes with a crew of twelve which are needed to move or operate it.

Inside the castle:

All missile fire from the curtain wall gains extra range as if they were on a two-level hill. All missile troops in the castle have an unlimited supply of missiles. Units inside a castle have nowhere to retreat so instead of routing they will take a poor morale reaction (back, back & turn, rout) the same number of times equal to their morale point. After they reach zero, they are removed.



MUSKET PERIOD RULES

The following rules apply specifically to the musket *period* (*French and Indian War, American Revolutionary War, and the Napoleonic Era*) are to be used *in addition* to the **Common Rules**.



Acknowledgements: I want to acknowledge the help I have had from many war gamers over the sixty-year evolution of these rules. Their patience was appreciated as we tried out (and continue to try out) variations of these rules.

I especially need to recognize the contribution of Bob McClure, to whom I dedicate these rules. Much of the playability found in these rules comes from Bob's willingness to try endless variations of the rules, as I adjusted and refined them. Although we played hundreds of games together, we seldom played two games with the same set of rules!

I also need to thank *Joseph Morschauser* (*How to Play War Games in Miniature*, 1962) and *H.G. Wells* (*Little Wars*, 1913) for these two books that put me on the path of miniature war gaming.

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Figure Capability Chart: *Musket Period*

Infantry:

Figure Type	Shock	Move cm	Melee	Morale Value	Range cm	Cost
Militia	0	30	2	1	30	1
Light Infantry	1	36	4	4	30	2
Rifles	0	36	2	2	54	4
Regulars	1	36	5	4	30	3
Carbines/Fusils	0	30	3	4	24	2
Indians	0	42	4	2	30	4
Grenadiers*	1	30	6	4	30	4
Guard	1	30	8	5	30	5

* Each grenadier carries one grenade which counts as one musket shot. They may throw grenades over walls and into buildings, in which case the defender is not protected by them. They may not throw and fire muskets on the same turn. If they throw a grenade the range is 3 cm, and it takes out troops in the following manner:

*Grenadier/Grenades: (six-sided die)

1, 2	3, 4	5	6
Fizzles / dud	Take out one figure	Takes out two figures	Removes two figures and the figure throwing the grenade!

Cavalry:

Figure Type	Shock	Move in cm	Melee	Morale	Range in cm	Cost
Light / Hussars	2	90	8	5	10	10
Light /Lancers	2	90	10	5	---	10
Dragoons	1	84	6	5	25	10
Cuirassier	3	84	11	5	----	10

* All cavalry units count morale two columns to the right on the Post-melee Morale Chart.

** Light cavalry carry pistols; Dragoons carry carbines.



Musket Period Artillery:

Figure Type	Move / Cm	Melee	Morale	Range cm	Cost
6 pd cannon	21	2	4	60	40
6 pd horse artillery	42	2	4	60	60
8 pd cannon	21	2	4	80	80
8 pd howitzer	21	2	4	20-80	100
12 pd cannon	21	2	4	120	120
Congreve Rockets	42	2	4	20-80	80
Extra 18 rounds 12 round/solid shot, 4 explosive and 2 cannister.	----	----	---	----	20
6 Extra Artillery Crew	----	----	4	----	20 pts 6 figs

Artillery Firing	Canister In CM	Explosive In CM	Round/Solid In CM
Rockets	-----	20 - 80	-----
6 pd	0-20	21-40	0-60
8 pd	0-25	26-40	0-80
8 pd howitzer	-----	30-80	-----
12 pd	0-30	31-80	0-120

Measure distances for all artillery (both medieval and musket period) start from the middle front of the figures base.

Projectiles: There are three types of artillery projectiles which may be fired: solid/round shot (long range), explosive (medium range) and canister (short range.) Each Musket Period Artillery figure begins the game with 12 Round shots, 4 Explosive shots, 2 Cannister shots. **The type of shot does not have to be written in the orders; the crew will load the proper shell at the time it is needed.**

To fire round/solid shot:

- 1) Declare the type of shell you are firing. {Solid, Explosive or Cannister} It does not have to be written down as you can decide before firing.

- 2) Rotate the cannon, up to 45 degrees right or left, to line up with the target. (If you rotate more than this it will be counted as a move, and you may not fire.) Estimate the distance to target and call the range *without measuring*.



- 3) Measure from the artillery stand/base (center front of the base as in this photo) to the target and place a colored marker at the point that the point you called.



Place the center hole in a variation wheel over the colored marker. Roll a six-sided die. A roll of 1 or 6 means you continue using the center hole, any other roll moves the



point of impact to that hole.

Different variation wheels have holes placed at different locations. Pick one wheel at random before calling range or rolling any dice. Put the variation wheel over the hit point before rolling the variation die. The position of the wheel doesn't change once it is placed. Roll a six-sided die and if the result is a 1 or 6 you keep the original hit point (in the center). A roll of 2,3,4,5 moves the hit point to that location.



- 4) Place the yellow end of the bounce stick at the point called. (The length of the bounce stick corresponds to the size of the cannon – 6 pd, 8 pd or 12 pd)

- 5) The blue line on the bounce stick is lined up with the range called. Then, roll a six-sided die to find the variable which will move that hit point forward or backward up to 3 cm.

- 6) Any figure whose torso or head is crossed by the yellow numbered portion of the bounce stick, or any crossed by any red portion of the bounce stick, is removed as a casualty. A direct hit (yellow or red) also takes out a cannon, wagon etc.



Bounce stick = Cut a length of 1/4th inch wooden dowel 30 cm for a 12 pd gun: 25 cm for an 8 pd gun and 20 cm for a 6 pd gun. Paint the stick black. When dry, paint red sections along the stick randomly along the stick. (These red areas can be to your liking but generally about 2 cm each. Each bounce stick can be different but should have the same distance on it painted red.) Red areas indicate places where the cannon ball hit, and bounced, and the black areas indicate where it would be a miss.



You can use these sticks without the following changes. In this case you simply put the tip of the bounce stick at the "hit point" and any figure crossed by the yellow or red areas is removed as a casualty. The figure must be crossed by the "bounce", not just the stand.

Solid cannon shot will NOT bounce under the following circumstances:

- if the ground is soft such as a wet or plowed field
- if the shot hits a solid object such as a stone wall, bridge
- if the shot is going uphill
- if the shot goes into or through a forest (10 cm or more)
- if the shot hits or crosses a river, lake, or pond

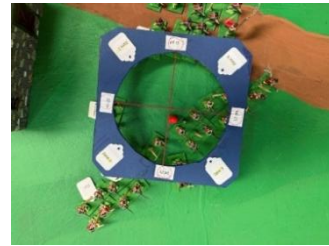
Musket Period Artillery Fire - **Explosive** Round

1. Start as you would with solid shot. Note that some of the ranges may be different for explosive rounds.
2. Place the variation wheel with solid shot and roll a six-sided die. Move the hit point to the hole in the variation wheel that corresponds to your die roll. Then put the "hit area guide" (a circle) for that size of cannon, over that spot. *Note: the 6 pd cannon and 6 pd rocket hit area guide has a 6 cm circle in the center of the guide. The 8 pd cannon and*



howitzer have an 8 cm circle in the center. The 12 pd cannon has a 12 cm circle cut out of the center.

3. Put the center cross hairs of the Hit Area Guide, over the hit point (red thread center marker).

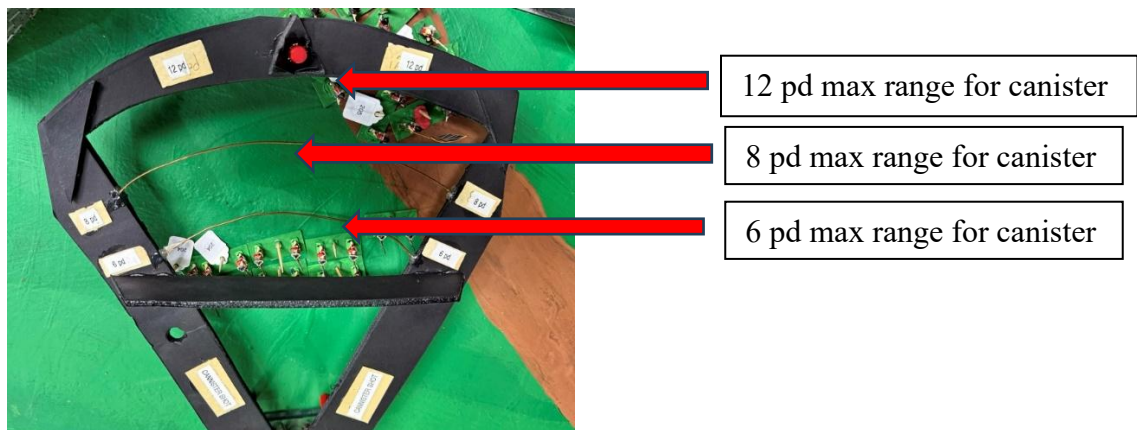


4. Any figure, artillery, infantry or cavalry, that is crossed by the intersection of the two red lines (threads) is an automatic kill. Any figure whose head or torso is within the round hit area, rolls a six-sided die and a roll of 4 or 6 removes the figure. If an artillery piece (or wagon etc.) is within the circular hit area, they roll a six-sided die and a 6 removes the piece. If any figures are within the hit area at least one of them must become a casualty.

Note: You will want to remove casualties from the unit but leave them separated at this point. You will need to know the exact losses from each unit, to calculate post-melee morale, at the end of the move.

Musket Period Artillery Fire – **Canister Shot**

1. There is no estimation of distance with canister. Use the special Canister Shot hit area guide. Place the middle point, as in the photo, up to the cannon figures/stand front center.
2. Note that this guide can be used for 12 pd, 8 pd, and 6 pd cannon. There are three distance indicators, one for each type of cannon.

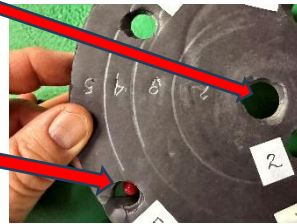


3. Every figure (infantry, artillery, or cavalry) whose head is within the area, defined by the guide, rolls a six-sided die. A roll of 2, 4, or 6 removes that figure. Casualties are counted in a wedge, on figures from the cannon stand base to the maximum range for that type of artillery.
4. Cannister can be devastating to your opponent, but your own cannon must be close to the enemy for it to be useful.

Tutorial: Musket Period Artillery Fire – British 6 pd **Rockets**

1. Follow the instructions for round/solid shot and explosive.
2. Use the variation wheel for British Rockets. *(It is 18 cm diameter, a bit larger than the standard wheel.)* Place the center of the wheel over the (in this case red) marker. Roll a six-sided die.

3. A roll of 1 or 6 means you don't change the hit point. A roll of 2-5 tells you where on the variation wheel, the red marker moves. In this case, the roll was "5". This indicates where the shell landed.



1. Put the crosshairs on the 6 pd hit area guide, (6 cm) over the red marker.
2. Any figure whose head is in the hit area rolls a six-sided die. A roll of 4 or 6 removes the figure. If an artillery stand (or wagon etc.) is in the hit area it also rolls and a 6 removes the figure. Any figure crossed by the red thread (line) in the hit area is automatically removed.
3. Since a rocket stand may fire up to **three rockets per move**, you might end up doing this three times for this figure that turn.

To make Rocket variation wheel – cut posterboard (or some other material) into a circle 18 cm in diameter. Cut (or punch) a 2 cm hole in the center.

Then starting with the outermost circle, mark a smaller circle 1 cm wide, at 17 cm. {Punch a 2 cm hole randomly along this diameter. This hole is to be marked "5"} Then mark a circle another 1 cm inside that mark, at 16 cm diameter. {Punch a random 1 cm hole along this diameter. This hole is to be marked "4"}. Then mark the next circle 1.5 cm inside of that circle. {Punch a random 1 cm hole along this diameter. This hole is to be marked "3"}. The final circle is 2 cm wide on the border of the center 2 cm hole. {Punch a random 1 cm hole at this diameter. This hole is to be marked "2"}.}

1. Firing over your own troops:

A howitzer or rocket may fire over the heads of other stands in its own army, or the opponents; However, it may only fire at a target that is known or visible to it. [Howitzers and rockets may fire up hill to any level which is in range.

Other artillery may only fire up one hill level.]

Other artillery may fire, over its own stands, only under the following circumstances:

If the target is further away than 1/3rd of its maximum range and any friendly troops to its front are at least 30 cm away from the cannon stand. [Round shot and explosive shot may be fired over the heads of troops which are at least one hill level beneath them, but canister shot may not, without taking friendly fire casualties.]

2. Each artillery piece is manned as indicated:

Type of Artillery	Full Crew	Effects of a reduction in crew		
		Reduced to	Fire reduced to half	No longer able to fire
6 pd	3	2 Crew	x	
		1 Crew		x
Rockets	3	2 Crew	x	
		1 Crew		x
6 pd Horse Artillery	6	4 Crew	x	
		2 Crew		x
8 pd / Cannon or howitzer	6	4 Crew	x	
		2 Crew		x
12 pd	6	4 Crew	x	
		2 Crew		x

Extra artillery crew may be purchased at the beginning of the game at a cost of 20 pts per six crewmen. These replacement artillery crewmen will function as the original crew and not require extra time to load and fire.

3. Artillery Melee:

Each artillery figure melees individually when attacked in melee. [Dead caps can be used to keep track of casualties.] All crew melee at 2 pts.

Your artillery may fire at a unit closing with them in melee, if they were able to fire before the unit closed.

4. Detached:

Crew can leave the gun (detach) and join another undermanned crew to make a full compliment. Extra artillery crew may be purchased at the beginning of the game for 20 pts for 6 crew.

5. Spike the Cannon:

Cannon crews may be given specific written orders to spike a cannon, to avoid it being captured (and possibly used by) the enemy. To spike the cannon an iron spike is driven into the touchhole with a hammer. Orders given to spike the cannon can only be accomplished when the artillery crew is not in melee. A spiked cannon cannot be used again, by either side.

6. If a cannon is left unattended (with no crew):

Either side may re-man, the gun and use it (if it has not been spiked). Re-manned artillery, not using trained artillery crew, may fire only every other turn even if it has a full complement as they are not trained.

7. Artillery crews & musket fire:

Cannon crews are legitimate targets for both small arms and artillery fire. The number of casualties should be recorded on the artillery order sheet.

8. Caissons and limbers:

All artillery stands include full limbers at the beginning of the game and suffer the same fate as the artillery piece.

9. Battery-to-battery fire:

If opponents are in an artillery duel (firing at each other, in "battery-to-battery" fire), the cannon which fires first may have a disadvantage, as their opponent will see the range used and may adjust accordingly. In such a situation, both sides must write down their calls before any hit points are calculated.

If two or more artillery pieces, on the same side, are firing at the same target, the first shot may be used to help judge the correct distance and the hit area determined, before the next cannon fires.

10. Artillery v. Infantry and Cavalry:

For any infantry or cavalry unit, which is four figures or more in depth; (often a flank) - the casualties from artillery fire are counted at one additional "step" (6 becomes 4,6). This is the same for musket and rifle firing on a unit which is four figures, or more, deep.

11. Parabolic artillery fire:

Artillery on a hill or ridge may not be able to fire down at a target beneath them. An artillery piece, which is on a hill, may be able to fire across a valley at a target which is equal to, or two levels above them and still not be able to fire effectively, at a target below them.

Shells fall in an arc. Judgments must be made as to the cannon's ability to physically fire at enemy troops, when backed against a hill section. Even when the artillery is fired from a hilltop, at a target which is lower, it still might not be possible when the arc of the shot is considered. The shell does not drop straight down but must follow a parabola.

14. Losses:

Artillery fire is counted before small arms fire, and figures are removed immediately, and may not return fire (although other artillery may return fire, after being hit).

Artillery firing from a hilltop (above the target)			
	6 pd.	8 pd.	12 pd.
One hill level (add to range)	+10 cm	+20 cm	+30 cm
Two hill levels (add to range)	+20 cm	+30 cm	+40 cm
Three hill levels (add to range)	+25 cm	+40 cm	+60 cm

15. Limits on added distance for hill levels:

Canister: is extended by a maximum of 10 cm. (6 pd.); 15 cm. (8 pd.) and 20 cm. (12 pd.) at its maximum range all hill levels

Explosive shot: is increased range for a maximum of 20 cm. only (including rockets and howitzers).

Solid shot: is the only round available for all increases in range. Solid shot does not bounce up hill.

Moving artillery up-hill levels or down: To move artillery up or down one hill level requires 1/3 of a movement period.

Artillery Rounds:

Artillery Firing	Canister In cm	Explosive Shot* In cm	Round / Solid Shot	Explosive Hit Area
6 pound/Rockets	0-20	21-40	0-60	6 cm
8 pound	0-25	26-40	0-80	8 cm
8 pound howitzer	-----	30-80	-----	8 cm
12 pound	0-30	31-80	0-120	12 cm
Odds (6-sided die)	2, 4, 6	4,6	Figure removed if touched by red or yellow on bounce stick	

Shock Effect:

Unit Attacking with Shock				
<i>Roll one six-sided die per shock - per figure.</i>	Light Cavalry	Medium Cavalry	Heavy Cavalry	Infantry <i>Hoplites, Romans, or Full Plate Men-at-Arms</i>
Unit Receiving Shock				
Light Infantry	2,4,6	1,2,4,6	1,2,4,5,6	2,4,6
Medium Infantry	4,6	2,4,6	1,2,4,6	4,6
Heavy Infantry	6	4,6	2,4,6	6
Light Cavalry	6	4,6	2,4,6	6
Medium Cavalry	---	6	4,6	---
Heavy Cavalry	---	---	6	---
Artillery	6	4,6	2,4,6	----

Small Arms Fire: (ten-sided die)

Range	Pistols	Muskets	Fusils/carbines	Rifles
Near	1 cm – 3 cm <i>Odds: 2,4,6</i>	1 cm – 12 cm <i>Odds: 2,4,6</i>	1 cm – 9 cm <i>Odds: 2,4,6</i>	1 cm – 21 cm <i>Odds: 2,4,6</i>
Mid	4 cm – 6 cm <i>Odds: 4,6</i>	13 cm – 21 cm <i>Odds: 4,6</i>	9 cm – 18 cm <i>Odds: 4,6</i>	22 cm – 42 cm <i>Odds: 4,6</i>
Far	7 cm – 12 cm <i>Odds: 6</i>	22 cm – 30 cm <i>Odds: 6</i>	19 cm – 24 cm <i>Odds: 6</i>	43 cm – 60 cm <i>Odds: 6</i>

When calculating how many times figure in a unit may fire consider each turn as having three parts. Small arms (pistol, musket or rifle) may only fire when loaded. Loading takes 1/3rd of a turn and firing takes another 1/3rd. If you move 2/3rds of your maximum distance and you were not loaded, you do not have time to load and fire. If you do not move and you begin the turn loaded, you may fire, load and fire again.

The rules for multiple fires are the same for pistols, muskets or rifles. Artillery may not move and fire in the same turn.

Miniature War Game Rules

	If your figures did not move	If you move up to 1/3 rd max	If you move up to 2/3 rd max	If you move the maximum
At the beginning of this turn they were LOADED	You may: Fire, load, fire again!	You may: Fire and load.	You may: Fire only	You may: not Fire or load
At the beginning of this turn, they were <u>NOT</u> LOADED	You may: Load, fire and reload	You may: Load and Fire	You may: Load but not fire	You may: Not fire or load

Additional Range: Small Arms Fire

Above Target	One hill level	Two hill levels	Three or more
Pistols	5 cm.	-----	-----
Muskets	10 cm.	15 cm.	20 cm.
Rifles	15 cm.	20 cm.	30 cm.

Army Organization:

During the musket period, different armies used different types of army organization. Reproducing specific army organization, drill and formation, is extremely complicated. Even common figure classifications such as dragoons, or grenadiers, often played different roles, in different armies, at different times. If you are interested in reproducing an exact army organization, it can be researched and added to the game. Such specifications might be found in other game rules, which may be more historically accurate (and almost certainly more complicated). Absolute precision in an exact time-period is not being attempted here.

Regiments and Brigades: (See Common Rules)

In this game a *unit* of infantry represents a *regiment*. The actual number of men in a regiment varied from nation to nation, and from time to time. (Armies usually fought with far fewer men than were being counted on their muster rolls, due to illness, wounds, and desertion.)

Broken Units: (See Common Rules)

Historical Grouping:

The intent of these Musket Period rules is to offer a simulation of a battle, during the period from the beginning of the French and Indian War (The Seven Years War) to the Napoleonic era. All miniature figures which fall into this period (1754-1815) can be used. For greater authenticity only those figures which would have met on a historic battlefield should be used in the same game - but this is up to you.

You might wish to play a game with opponents who never actually met in battle, or you might combine armies who were never allied historically. You can form armies based upon your own scenario - such as, "What if the French had won the French and Indian War and therefore had American allies to support them in Europe?" You are limited only by your imagination.

It may be helpful to organize your figures into permanent national armies. An *army* is a collection of units of the same nationality. (For example: French, British, Austrian, American, Russian etc.) Each army can maintain certain distinctive national characteristics. An American Revolutionary War army would have few cavalry units and more militia. Your French army might have more artillery while the British might have rockets.

Each army is built of permanently assigned artillery, infantry and cavalry units. Each unit should be given its own unit identification number, which it permanently carries into battle, (on a small tag). This identification tag can also include a description of its figure-type; (Example: Unit 36: British - Light Infantry or Unit 7: American Riflemen).

Put at least two tags on each unit. One will stay with the unit, and the other can be used as the unit's hidden troop marker. [See: Hidden Troops section.] The total number of figures assigned to the unit, and the unit's total cost, should be listed on a master list. The master list (often referred to as the shopping list by players) describes the units available to them. From this list you will build your army. [See: appendix for examples of National Armies master lists.]

To begin each player selects a nationality (French, British, Russian . . . etc.) and records the specific units they want to use taken from those available to that nationality, on the master list. In this way each side can create their own army, (within the limits of the total points agreed to for each game), with the units available on the nations master list. Each player *buys* their army, (cost points) at the beginning of the game.

Movement: (See Common Rules)

A unit can be reduced in its movement allowance by factors, such as: a change in its direction (more than 45 degrees); or moving up or down one hill section, crossing a "creek", or crossing over a fence, (1/3rd); crossing a river at a ford, or movement which takes place through a forest or rough terrain, reduces movement by 1/3rd.

A formation of infantry - with a morale of 4 or 5 - moving in a straight line, may increase its movement by 1/3rd, if it is moving in a column of two or four (*four or two figures abreast, in a column*), in a straight line, and does not stop or turn, or go over any rough terrain, walls, woods, etc.

Charge / Engage: (See Common Rules)

Sighting:

Normal sighting in the game is 90 cm. Artillery stands (and ships, in the advanced game) are equipped with telescopes and therefore can see up to 120 cm or at their maximum firing range, whichever is greater. Sighting from artillery is 360 degrees (even though the fire is not). All small arms *sightings* are increased at the same rate as their range. {Regulars fire 30cm but add 10cm if they are on a hill. They normally can see 90cm, but on a hill, they get an extra 10cm - so they can see the enemy at 100cm.}

Forming a Square:

If given orders to do so, an infantry unit (with morale value of 4 or 5) may form a *square*, (also called a "British, hollow or infantry" square). To form an infantry square, all figures in the unit are placed in a square (or rectangle) each stand facing away from the center. This formation requires 1/3rd unit's movement allowance. Once formed a square does not move unless it reforms into another formation. A square may be of any size, but it must be at least *two ranks deep*. Infantry figures, formed in a square reduce shock effect by one shock.

Geography (See: Common Rules)

Forest: (Small arms fire)

Small arms fire while in or against troops in a forest are reduced by one step [2,4,6 becomes 4,6. etc.] All musket fire, in and out of the forest, is reduced to a range of 6 cm. [Each figure (infantry or cavalry) uses the odds which it would normally have, at a range of 10 cm. and then reduce it by one step.]

Artillery and Forest:

Artillery fire casualties, against figures in a forest, are not reduced. [Any protection the trees might afford would be offset by the casualties caused by the trees splintering when hit by artillery.] All artillery, musket or rifle effect will stop after the first 10 cm. of the forest.

Firing from inside a forest, cannon may only fire if they are less than 6 cm inside the forest. Rockets may not fire out of a forest. [See: "rocket artillery" rules.]

Hill Sections: (Small Arms fire)

Small arms (pistol, musket, rifle etc.) increase their effective range, when firing at a target which is one or more hill sections (approximately the height of a man on horseback) below their level.

Wooden fence:

Figures behind a wooden fence will reduce small arms fire losses by one step, but no reduction will be given from artillery. A reduction of 1/3rd movement is needed for artillery to move through a wooden fence. You may remove a section of fence only big enough for the artillery piece to cross.

Stone Wall:

Figures behind a stone wall will reduce losses, from an explosive artillery shell, or canister shot, by one step (4,6 to 6 etc.), if the wall is between the hit area and the figures; and one step from small arms fire. Troops behind a stone wall may

remain hidden, if they do not move or fire, until the enemy comes within 10 cm. of them.

Hidden behind a wall, figures must be represented by a hidden troop marker. Troops hidden behind a stone wall will not take casualties from small arms or artillery, if they don't melee or fire, and the wall is between them and the hit area. To move artillery over a stone wall requires one move. You may remove a section of fence big enough for the artillery to cross.

Buildings:

Figures may move into a building. {There is a special building sheet for this} The maximum number of figures which may be placed on each floor is the same as the number of stands which would fit on the building's floor. {If you have buildings that can be taken apart and stands placed in them - great. If not, you can measure how many stands can fit on each floor.

Inside of a building will receive small arms fire at one less step. Two infantry figures per window or door may fire from a building. They may both fire and receive fire from that position.

Figures in a building must melee when the enemy comes into base-to-base contact with them through a door or window. Only two figures, per window or door, can fire or melee. Melee will count as if both sides were behind a fence or wall (-1 melee point). [See: Artillery Section.]

Doors are assumed to be closed and locked. Two stands of figures can destroy a building door in two turns of non-movement, fire, or melee. Once broken they must melee with the enemy stands inside.

Each story of a building acts like a hill section when it comes to increasing their firing range and sighting.

Screened units, and *hidden* units, will have to be revealed if they are within the sighting range of figures, in the second story (or more), of a building.

Figures inside a building may also wait, undetected, until the enemy comes within 10 cm if they neither shoot nor move first. Dragoons may dismount and be used in the higher stories of a building but one in every four figures must be used to hold the horses outside of the building.

Hills and Artillery:

Artillery firing from a hilltop (above the target)			
	6 pd.	8 pd.	12 pd.
One hill level (add to range)	+10 cm	+20 cm	+30 cm
Two hill levels (add to range)	+20 cm	+30 cm	+40 cm
Three hill levels (add to range)	+25 cm	+40 cm	+60 cm

Buildings & Artillery:

Artillery may not be placed in an upper story of a building but may be hidden in the lower level of a building if there is a door big enough or a permanent hole is carved though the wall.

Artillery rounds will travel into/through a wooden building and take out casualties as normal (whatever protection the building might provide, would be counteracted by the splinters of wood, flying through-the-air).

Solid shot will continue to bounce after hitting any wooden part of the building but will be stopped by a stone wall section. [See: artillery section.] Solid shot fired against the same wall section, of a stone building, will knock down the wall on the second hit.

Small Arms Fire: (*musket, pistol, and rifle*)

Simultaneous fire:

Losses due to small arms fire are simultaneous. Either player may fire first. All figures removed, as casualties, may also return fire in that turn.

Roll one ten-sided die for each figure, within range and firing at the enemy. [It is useful to have several boxes full of dice available and shake the entire box (10 or 20) of dice at a time, representing the firing of an entire unit.]

First rank only:

All firing is line of sight. Under most conditions only the first rank of man may fire, but if a second rank is higher than the first, (on a slope or hill, in a building

etc.), the rank behind them, may also fire. [See: "charge" section, for rules about receiving a charge, and small arms fire.]

Steps:

The pistol, musket & rifle hit charts indicate the odds of hitting a target, from one figure firing one time, under normal circumstances. In some circumstances the odds will decrease because the target is protected, such as when behind a wall, fence or in a building. In such a case you must decrease the hits found on the Figure Capability Chart by one "step." [For example: 2, 4, 6 {on a ten-sided die} will become 4, 6; and a 4, 6 will become 6; and less one step from a 6, will be 0.]

If a musket unit, firing at maximum range at a target behind protection, (such as muskets firing at an artillery crew or behind a fence, at their maximum range of 30 cm.) the odds are reduced from 6 to 0, and no casualties are taken. (This is not to say that no one could be hit, only that the number hit would not be significant.)

At the beginning of the game all small arms are considered *loaded*. Pistols, Muskets, and Rifles may be ordered to fire (if they are loaded) – at the beginning, or end of their turn. Reloading reduces the time the unit has for movement.

Small Arms

Small arms fire against a charge: [See: charge/engage section.]

If an enemy unit reaches a defending unit in melee, at the same time the defending unit would fire, the defender has to *melee* with them and is not allowed to fire.

Dragoons may not fire from horseback but need to dismount to shoot. They require 1/3rd of a turn to dismount to fire.

Angle of fire:

Musket figures may fire in an arc up to 45 degrees right or left, of the direction they are facing. A target outside of this arc is not available, without a change of facing or movement, which must be ordered on the order sheet and would count as a turn.

Cavalry & small arms:

Hussars (light cavalry), (not lancers) and cuirassiers (heavy cavalry) are equipped with pistols. Dragoons carry carbines. Ranges are described on the Figure Capability Chart. The cavalry may fire before making a *charge* or attack, but they seldom will, because if they do, they must fire at the range at which they begin their move and then close for melee.

A cavalry unit carrying pistols may lose their shock effect if they fire before attacking, (as shock requires 20 cm. of straight-line movement, to count and pistol range is only 15 cm.)

A cavalry unit, equipped with pistols, may use the *caracole* which is riding up to the front of the enemy to fire, and then move back to where they began (or even to a new position). When cavalry performs this maneuver, they must accept fire at the point at which they are within range of their target. A line of cavalry may attack in such a manner, and retreat in a line.

Dragoons may not use this maneuver.

Firing En Passant: (See: Common Rules)

A situation can occur where a unit moves *into* range of an opponent's unit, and *out of* range, within the same move. In such a situation the opponent may fire at the traveling unit at the point at which it was in range. Casualties are taken from the traveling unit, and it may then continue according to its orders, (unless it suffers a poor *post-melee morale test due to the casualties*.) The poor morale test will override any other order. The traveling unit may also exchange fire with the stationary unit, if it is a position to do so.

Two units passing each other, in such a way that they were in range and then moved out of range, may also exchange fire. This counts as the units firing, for that move. It may not fire again at the end of the move. It is the option of the player to fire "En Passant" or to wait to fire at a target available at the end of the move.

"Friendly" fire:

Units may fire into their own men by accident. In such a case the unit which took friendly fire casualties will be reduced by two melee points and one morale point, for the next two turns.

Target Priority:

Unless given other specific orders, a unit will follow the following target priorities:

First Priority: Units will fire first upon any unit closing in on them, in melee.

Second Priority: Units will fire upon any enemy unit directly in front of them and within range.

Third Priority: Units will fire upon any enemy in range.

Post-Melee Morale:

(See: Common Rules)

When computing morale on the Morale Chart:

Count the effect one column to the RIGHT for each of the following: (example instead of chart 21-30 - you would use chart 31-40.)

1. If the general/emperor/king has the unit under his personal command; (requires "base-to-base" contact)
2. For two infantry units are formed into a brigade
3. If the unit is positioned behind defensive features such as a wall, hill, or bank of a river in a building

Count the effect two columns to the right for:

1. For all cavalry units:
2. For an infantry unit in a square:

Post Melee Morale Chart:

UNITS VALUE BEFORE MELEE: {MORAL value of figure type, times the number of figures in unit before losses this turn.}

1-10 11-20 21-30 31-40 41-50 51-60

LOSSES THIS TURN: {MORALE value of figure type, times the number of figures lost this turn.}

0=NE 0=NE 1=NE 1,2=NE 1-3=NE 1-5=NE
 0=B 1=B 2=B 3,4=B 4,5= B 6-8=B
 0=BT 2=BT 3,4=BT 5,6=BT 6-8=BT 9-11=BT
 1+ =R 3+=R 5+=R 7+=R 9+=R 12+=R

UNIT VALUE BEFORE MELEE: {MORAL value of figure type, times the number of figures in unit before losses this turn.}

>61-70 71-80 81-90 91-100 101-120 121-150>

LOSSES THIS TURN: {MORALE value of figure type, times the number of figures lost this turn.}

1-7=NE 1-8=NE 1-10=NE 0-20=NE 0-25=NE 0-35=NE
 8-10=B 9-12=B 11-16=B 21-25=B 26-30=B 36-55=B
 11-14=BT 13-17=BT 17-21=BT 25-32=BT 31-39=BT 56-59=BT
 15+=R 18+=R 22+=R 33+=R 40+=R 60+=R

UNIT VALUE BEFORE MELEE: {MORAL value of figure type, times the number of figures in unit before losses this turn.}

>151-180* 181-220 221-300 301-400.

LOSSES THIS TURN: {MORALE value of figure type, times the number of figures lost this turn.}

0-49=NE 0-59=NE 0-72=NE 0-100=NE
 50-65=B 60-79=B 73-99=B 101-150=B
 66-89=BT 80-109=BT 100-149=BT 151-199=BT
 90+ =R 110+ = R 150+ = R 200+ = R

The effect of a ROUT, “back” or “back and turn” on friendly units:
 (See: Common Rules)

Optional Rules: Musket Period

Fog of War / Smoke on the Field:

To simulate the loss of visibility caused by the smoke of black powder, each turn of continuous firing, at the same target, will reduce small arms fire by one step and double the artillery variable.

Personal Command Figures:

Each player represents themselves with a figure, on the game board. This figure can be of different ranks, and each rank will *cost* points at the beginning of the game. These officers may not regroup units. Personal command figures can be captured in melee but not killed. They are captured when they fight in a melee and lose. If they are hit by musket, or artillery fire, they are injured and unable to move from that spot, for the rest of the game.

The ranks available are:

Colonel = 40 pts. (commands a regiment or unit)

General = 60 pts. (commands a brigade)

Each of these Personal Command figures may do the following, for any unit they are personally leading, and are in base-to-base contact with:

Colonel = add one column to post-melee morale, and one white die for any 3DTs

General = add two columns to post-melee morale, and two white dice for any 3DTs

Ships - Frigate: = (Costs must be agreed to ahead of time.)

There were a variety of frigates of different sizes carrying different armaments during this period.

1. For the purposes of this game each frigate carries: Four, 12 pd. Cannon per side, on a covered gun deck.
2. Maximum load: A frigate can carry up to five units of infantry, cavalry or artillery, up to a maximum load of 500 points.

3. The infantry can be placed below decks, or on the top deck, as the cannon fires from the deck below the weather deck.
4. Cannon on the gun deck will not be as accurate as cannon on solid ground as the ship rock as the waves move the ship back and forth, so when firing gun cannon, the result on the variable used (four dice / red and green, as with all cannon,) is doubled. (Five degrees right and short three cm, becomes ten degrees right and short six cm.)
5. Cannon on board may not fire when on loading or off-loading men or equipment.
6. If destroyed, one gun per side can be replaced from the other side, but only four guns may be on any one side of the ship at a time. It takes an entire turn, (of no movement or firing for the stands involved) to move one ship's cannon, to the other side of the ship.

Movement:

7. The ship's crew may disembark and man the row boats to pull the ship (6 cm. per turn) forward. Turning (pivoting on its axis) the ship (up to 45 degrees) will also take one turn. On the second turn of straight-line movement that the ship is being pulled in the same direction, it may be moved 10 cm and continue at that rate for any following uninterrupted turns.
8. A ship, with its sails full, may move with the wind (within 45 degrees of wind direction), 12 cm. on the first turn, and 21 cm. on the second turn and 30 cm. for all following turns, that it is going in the same direction as the wind.
9. To begin to sail a ship at anchor you must first raise the anchor and lower the sails. These actions require one full turn of non-movement, off-loading, or firing to accomplish. The ship may NOT fire, during these turns, as the crew needs to sail and weigh the anchor.

To find out which way the wind is from, roll a four-sided die:

1 = North, 2 = East, 3 = South, 4 = West

[Remember, a "wind from the north" means it is blowing from north to the south, on the game board.]

10. All measurements for movement are taken from the point of the bow of the ship.
11. When off-loading units from a ship, only one unit, (or one cannon), may be off-loaded per turn.
12. When off-loading, the deck of the ship is assumed to be full of units which are preparing to disembark. Any artillery hit striking the deck of the ship will take casualties as if it were on land.
13. Small arms fire against troops offloading, from a ship, count down one step (as if they were behind a wall).
14. Ships cannon can be off-loaded to shore.
15. The captain of a ship can give orders to scuttle the ship, to avoid having it taken by the enemy. In such a case the order needs to be written down one turn. The next turn it begins to sink. On the following turn, it sinks.
16. A ship coming into port speed is 20 cm per turn and then 10 cm before docking.
17. The ship cannot fire and dock in the same turn.

Shipboard Artillery:

1. Shipboard artillery only pivots 20 degrees, right or left, from a perpendicular line to the ship's keel, before firing.
2. They may fire every other turn as cannons must be moved in and out using ropes, to reload.
3. Shipboard artillery has unlimited projectiles.
4. Each artillery hit on the ship's cannons from shore, takes out guns and crew, as if they were on land.
5. If ships are off-loading soldiers or equipment, those units must be on the deck of the ship the turn before it disembarks. On the deck, troops are a target for artillery and small arms fire.

6. Troops on the deck of the ship may also fire off the ship at the enemy.
7. Ships cannon may fire round/solid ball, grape (count as cannister) or explosive shot. In each case calculate as if for a 12 pd. Gun.
8. Each hit from shore, (from solid round shot, artillery of 8 to 12 pd., and howitzers; There is no effect from 6 pd. guns on the ship itself) against the ship you roll two, six-sided dice to determine the damage to the ship:

Die Roll:

2 = mast hit, half speed, with the wind. If hit again - no movement with wind; (5 cm. speed with boats towing only).

3 to 8 = no significant damage to ship, (*but possible hits taken on cannon and crew*)

10 = Some damage to ship. One cannon removed immediately on the side hit, and a subsequent roll (from another shot) of "10" and ship will sink in three turns (not including this turn when it was hit).

11 = hit below water line; ship will sink in six turns.

12 = hit below water line; ship will sink in three turns.

Fire:

A direct hit from a rocket may start a fire on the ship. If hit by a rocket, after taking any casualties, roll a six-sided die:

- 1-4 The ship's crew put out the fire immediately.
- 5 Ship's crew must stop firing cannon for the next turn to put out the fire
- 6 Fire continues to burn. If it is not put out in the next turn (you roll another six) the fire reaches the ship's magazine and blows up in two more turns, destroying everything on board.

River Boats:

1. River boats cost 25 pts.
2. One boat may transport up to ten infantry stands, or four cavalry stands. One boat may transport one 8pd. artillery piece. 8 pd. Horse artillery requires two.

12pd. cannon may not be transported by boat.

3. River boats may have 6 pd cannon on the bow (which adds 25 pts. to the cost of the boat). The cannon may fire, and casualties are taken as they would be for any 6pd. cannon, except that only solid round shot is available. Red and green variable dice are used. The cannon may only fire in the direction it is facing on the boat.

4. Boats may not be moved on land without a wagon (except to portage around fords in a river.) Portage around a ford will require one turn per ford. At least six figures are required for portage. Bridges may be passed under without effect. A wagon used to transport a boat across land costs 20 pts and moves 20 cm. per turn.

5. Troops in a boat may fire; 50% from each side of the boat. They may also be fired upon, as if they are in open terrain. They may not melee, while in the river, but may suffer morale tests at the end of any turn in which they took casualties. The effects are the same as if they were on land: "back" = the boat moves back one-half move; "back & turn" = the boat turns around and "rout" removes the boat and the unit in it.

6. When fired upon by artillery, a boat will be sunk in the same way as an artillery piece would have been destroyed. If a boat is sunk with a unit in transport, the entire unit will be lost. Artillery fire against a boat, from the fore or aft, counts double casualties, (as if they were hitting four figures in a file, or more.)

7. A boat will travel 60 cm. if it is traveling down river. Against the river flow, the speed will be 30 cm. [*The flow direction of all rivers must be indicated on the board before the game begins.*]

9. It will cost 1/3rd of a movement phase to beach or dock a boat and embark or disembark. A cavalry unit requires twice that time.

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- b. no movement possible up or downhill sections
 - c. visibility and all weapons ranges reduced by 2/3rds
 - d. no charge move is possible
 - e. no gun powder or archer fire possible
- 26.-30. "*London Fog*" (Effects BOTH sides 2 turns)
- a. visibility down 2/3rds for both sides
- 31.-40. = no effect this turn
41. "*It's the water!*" (Effects BOTH sides for 1 turn) Poisoned wells spread disease throughout your army. You lose up to a maximum of four stands (eight infantry figures or four cavalry), from any unit that is within 20 cm of a well. Artillery units are not affected.
42. "*Spies at work*" (Effects ONE side for 1 turn) Enemy spies reveal the location of a hidden unit. One unit, represented by flags or tokens, [as hidden troops] or a unit being "screened" must be placed on the board at this time. (Your opponent may choose which of your hidden troop marker or screened unit is revealed.)
- 43.- 46. "*Take the King's Shilling*" (Effects ONE side for 1 turn) New recruits from a local village join your army. One peasant/militia unit, (36 figs.) in your army, is suddenly increased to a compliment of thirty. [If you don't have a militia unit, a cavalry unit of your choice, with less than 20 figures may be increased to twenty.]
47. *The "French disease"* (Effects ONE side for 1 turn) The "pox" hits your men. Lose one figure per infantry unit.
- 48.-53. "*Start me with ten who are stout hearted men!*" (Effects ONE side for 1 turn) None of your units will *rout or back & turn*, this turn. The most severe moral effect this turn will be "back."
- 54.-55. "*Help Prevent Forest Fires*" (Effects BOTH sides for rest of the game) A forest fire starts and removes three trees each turn starting with any forest area closest to the corner of the board indicated:
- Roll a four-sided die:
- 1=northeast, 2=northwest, 3=southeast, 4=southwest
- Remove three trees per turn for the rest of the game or until that clump of trees (separated by 20 cm or more) is eliminated. All troops caught in the fire are lost. The area where trees are removed is then off limits. Units cannot be moved into or through for the rest of the game. Trees must be separated by at least 20 cm to avoid fire from moving to the next group of trees.
56. "*Don't drink the water*" (Effects BOTH sides for 1 turn) Any unit within 5 cm of a river, or a well, on both sides, lose one fig from each, due to cholera

57.-60. *"Over here!"* (Effects ONE side for 1 turn) Reinforcements arrive just in time. Either ten figures of infantry, OR ten figures of cavalry, (your choice) appear on the midpoint of the side of the board indicated:

Roll a four-sided die: 1=north, 2=south, 3=east, 4=west}

61. *"Go tell the Spartans"* (Effects ONE side for 1 turn) A great leader instills one unit on your side {your choice} with extreme confidence. That unit becomes "Imperial" for the rest of the game - your choice. {They no longer take melee tests!}

62.-65. *"Elan!"* (Effects ONE side for 1 turn) One of your cavalry units just can't wait for orders and attacks (not charges) the closest enemy unit in front of them.

66. *"Days of wine and roses"* (Effects BOTH sides for 1 turn) Any figures (on either side) which are in a village or have passed through a village in the last turn, find several barrels of beer and become worthless drunk. They do not move or melee for this turn. If attacked in melee, they are reduced by two melee points.

67. *"Just don't 'boar' me!"* (Effects BOTH sides for 1 turn) Remove one figure from each unit in the forest (both sides) due to wild boar attacks!

68. *"I've fallen, and I can't get up!"* (Effects ONE side for the rest of the game) Your supreme commander has fallen from his horse and cannot be moved for the rest of the game.

69. *"Success has a thousand fathers, but failure is an orphan"* (Effects ONE side for 1 turn) A high desertion rate effects your men. Remove one figure from each unit which has lost even one figure in the game so far.

70.-77. *"Training pays off"* (Effects ONE side for 1 turn) For this turn, any missile or firearm fire, will increase their odds one step [from 6 to 4, 6 for example].

78.-82. *"Fratricide"* (Effects ONE side for 1 turn) Your smallest unit of missile or musket mistakenly fire upon your own men. They fire on the closest unit to them. (If there are more than one you may select.)

83.-84. *"Reinforcements arrive for your side."* (Effects ONE side for 1 turn) Ten regular infantry figures and ten light-cavalry will enter at any point of your choice, along one side of the game board.

{Roll a four-sided die: 1=north, 2=south, 3=east, 4=west}

85. *"Bad news from Dorothy"* (Effects BOTH sides for 1 turn) A tornado sweeps the board. Draw a line from the corner, which is the result of your die roll, to the corner farthest away. Any figure crossed by this line is removed. {Roll a four-sided die: 1=northeast/, 2=northwest, 3=southeast, 4=southwest}

86.-90. "*Training pays off*" (Effects ONE side for 1 turn) For this turn, any artillery hit will double casualties.

91. "*Into the valley of death*" (Effects ONE side for 1 turn) Impatient for victory, and not that confident in your ability, some hot-headed cavalry decide to attack. One cavalry unit (your opponent's choice) within a charge move of any enemy infantry unit, charges it this turn regardless of orders.

92.-93. "*God is on Your Side*" (Effects ONE side for 1 turn) Reinforcements arrive. Add four figures per unit for two units.

94. "*Mercenaries are not to be trusted*" (Effects ONE side for 1 turn) If you have any mercenary troops they unexpectedly march away and join your opponent's army. (They will not attack you on this next turn.)

95-96. "*The Dogs of War*" (Effects ONE side for 1 turn) If your opponent has any mercenary units, they unexpectedly join your army. (They will not attack on this turn.)

97-98. "*The Dogs of War II,*" (Effects ONE side for 1 turn) Mercenaries are not to be trusted, and they expect to be paid! All mercenary troops on either side leave the board immediately.

99- 100. "*Avoid this one like the plague*" (Effects BOTH sides for 1 turn) The plague strikes both armies. Each side rolls a four-sided die. A result of 2, 3, 4 indicates the number of figures removed from each unit. A die roll of "one" means your army avoids the plague, by wearing garlic around their necks.

Definitions:

Armor Classification: [medieval game] The armor classes are: "light" = no armor, "medium" = mail armor, and "heavy" (men-at-arms) = in plate. These classes are determined at the beginning of the game and include all figures in a unit. The unit's classification is determined by the armor and weapons carried by the figures.

Army Roster: Each side fills out a roster at the beginning of the game indicating which units they choose for their army, from those available. Unit costs are calculated on the roster when playing with a limited point value

Attached: Putting two or more units together to form a "Brigade" [in musket period]; or a Battle [in the medieval game] for better morale.

Ballista: [ancient and medieval game] A large crossbow type of artillery, firing a metal tipped spear or stone, at a great range.

Berserker: [medieval game] Crazy Viking not expected to return from the battle and

will fight to the death.

"Battle": [medieval game] Battles were the three main segments of a medieval army. They are called the vanguard, main and rear. Battles are made up of at least two units and move as a group throughout the game and give morale advantages.

Bounce Stick: [musket game] Solid cannon balls often bounced across the battlefield when fired. This stick is placed at the point of impact of a round/solid cannon shot. The red areas indicate "hits" where the ball bounced, taking more casualties. On some types of terrain, the ball will not bounce, and the heavier the cannon (6 pd., 12 pd. etc.) the farther it may bounce.

Brigade: [musket game] A formation made up of two or more units.

Broken: A unit is broken when any of its stands are no longer in base-to-base contact {with some exceptions} with the other stands, in the unit. A broken unit will rout on its next turn if not immediately regrouped.

Caltrops: [medieval game] Caltrops are triangular steel "jacks" used to stop cavalry. This is a weapon which has changed little in a thousand years and is still included in the arsenal of many nations.

Cannister Shot: [musket game] (Also called case shot.) A short-range anti-personnel weapon which consists of many musket ball sized projectiles fired at once, like a big shot gun. At close range the effect would be devastating.

Catapult: [ancient and medieval game] There were various types of catapults one type was called an "onager" or "wild ass." It fired large rocks by using torsion windings.

CM.: [Centimeters = 1/100th of a meter] Measurements in the game are metric.

Cost: A value given, per figure, which roughly represents the potential of the piece in play. It is used at the beginning of the game, when choosing armies.

Crossbow: [medieval game] An excellent weapon that took less training to be effective compared with the longbow. The crossbow had a slower rate of fire.

Cuirassiers: [musket game] Heavy cavalry with armored breast plate.

Dead Caps: Small items (small wire nuts work well) placed on the head of a figure, or the toothpick on the stand, to indicate that one of two figures have been removed.

Detach: Separating a single stand of men (or a four-man gun crew) from an infantry or cavalry to re-man an artillery piece. Untrained crew fire less often in the game.

Direct Fire: [medieval game] Missile fire directly into the enemy requires an unobstructed "line of sight." If part of the missile unit has a direct line of fire, but other stands in the same unit do not, they can fire over the heads of other archers, with indirect fire. Indirect fire is reduced one step. In the Musket Period game indirect fire is not permitted. You can't shoot what you don't see.

Duke: [medieval game] A "battle" is led by a Prince or a Duke. [See: King]

Dragoons: [musket game] Mounted infantry which ride to battle and dismount, to fight and shoot, as infantry.

En Passant: To fire "in passing" when two units come into, and then out of, range in a turn.

Explosive shot: [musket game] A primitive round hollow explosive shell, with a fuse set to explode at a certain range. Not common within the time period of these rules and are therefore optional. We feel they add to the game and usually include them.

Facing: The direction the figure is facing. (Usually, the direction they last moved toward.)

Figure: A miniature soldier, or artillery piece, made of metal or plastic.

Files: Columns of figures. (See: "ranks")

Fords: A low spot in a river that can be crossed, but with some difficulty.

Formation Change: All units must be in formation. A formation consists of figures arraigned in ranks and files. [Files run front to back, while ranks run from left to right, as they face the enemy.] Changing formation would be changing either ranks or files. Example: Changing from a line two files deep and ten ranks across to a formation four files deep and five ranks across, would be a formation change and would cost 1/3rd movement for that turn.

Game Victory: The objective of the game should be specific and agreed to on both sides. Armies don't commonly "fight to the last man" (if they have a choice). The object of the game must be clearly stated before the game begins.

Guard: [musket game] Most trusted and experienced troops, Napoleon's Grande Armee had the "Young Guard", "Middle Guard" and the "Old Guard," which were the oldest and most experienced troops.

Horse archers: [medieval game] They may be Huns, Mongols, Parthians – it's your choice. Horse archers were typically excellent marksmen with a very strong composite (horn, wood, leather) bow. A very useful weapon if used correctly.

Hidden Troop Movement: A way to reduce the "birds eye view" of the opponent's army before the troops would be visible on the game board. Markers, numbered indicating the unit number of the troops they represent, are moved until they come within visible range of the enemy. At that point, the actual figures are placed on the board. Fake, or "phantom" markers may also be moved around the board, to confuse your opponent.

Hill: Hills can be made of different materials but should include several levels. A 1/3 turn is required to move either up or down.

Horse Artillery: [musket game] Light artillery intended to move quickly into place, on the battlefield.

Howitzer: [musket game] Artillery pieces, which are not line-of-sight and may fire over obstacles, to strike targets. (The target must be in view however.)

Imperials: Personal bodyguard of the general/king/emperor, who will fight to the last man. Cost is double at the beginning of the game. Only one unit of imperials is allowed per side.

Indirect Fire: [see Direct Fire]

Indians: [musket game] Native American auxiliary allies with musket and ax. Full move in the forest and may use open formation with 2 cm. between stands like skirmishers.

King / Queen: [medieval game] One per side, he is the Supreme Commander of all troops and increases morale when he/she is fighting with a unit. In the advanced game, the king can personally reform smaller units into larger units and create new battles.

Like Type: All stands, in a unit, must be of "like type" ex: all militia, light cavalry, armored longbow etc.

Light Cavalry: [musket game] Lancer and Hussars - the fastest moving cavalry, often used for finding the enemy.

Line-of-battle: A line, one or two figures deep, stretching left to right, with as many files as possible, in width.

Longbow: [medieval game] This was the most devastating weapon on the late medieval battlefield. The bow was commonly made of yew and about six feet in length. It fired an arrow a "Flemish yard" in length. With a metal piercing "bodkin" point, drawn back with a pull of 125 plus pounds it could penetrate armor. It had an effective range up to about 220 yards.

Mercenary Troops: Units hired to fight and whose loyalty and motivation is not always known. They are cheaper to hire than regular troops, but you run the risk of having them change their mind and join the other side or simply leave the battle without permission.

Melee: Hand to hand fighting.

Melee Point: A number (between 2 and 11) indicating the relative strength of the figure in melee. A unit's melee point will drop one point per turn of continuous melee. One turn without melee or movement is needed to restore full melee value.

Melee Range: The distance at which figures are in melee: one centimeter or "base-to-base" contact.

Men-at-arms: [medieval] MAA is a fully armored knight or squire in complete plate.

Militia: [musket game] Citizens soldiers with little training, and no bayonet

Missile Fire: [medieval game] Archers, slingers, crossbow, javelins, throwing axes, Roman pilums.

Missile Hits: [medieval game] Figures removed due to archer fire. [Ex: against light or no armor a 2, 4, 6 is a "hit" on a ten-sided die.]

Missile Priority: [medieval game] Defines what targets a missile unit will fire upon if specific orders are not written.

Morale Value: A number (from one to five) which indicates the ability of a unit to follow orders under battlefield conditions.

Morale Reaction: A forced move, because of suffering a poor morale test.

Move Sequence: 1. write orders for all units (both players) 2. Move all units (moves are simultaneousness.) 3. artillery fire 4. missile/musket fire (both sides counted at the same time) 5. shock 6. melees (both at the same time) 7. post melee morale. (Three dice morale-tests may take place during movement, as in a charge, or when determining morale at the end of the turn.)

Orders: Orders are written instructions (direction, distance, formation, and facing) given to units. Units attempt to follow orders as written.

Pavise: [medieval game] A pavise is a large stationary shield used by archers.

Phalanx: [ancient game] A close shield to shield formation used by Greek Hoplites. In

a phalanx formation (at least two ranks deep) the unit can push the opponent's unit back.

Phantom Markers: Markers used on the game board, with blank tags on them. They may be moved about as if they represented real units.

Pilum: [ancient game] A type of javelin used by Romans. It was specifically designed to encumber the enemy when thrown. The head of the pilum would bend or break when it strikes an enemy shield. This made it very difficult to throw back and meant that the defender probably had a bent pilum sticking into his shield (if not himself), dragging it down, just as the Roman unit made melee contact. Only Roman troops may use pilums.

Primary Attack: In a melee, it is the first or main attack on a figure in a unit. If other figures can also attack the same unit (from the rear for example) these attacks are known as "secondary attacks."

Prince: [medieval game] [see: King and Duke] A prince leads a "battle" and in advanced rules, can be captured for ransom along with knights, Dukes and the King.

Post-Melee Morale: The morale test taken after taking casualties for a turn, which may determine its next move.

Ranks: Are a line of figures, left to right. (See: "Files")

Ransom: [medieval game] High ranking soldiers were not always killed in battle but were captured to sell them back to their family at a profit. (A fine idea, supported by those who had the finest armor and high motivation that the enemy to not kill them.)

Referee: A judge who settles disputes in the game. The referee should do so according to the written rules; the intent of the rules in effect and the specific needs of the game. It is not required to have a referee, but it is helpful at times.

Regiment: [musket game] A formation also called a "unit" in the Musket Period game.

Regulars: [musket game] Trained infantry with musket and bayonet.

Rifles: [musket game] Troops with improved firearm with a greater range, but they are slower to load and have no bayonet.

Rockets: [musket game] A primitive type of anti-personnel artillery, which had a relatively short range and was not very accurate. The Congreve rocket was used by the British, in the Napoleonic wars, but were eventually abandoned. In the War of 1812, they were the "rocket's red glare" from the National Anthem.

Roster: (See "Army Roster") A list of all units for an army for the game.

Rough Terrain: Difficult and uneven ground, indicated on the game board, and reduces movement by 1/3.

Rout: Each soldier in route will run away as individuals and will leave the board permanently by the easiest route.

Screening: The use of a unit of cavalry to hide a smaller unit of infantry, from the enemy.

Secondary Attack: When more than one enemy figure is within melee range of a single figure. The attack from the front is usually the primary attack and any additional attack from the rear or side is the secondary attack.

Shock Value: The effect of infantry or cavalry hitting a line after charging into enemy troops.

Skirmish Line: A weak line, with gaps (up to 2 cm.) between the stands, stretched out to cover a longer front.

Signaling: Instruments, such as a drum or flags, may be used to signal troops.

Slinger: [ancient / medieval game] An effective short-range weapon, if you are trained. Slingers used different lengths and sizes of slings for different purposes. Slingers didn't just "pick up a rock and throw it." They often threw lead balls, especially made for slings and they hit very hard. Their major drawback was the short range and the time-consuming training needed to hit anything.

Stands: All figures are placed on stands, with two figures per stand for infantry (including missile troops such as crossbow and archers), and one figure for cavalry and artillery. A single figure on a stand can be removed by using a "dead cap". Figures that are already on other types of bases can be used if both sides have the same types of bases and stands.

Step: Steps are a way of reducing or increasing the effectiveness of missile (or musket / rifle fire) by adding or subtracting the number of "hits" which count as a kill. For example: troops firing into a line behind a fence will be reduced by one step (from 2,4,6 to 4,6 for example).

Spike the cannon: [musket game] Spiking a cannon is driving a metal spike into the touch hole of a cannon to disable it. Once done, it cannot be reversed, in the game.

Surrender: A unit, which is in melee with an opponent's unit, may choose to offer surrender - it does not have to be accepted. If a surrender is accepted one figure is

Miniature War Game Rules

required to guard every four surrendering figures. If not accepted a die roll determines if the unit fights on.

Square ("British" or "hollow" square): [musket game] A formation of infantry in which all are facing out from a square formation for protection from cavalry attacks. A square may only be formed by trained troops, with a morale pt. of 4 or 5.

Three-dice morale test: (also called "3DT") A test of a unit's morale before it can perform certain actions, such as to make a charge.

Testudo: [ancient game] A protective formation used by Roman troops against archer fire.

T.M.V.: [both games] This is the result of adding up the number of figures in a unit and multiplying by its morale value (1-5). This is necessary in determining morale at the end of a turn of melee or firing.

Trebuchet: [medieval game] Siege machine which fired very large rocks (and occasionally human heads or dead horses) by use of a counter weighted arm and sling.

Units: The basic group of figures used in the game. It can be from six figures to thirty-six. Orders are given, and morale tests are calculated per unit.

Victory Conditions: Each game should have agreed upon objectives for winning. Battles should not be fought to the last man.

Miniature War Game Rules

Order Sheet

[Use this sheet for all infantry & cavalry units, in all periods. Some figures: elephants, chariots, etc. require special order sheets.]

Unit No. _____ Figure Type _____ No. of Figs _____ Unit Cost _____

Move (cm) _____ Melee Pt. _____ Morale Pt. _____ Shock _____ Range of weapon: _____

Formed (battle / brigade) with units _____ Special Info. _____

Move	Orders:	Move	Orders:
1.		13.	
2.		14.	
3.		15.	
4.		16.	
5.		17.	
6.		18.	
7.		19.	
8.		20.	
9.		21.	
10.		22.	
11.		23.	
12.		24.	

Artillery Order Sheet - Medieval and Musket Periods

Number _____ Type of Artillery _____ Move _____
 Melee _____ Range from _____ to _____ No. of Crew: _____

Shots Fired: (check off as used)

1 ___ 2 ___ 3 ___ 4 ___ 5 ___ 6 ___ 7 ___ 8 ___ 9 ___ 10 ___ 11 ___ 12 ___ 13 ___ 14 ___ 15 ___
 16 ___ 17 ___ 18 ___ 19 ___ 20 ___ 21 ___ 22 ___ 23 ___ 24 ___

Move:	Move Order	Range Called	Projectile Fired	Effect
1.	_____	_____	_____	_____
Move:	Move Order	Range Called	Projectile Fired	Effect
2.	_____	_____	_____	_____
Move:	Move Order	Range Called	Projectile Fired	Effect
3.	_____	_____	_____	_____
Move:	Move Order	Range Called	Projectile Fired	Effect
4.	_____	_____	_____	_____
Move:	Move Order	Range Called	Projectile Fired	Effect
5.	_____	_____	_____	_____
Move:	Move Order	Range Called	Projectile Fired	Effect
6.	_____	_____	_____	_____
Move:	Move Order	Range Called	Projectile Fired	Effect
7.	_____	_____	_____	_____
Move:	Move Order	Range Called	Projectile Fired	Effect
8.	_____	_____	_____	_____
Move:	Move Order	Range Called	Projectile Fired	Effect
9.	_____	_____	_____	_____
Move:	Move Order	Range Called	Projectile Fired	Effect
10.	_____	_____	_____	_____
Move:	Move Order	Range Called	Projectile Fired	Effect
11.	_____	_____	_____	_____
Move:	Move Order	Range Called	Projectile Fired	Effect
12.	_____	_____	_____	_____

Available Crew: (check off when removed) 1. 2. 3. 4. 5. 6.
 2=ballista/rockets 4=catapult/cannon 6.=Trebuchet/bombard

Occupied Building Sheet

Building Identification: _____ Building Classification: _____

- 1 - Name (or number) the building on this sheet, and the game board, for future reference.
- 2 - Give the building a classification (A=stone, B=stone and timber, C=solid timber, D=wattle and daub, wood frame)
- 3 - Place the building on the center of this page and trace the buildings footprint with a pencil.
- 4 - Indicate the cardinal direction of the building, on the game board, on this sheet. (n/e/s/w)
- 5 - If the building has more than one story, use a different sheet per story.
- 6 - Leave this sheet off the game board, with the stands of figures placed on it as they would be in the building.
- 7 - When stands inside the building are fired upon, calculate them according to the chart below: {the building may provide protection against the shell but it may also create more casualties due to wood and stone pieces of the building causing injuries.

Artillery:

(Calculate hits normally, then roll die and take casualties as indicated)

6pd / roll 6 sided die

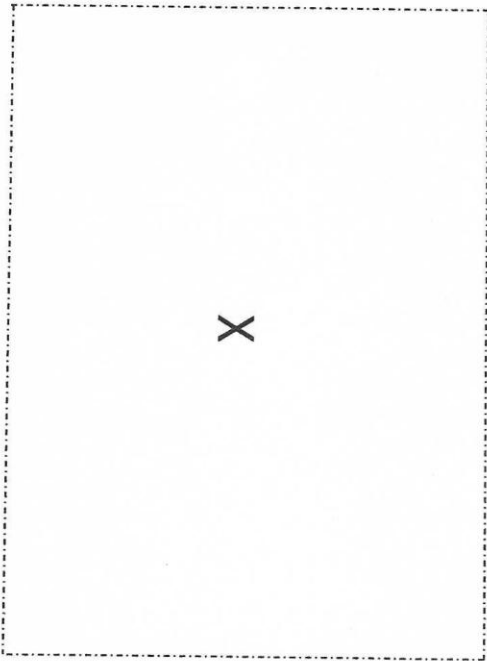
Roll of 1 = no casualties
 Roll of 2, 3, 4, 5 = casualties taken normally for that shot
 Roll of 6 = casualties doubled!

8pd / 8 sided die

Roll of 1 = no casualties
 Roll of 2, 3, 4, 5, 6, 7 = casualties taken normally for that shot
 Roll of 8 = casualties doubled!

12pd or Howitzer/12 sided die

Roll of 1 = no casualties
 Roll of 3, 4, 5, 6, 8, 9 = casualties taken normally
 Roll of 10, 11, 12 = casualties doubled!



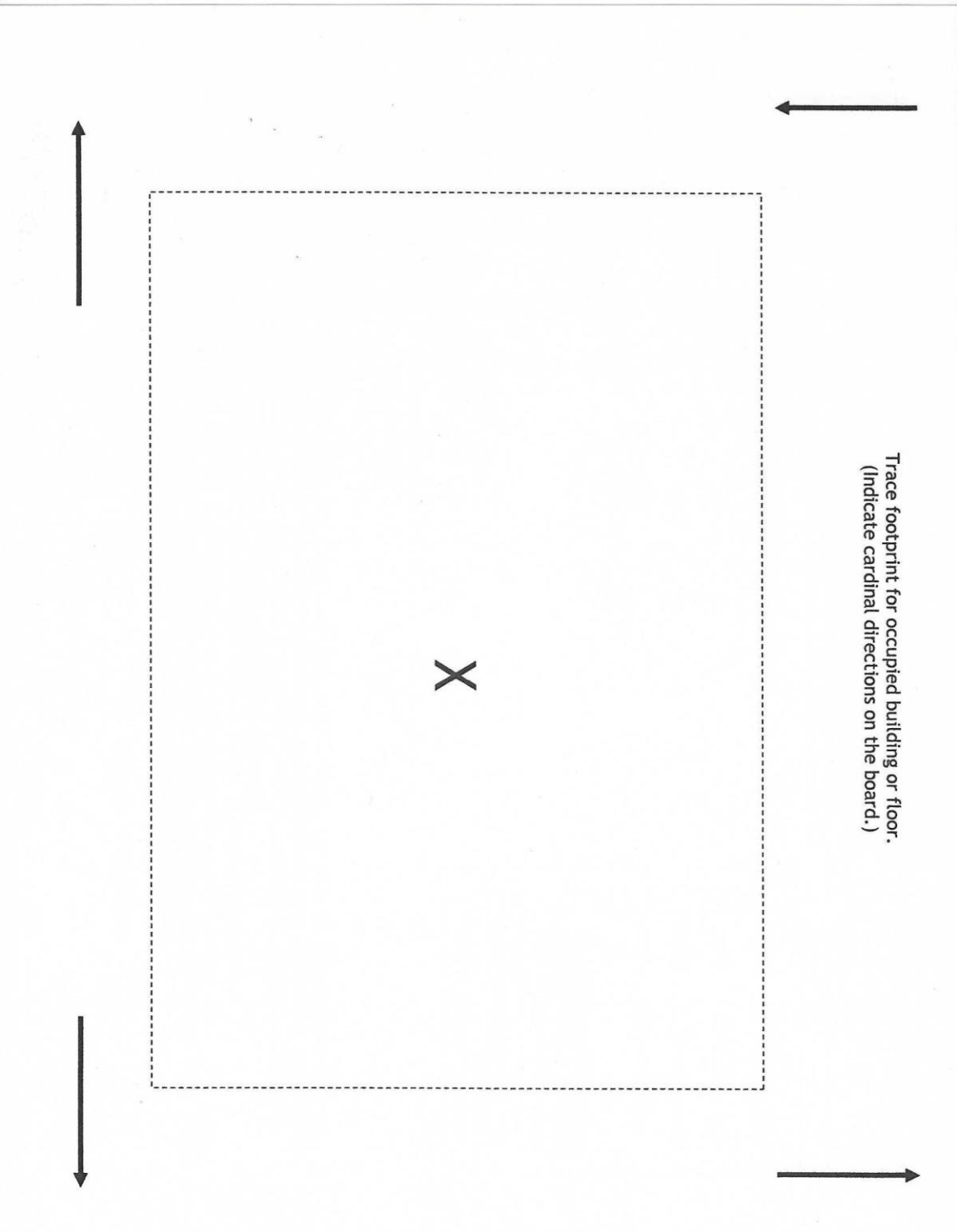
Cardinal compass direction: _____ (N/E/S/W)



Hits to destroy a floor of a building: (add the sums from the dice thrown as variables)

- Class A: 18 points per floor
- Class B: 12 points per floor
- Class C: 8 points per floor
- Class D: 6 points per floor

Number of hits this building (or floor) has taken:
 18, 17, 16, 15, 14, 13, 12, 11, 10, 9, 8, 7, 6, 5, 4, 3, 2, 1, 0



Trace footprint for occupied building or floor.
(Indicate cardinal directions on the board.)

Individual Chariot Order Sheet

Figure Number: _____ Unit Type: (Archer/Slinger/or Javelin) _____

Type	Armor	Shock	Move	Melee	Morale	Range	Missiles	Cost
Archer	Med	1	51 cm	6	5	30 cm	24	20
Slinger	Med	1	51 cm	6	5	21 cm	24	15
Javelin	Med	1	51 cm	6	5	12 cm	12	10

Mark off as missiles are used:

Archer: 1_ 2_ 3_ 4_ 5_ 6_ 7_ 8_ 9_ 10_ 11_ 12_ 13_ 14_ 15_ 16_ 17_ 18_ 19_ 20_ 21_ 22_ 23_ 24_

Slinger: 1_ 2_ 3_ 4_ 5_ 6_ 7_ 8_ 9_ 10_ 11_ 12_ 13_ 14_ 15_ 16_ 17_ 18_ 19_ 20_ 21_ 22_ 23_ 24_

Javelin: 1_ 2_ 3_ 4_ 5_ 6_ 7_ 8_ 9_ 10_ 11_ 12_

Orders:

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

Orders:

11. _____

12. _____

13. _____

14. _____

15. _____

16. _____

17. _____

18. _____

19. _____

20. _____

Miniature War Game Rules

The other side can be used when giving orders to a group of chariots. (For example: *Chariots numbered 10 to 18.*) Use this side when giving orders to individual chariot figures.

Chariot Number _____ Turn/Move No. _____ Orders: _____	Chariot Number _____ Turn/Move No. _____ Orders: _____
Chariot Number _____ Turn/Move No. _____ Orders: _____	Chariot Number _____ Turn/Move No. _____ Orders: _____
Chariot Number _____ Turn/Move No. _____ Orders: _____	Chariot Number _____ Turn/Move No. _____ Orders: _____
Chariot Number _____ Turn/Move No. _____ Orders: _____	Chariot Number _____ Turn/Move No. _____ Orders: _____
Chariot Number _____ Turn/Move No. _____ Orders: _____	Chariot Number _____ Turn/Move No. _____ Orders: _____
Chariot Number _____ Turn/Move No. _____ Orders: _____	Chariot Number _____ Turn/Move No. _____ Orders: _____
Chariot Number _____ Turn/Move No. _____ Orders: _____	Chariot Number _____ Turn/Move No. _____ Orders: _____
Chariot Number _____ Turn/Move No. _____ Orders: _____	Chariot Number _____ Turn/Move No. _____ Orders: _____

This sheet can also be used with Roman Legionnaires when a unit divides into centuries.

Elephant Order Sheet

Number: _____ **Mark off as Removed:** Archer ____ / Javelin ____ Driver ____

Armor Class	Move	Weapon	Melee	No. of Missiles	Range	Shock	Cost
Heavy	24 cm	Javelin	Starts at 10	Javelin: 12	Javelin: 10 cm	3	50 Javelin
Heavy	24 cm	Archer	Starts at 10	Archer: 24	Archer: 30 cm	3	75 Archer

Mark off as missiles are fired:

Javelin: 1 _ 2 _ 3 _ 4 _ 5 _ 6 _ 7 _ 8 _ 9 _ 10 _ 11 _ 12 _

Archer: 1 _ 2 _ 3 _ 4 _ 5 _ 6 _ 7 _ 8 _ 9 _ 10 _ 11 _ 12 _ 13 _ 14 _ 15 _ 16 _ 17 _ 18 _ 19 _ 20 _ 24 _

Move No.

Orders

- | | |
|----------|-----------|
| 1. _____ | 9. _____ |
| 2. _____ | 10. _____ |
| 3. _____ | 11. _____ |
| 4. _____ | 12. _____ |
| 5. _____ | 13. _____ |
| 6. _____ | 14. _____ |
| 7. _____ | 15. _____ |
| 8. _____ | 16. _____ |

- Number of hits (melee and missile hits) 1. ____ 2. ____ 3. ____ 4. ____ 5. ____ 6. *Rampage*
- Missile Range/firing at Elephant: 2/3rds to maximum – hits start at 4,6; 1/3rd to 2/3rds hit start 2,4,6; 1/3rd of less – hits start at 2,4,6,8

Elephant Rampage: Begins when 6th missile or melee hit / Roll two six-sided dice:

- 2-9 Moves forward, destroying everything in its path (up to six figs.)
- 10 Moves backwards (doing the same into your own troops if they are too close)
- 11 Does not move.
- 12 Panics – crushing everything within the 4 cm radius of the elephants stand.

The cavalry do not like elephants and will move away if they are within 10 cm of them.
 Slingers have no effect on war elephants. Elephants are removed by one catapult hit or two ballista hits.