

# War Game Charts

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.

## *Ancient / Medieval*

### Infantry:

Figure Type	Armor	Shock	Movement cm	Melee Pt	Morale Value	Range 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 cm	Melee Point	Morale Value	Range 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.

## Ancient and Medieval Artillery:

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

Effects on Movement		
Reduced by 1/3rd	Reduced by 1/3rd	Increased by 1/3rd
Units of Morale Pt. 2-5 changing formation	Artillery moving over a fence or wall	An ordered "charge"- (movement reduced by 1/3rd 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> , <b>one</b> 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)	

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 requires an unobstructed straight line to the defender of 10 cm for cavalry and 6 cm for infantry.

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

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 1/3<sup>rd</sup> of their range the odds are at 6; at the mid-range the odds begin at 4,6; and at the nearest 1/3<sup>rd</sup> 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

### Medieval Gunpowder:

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 (crew)	12	2	2	60 cm.	3	6 cm. linear	50
culverin	Light (crew)	12	2	2	75 cm.	6	6 cm. (diameter)	75
cannon	Light (crew)	12	2	2	90 cm.	6	8 cm. (diameter)	100
bombard	Light (crew)	10 cm, then Zero: Once set up	2	2	120 cm.	9	12 cm (diameter)	120

Medieval Artillery and Hills			
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<sup>rd</sup> movement.  
Artillery may not go to a third level hill.

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.**

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 1/3 <sup>rd</sup>	Move 1/3rd	Move 1/3rd	Aim/Fire	Load
1/3rd	Move 1/3rd	Move 1/3 <sup>rd</sup>	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

**Situations where a Three-Dice Test (3-DT) is required**  
**(See chart: "3-DT in a Charge" below.)**

<p>Making (or receiving) a charge against any unit with more than <b>twice</b> their Total Morale Value</p> <p>(See chart below.)</p>	<p>If the unit receiving the charge has twice (or more) the Total Morale Value (<i>number of figures times their morale point</i>) than the attacker, the attacker must roll a 3-DT to see if they make the charge. If they do not pass the 3-DT they do not make the charge. They stay where they are for that turn and be reduced by one melee point, for that turn, due to confusion.</p> <p>If the unit making the charge has twice the Total Morale Value than the defender, the defender must roll a 3-DT. If they do not pass the 3-DT they retreat 1/3<sup>rd</sup> of a move, with their backs to the attacker.</p> <p>If that puts them out of the attacker's range, they avoid the melee. If not, they will melee and only they – the defender - takes casualties.</p> <p><b>A 3-DT is not necessary if neither the attacker, nor defender, has a Total Morale Value of twice that of the opponent.</b></p>
<p>To break off from an established melee</p>	<p>Units which are in melee will normally remain in melee until one side breaks due to a morale test. If one side wishes to withdraw from the melee, they must pass a 3-DT. If they attempt to withdraw from the melee but fail the 3-DT they will remain in melee with one melee point reduced for the confusion. <i>Each turn they are in melee they are also reduced one melee point so they could be reduced by two points by trying to withdraw.</i></p> <p>If they pass the 3-DT, they follow orders to withdraw.</p>
<p>Musket or Missile figures firing at the unit charging them</p>	<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 mid-range and then throw down their bow or muskets – and fight as infantry. If they</p>

	<p>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 <b>rout</b> 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, <b>that has not also suffered a poor morale reaction that turn</b>, 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. <b>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!</b></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>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, <b>they must pass a 3-DT to not suffer the same result.</b> If they fail the 3-DT, they must also go "back", "back and turn" or even "route" with the unit. 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>

## 3-DT and a charge

If the <b>attacking, or "charging" unit</b> , has twice the "total morale value" of the defender (or more)	If the <b>defending unit</b> has twice the "total morale value" (or more) of the attacker	If <b>neither</b> unit has twice the "total morale value"
The <b>defender</b> takes a 3-DT	The <b>attacker</b> takes a 3-DT	There is no 3-DT
<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><b>If they fail the 3-DT, the defending unit turns their backs to the enemy and moves away from the melee 1/3<sup>rd</sup> of a move.</b></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 <b>Morale Effect</b> by multiplying its number of casualties - that turn - times the units <b>Morale Value</b> (before losses) that turn. Then you multiply the number of figures in the unit, before casualties were taken (that turn) times its morale value. Then you consult the <b>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."</b></p> <p>If both sides took casualties, you determine the result for each <b>but ONLY side with the worst effect (B, B+T or R) takes the result.</b> 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 orders.</p>	<p>If they pass - they make the charge</p> <p>If they fail, they do <b>not</b> make the charge.</p> <p>If it fails the 3-DT stays where it is and is <b>reduced by one melee point if attacked that turn.</b></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 <b>Morale Effect</b> by multiplying the unit's casualties - that turn -times that figures/units <b>Morale Value (1-5).</b></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>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><b>Only the side with the worst effect (B, B+T or R) takes the result.</b></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 1/3<sup>rd</sup> on the following turn.</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 <b>Morale Effect</b> by multiplying the number of casualties - that turn - times the <b>Morale Value of that type of figure/unit</b> (before losses that turn) and consult <b>the Post Melee Morale Chart).</b></p> <p><b>Only the side with the worst effect (B, B+T or R) takes the result.</b></p> <p>If the attack was a result of a charge the charging unit's movement is also reduced by 1/3<sup>rd</sup> on the following turn.</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 in the next turn <b>with each side reduced one melee point.</b></p> <p>On the following move the charging unit may not charge again.</p>

## 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 <b>and</b> 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.

## 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 <small>12 round/solid shot, 4 explosive and 2 cannister.</small>	----	----	---	----	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

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

## Artillery Crew

Type of Artillery	Full Crew	Effects of a reduction in crew		
		Reduced to	Fire reduced to half	No longer able to fire
6 pd	4	2 Crew	x	
		1 Crew		x
Rockets	4	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

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	

## 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>

	If your figures did not move	If you move up to 1/3 <sup>rd</sup> max	If you move up to 2/3 <sup>rds</sup> max	If you move the maximum
At the beginning of this turn they were <b>LOADED</b>	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 <b>NOT LOADED</b>	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.