# 0 A.D. is Actually Before Christ https://github.com/Oabc/Oabc-a23.git

A modification of 0 A.D. Empires Ascendant version 0.0.23 Alpha XXIII: Ken Wood

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### 1 Introduction

**Oabc** is an acronym for "0 A.D. is Actually Before Christ". This mod tweaks, rebalances, and improves upon what already exists in the game. Amongst other things, it contains a moderate bonus attack counter and penalty system, more experience promotion ranks (0–12), and a new resource (silver).

**Oabc** serves as a showcase for what 0 A.D. easily could be at the moment, as a playground for me experimenting with modifying the game to get used to the code structure, and as a platform for including my own opinions and views to have the game the way I like it. Being a test mod of an alpha-stage game, it is inherently imperfect, unfinished, and restricted by my limited programming skills and the files available in 0 A.D.'s latest stable release.

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### 1.1 Instructions

- Use git clone https://github.com/Oabc/Oabc-a23.git to get the repository directly or download it as a zip via https://github.com/Oabc-a22/archive/master.zip
- Place it in your /Oad/mods/ folder:

GNU/Linux (e.g. Fedora) typically: ~/.local/share/Oad/mods/ Macintosh/Apple OS X typically: ~/Library/Application\Support/Oad/mods/ Microsoft Windows typically: ~\Documents\My Games\Oad\mods\

- Launch 0 A.D., click "Settings" and "Mod Selection"
- Select Oabc, click "Enable" and "Save Configuration"
- Add, remove, or move up or down any other mods, click "Save Configuration" and "Start Mods"
- Click "Learn To Play" and "Structure Tree" to see the mod(s) implemented.

# 2 Units

# 2.1 Population costs

- ullet 0: fauna, catafalques, ships
- 1: infantry, women, healers, traders
- 2: camelry, cavalry
- $\bullet$  3: worker elephants
- $\bullet$  4: bigae, battering rams, bolt-shooters, stone-throwers
- 5: -
- 6: quadrigae, war elephants, siege towers

### 2.2 Counters

unit	new penalties	new bonuses	restricted
war dogs	_	_	Ships, Siege, Structure
infantry lead-slingers	_	_	_
infantry longbowmen	_	_	_
infantry archers	_	_	_
infantry crossbowmen	_	_	_
infantry stone-slingers	_	_	_
infantry javelineers	_	_	_
infantry axe-throwers	_	_	_
infantry macemen	_	_	_
infantry axemen	_	_	_
infantry sabremen	_	_	_
infantry longswordsmen	_	_	_
infantry swordsmen	_	_	_
infantry spearmen	_	_	_
infantry pikemen	_	_	_
camel archers	_	_	_
camel javelineers	_	_	_
camel spearmen	$0.5 \times$ vs Elephantry	_	_
cavalry archers	$0.5 \times$ vs Elephantry	_	_
cavalry crossbowmen	_	_	_
cavalry javelineers	_	_	_
cavalry macemen	$0.75 \times \text{vs Chariotry}, 0.5 \times \text{vs Elephantry}$	_	_
cavalry axemen	$0.75 \times \text{vs Chariotry}, 0.5 \times \text{vs Elephantry}$	_	_
cavalry sabremen	$0.75 \times \text{vs Chariotry}, 0.5 \times \text{vs Elephantry}$	_	_
cavalry swordsmen	$0.75 \times \text{vs Chariotry}, 0.5 \times \text{vs Elephantry}$	_	_
cavalry spearmen	$0.75 \times \text{vs Chariotry}, 0.5 \times \text{vs Elephantry}$	_	_
cavalry lancers	$0.75 \times \text{vs Chariotry}, 0.5 \times \text{vs Elephantry}$	_	_
biga longbowmen	_	_	Ships, Siege, Structure
biga archers	_	_	Ships, Siege, Structure
biga javelineers	_	_	Ships, Siege, Structure
quadriga archers	_	_	Ships, Siege, Structure
quadriga scythed	_	_	Ships, Siege, Structure
war elephants	_	_	_
bolt-shooters	_	$1.5 \times$ vs Elephant	_
stone-throwers	_	$2.0 \times \text{ vs Ships}$	_
battering rams	_	$2.0 \times$ vs Defensive	Organic
siege towers	_	$1.5 \times \text{vs Tower}$	_

# 2.3 Unit types

## 2.3.1 Infantry

class	pop.	training costs	exp.	vision	walk	health	armour	damage	rate	range	other
	size	(s, f, w, i, s; time)	loot/up	range	$\mathbf{speed}$		(c, h, p, t)	(c, h, p, t)	(ms)	(m)	stats
infantry	1	30, 30, 0, 0, 0; 30	60/-	80	11.5	60	3, 1, 2, 1	0, 0, 8, 0	2000	70+1	
lead-slinger	(1)	(-, 50, 20, 0, 30; 10)	(100/100)	(80)	(10.8)	(50)	(10, 1, 1, -)	(1, 0, 9.5, -)	(1250)	(48)	
infantry	1	30, 30, 0, 0, 0; 30	60/-	80	10.5	60	2, 1, 2, 1	0, 0, 12, 0	2000	60+1	
archer	(1)	(-, 50, 50, 0, 0; 10)	(100/100)	(80)	(9.9)	(50)	(10, 1, 1, -)	(0,0,6,-)	(1000)	(72)	
infantry	1	30, 30, 0, 0, 0; 30	60/-	80	9.0	60	1, 1, 1, 1	0, 0, 10, 5	2000	50+1	
crossbowman	(1)	(-, 50, 50, 0, 0; 10)	(100/100)	(80)	(9.9)	(50)	(10, 1, 1, -)	(0, 0, 6, -)	(1000)	(72)	
infantry	1	30, 30, 0, 0, 10; 30	60/-	80	11.5	60	1, 1, 1, 1	9, 0, 0, 0	2000	40+1	
stone-slinger	(1)	(-, 50, 20, 0, 30; 10)	(100/100)	(80)	(10.8)	(50)	(10, 1, 1, -)	(1, 0, 9.5, -)	(1250)	(48)	
infantry	1	30, 30, 0, 0, 10; 30	60/-	80	11.5	60	1, 1, 1, 1	12, 0, 0, 0	2000	40+1	
staff-slinger	(1)	(-, 50, 20, 0, 30; 10)	(100/100)	(80)	(10.8)	(50)	(10, 1, 1, -)	(1, 0, 9.5, -)	(1250)	(48)	
infantry	1	30, 30, 0, 0, 0; 30	60/-	80	11.0	60	2, 1, 3, 1	0, 0, 20, 0	2000	30+1	
javelineer	(1)	(-, 50, 50, 0, 0; 10)	(100/100)	(80)	(12.6)	(50)	(10, 1, 1, -)	(0, 0, 16, -)	(1250)	(24)	
infantry	1	30, 30, 0, 0, 0; 30	60/-	80	10.5	60	3, 3, 3, 3	6, 12, 0, 0	2000	20+1	
axe-thrower	(1)	(-, 50, 50, 0, 0; 10)	(100/100)	(80)	(12.6)	(50)	(10, 1, 1, -)	(0, 0, 16, -)	(1250)	(24)	
infantry	1	30, 30, 0, 0, 0; 30	60/-	80	10.0	90	4, 3, 4, 5	15, 0, 0, 0	2000	3	
maceman	(1)	(-, 50, 40, 10, 0; 10)	(100/100)	(80)	(9.45)	(100)	(15, 5, 5, -)	(0, 5.5, 0, -)	(750)	(3.5)	
infantry	1	30, 30, 0, 0, 0; 30	60/-	80	10.5	90	4, 4, 4, 4	5, 10, 0, 0	2000	3	
axeman	(1)	(-, 50, 40, 10, 0; 10)	(100/100)	(80)	(9.45)	(100)	(15, 5, 5, -)	(0, 5.5, 0, -)	(750)	(3.5)	
infantry	1	30, 30, 0, 0, 0; 30	60/-	80	10.5	90	5, 4, 4, 3	0, 15, 0, 0	2000	3	
sabreman	(1)	(-, 50, 40, 10, 0; 10)	(100/100)	(80)	(9.45)	(100)	(15, 5, 5, -)	(0, 5.5, 0, -)	(750)	(3.5)	
infantry	1	30, 30, 0, 0, 0; 30	60/-	80	9.5	90	3, 5, 3, 5	0, 12, 0, 4	2000	3	
longswordsman	(1)	(-, 50, 40, 10, 0; 10)	(100/100)	(80)	(9.45)	(100)	(15, 5, 5, -)	(0, 5.5, 0, -)	(750)	(3.5)	
infantry	1	30, 30, 0, 0, 0; 30	60/-	80	10.0	90	4, 4, 4, 4	0, 8, 0, 8	2000	3	
swordsman	(1)	(-, 50, 40, 10, 0; 10)	(100/100)	(80)	(9.45)	(100)	(15, 5, 5, -)	(0, 5.5, 0, -)	(750)	(3.5)	
infantry	1	30, 30, 0, 0, 0; 30	60/-	80	10.0	90	3, 5, 4, 4	0, 0, 0, 15	2000	3	
spearman	(1)	(-, 50, 50, 0, 0; 10)	(100/100)	(80)	(8.55)	(100)	(15,5,5,-)	(0, 3.0, 2.5, -)	(1000)	(4.5)	
infantry	1	30, 30, 0, 0, 0; 30	60/-	80	9.0	90	5, 3, 5, 3	0, 0, 6, 6	2000	6	
pikeman	(1)	(-, 50, 50, 0, 0; 10)	(100/100)	(80)	(7.2)	(100)	(15, 10, 10, -)	(0, 1.0, 3.0, -)	(2000)	(7.0)	

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### 2.3.2 Cavalry

class	pop.	training costs	$\exp$ .	vision	walk	$\mathbf{health}$	armour	damage	$\mathbf{rate}$	range	other
	size	(s, f, w, i, s; time)	loot/up	range	$\mathbf{speed}$		(c, h, p, t)	(c, h, p, t)	(ms)	(m)	stats
cavalry	2	40, 80, 0, 0, 0; 50	120/-	85	15.0	120	1, 1, 1, 1	0, 0, 14, 0	2000	60+2	
archer	(1)	(-, 100, 50, 0, 0; 15)	(130/150)	(92)	(17.55)	(100)	(15, 3, 1, -)	(0, 0, 7, -)	(1000)	(72)	
cavalry	2	40, 80, 0, 0, 0; 50	120/-	85	15.0	120	1, 1, 1, 1	0, 0, 12, 6	2000	50+2	
crossbowman	(1)	(-, 100, 50, 0, 0; 15)	(130/150)	(92)	(17.55)	(100)	(15, 3, 1, -)	(0, 0, 7, -)	(1000)	(72)	
cavalry	2	40, 80, 0, 0, 0; 50	120/-	85	15.0	120	1, 1, 1, 1	0, 0, 24, 0	2000	30+2	
javelineer	(1)	(-, 100, 50, 0, 0; 15)	(130/150)	(92)	(17.55)	(100)	(15, 3, 1, -)	(0, 0, 18, -)	(1250)	(28)	
cavalry	2	40, 80, 0, 0, 0; 50	120/-	85	15.0	150	3, 3, 3, 3	18, 0, 0, 0	2000	4	
maceman	(1)	(-, 100, 30, 20, 0; 15)	(130/150)	(92)	(21.06)	(160)	(15, 4, 2, -)	(0, 6.5, 0, -)	(750)	(3.5)	
cavalry	2	40, 80, 0, 0, 0; 50	120/-	85	15.0	150	3, 3, 3, 3	6, 12, 0, 0	2000	4	
axeman	(1)	(-, 100, 30, 20, 0; 15)	(130/150)	(92)	(21.06)	(160)	(15, 4, 2, -)	(0, 6.5, 0, -)	(750)	(3.5)	
cavalry	2	40, 80, 0, 0, 0; 50	120/-	85	15.0	150	3, 3, 3, 3	0, 18, 0, 0	2000	4	
sabreman	(1)	(-, 100, 30, 20, 0; 15)	(130/150)	(92)	(21.06)	(160)	(15, 4, 2, -)	(0, 6.5, 0, -)	(750)	(3.5)	
cavalry	2	40, 80, 0, 0, 0; 50	120/-	85	15.0	150	3, 3, 3, 3	0, 9, 0, 9	2000	4	
swordsman	(1)	(-, 100, 30, 20, 0; 15)	(130/150)	(92)	(21.06)	(160)	(15, 4, 2, -)	(0, 6.5, 0, -)	(750)	(3.5)	
cavalry	2	40, 80, 0, 0, 0; 50	120/-	85	15.0	150	3, 3, 3, 3	0, 0, 0, 18	2000	4	
spearman	(1)	(-, 100, 50, 0, 0; 15)	(130/150)	(92)	(19.305)	(160)	(15, 4, 3, -)	(0, 6, 5, -)	(2000)	(4.5)	
cavalry	2	40, 80, 0, 0, 0; 50	120/-	85	15.0	150	3, 3, 3, 3	4, 0, 0, 16	2000	4	
lancer	(1)	(-, 100, 50, 0, 0; 15)	(130/150)	(92)	(19.305)	(160)	(15, 4, 3, -)	(0, 6, 5, -)	(2000)	(4.5)	

## 2.3.3 Camelry

${f class}$	pop.	training costs	exp.	vision	walk	health	armour	damage	$\mathbf{rate}$	range	other
	size	(s, f, w, i, s; time)	loot/up	range	$\mathbf{speed}$		(c, h, p, t)	(c, h, p, t)	(ms)	(m)	stats
camel	2	35, 70, 0, 0, 0; 60	90/-	90	18.0	144	1, 1, 1, 1	0, 0, 13, 0	2000	60+3	
archer	(1)	(-, 100, 50, 0, 0; 15)	(130/150)	(92)	(17.55)	(100)	(15,3,1,-)	(0, 0, 7, -)	(1000)	(72)	
camel	2	35, 70, 0, 0, 0; 60	90/-	90	18.0	144	1, 1, 1, 1	0, 0, 22, 0	2000	30+3	
javelineer	(1)	(-, 100, 50, 0, 0; 15)	(130/150)	(92)	(17.55)	(100)	(15,3,1,-)	(0, 0, 18, -)	(1250)	(28)	
camel	2	35, 70, 0, 0, 0; 60	90/-	90	18.0	180	2, 2, 2, 2	0, 0, 0, 17	2000	4	
spearman	(1)	(-, 100, 50, 0, 0; 15)	(130/150)	(92)	(19.305)	(160)	(15, 4, 3, -)	(0, 6, 5, -)	(2000)	(4.5)	

### 2.3.4 Chariotry

${f class}$	pop.	training costs	exp.	vision	walk	health	armour	damage	$\mathbf{rate}$	range	other
	size	(s, f, w, i, s; time)	loot/up	range	$\mathbf{speed}$		(c, h, p, t)	(c, h, p, t)	(ms)	(m)	stats
biga	4	90, 160, 0, 0, 0; 70	180/-	85	16.0	240	5, 5, 5, 5	0, 0, 15, 0	2000	60+2	arrow count: 1–2 (–)
archer	(1)	(-, 250, 100, 100, 0; 30)	(150/-)	(96)	(20.25)	(240)	(20, 7, 5, -)	(0, 0, 14, -)	(1000)	(76)	
biga	4	90, 160, 0, 0, 0; 70	180/-	85	16.0	240	5, 5, 5, 5	0, 0, 25, 0	2000	30+2	arrow count: 1–2 (–)
javelineer	(1)	(-, 250, 100, 100, 0; 30)	(150/-)	(96)	(20.25)	(240)	(20, 7, 5, -)	(0, 0, 36, -)	(1250)	(32)	
quadriga	6	120, 240, 0, 0, 0; 80	240/-	85	17.0	360	6, 6, 6, 6	0, 0, 16, 0	2000	60+2	
archer	(1)	(-, 250, 100, 100, 0; 30)	(150/-)	(96)	(20.25)	(240)	(20, 7, 5, -)	(0, 0, 14, -)	(1000)	(76)	arrow count: 1–2 (–)
quadriga	6	120, 240, 0, 0, 0; 80	240/-	85	17.0	360	6, 6, 6, 6	5, 10, 0, 10	2000	8	
scythed	(1)	(-, 250, 100, 100, 0; 30)	(150/-)	(96)	(20.25)	(240)	(20, 7, 5, -)	(0, 0, 14, -)	(1000)	(76)	arrow count: 1–2 (–)

## 2.3.5 Elephantry

class	pop.	training costs	exp.	vision	walk	health	armour	damage	$\mathbf{rate}$	range	other
	size	(s, f, w, i, s; time)	loot/up	range	$\mathbf{speed}$		(c, h, p, t)	(c, h, p, t)	(ms)	(m)	stats
Indian	6	330, 330, 0, 0, 0; 99	360/-	95	12.0	495	12, 3, 9, 6	110, 0, 0, 0	2000	6	
elephant	(3)	(-, 250, 0, 250, 0; 30)	(150/-)	(100)	(8.45)	(750)	(25, 10, 10, -)	(150, 20, 0, -)	(1500)	(8)	
North African	6	270, 270, 0, 0, 0; 81	360/-	95	12.0	405	12, 3, 9, 6	90, 0, 0, 0	2000	6	
elephant	(3)	(-, 250, 0, 250, 0; 30)	(150/-)	(100)	(8.45)	(750)	(25, 10, 10, -)	(150, 20, 0, -)	(1500)	(8)	

### 2.3.6 Siege engines

${f class}$	pop.	construction costs	exp.	vision range	walk	health	armour	damage	$\mathbf{rate}$	$\mathbf{range}$	other
	size	(s, f, w, i, s; time)	loot/up	packed/unpacked	$\mathbf{speed}$		(c, h, p, t)	(c, h, p, t)	(ms)	(m)	stats
scorpio	2	0, 50, 50, 100, 0; 60	-/-	100	8.0	100	5, 1, 50, 2	0, 0, 40, 20	4000	10-90	un/pack (ms): 4000 (10000)
bolt-shooter	(2)	(-, 0, 250, 250, 0; 20)	(200/-)	(120)	(8.1)	(200)	(5, 1, 50, -)	(25, 0, 150, -)	(4000)	(26-80)	l. splash: $-(5c+0h+75p)$
polybolos	4	0, 100, 150, 150, 0; 90	-/-	100	8.0	200	5, 1, 50, 2	0, 0, 40, 20	2000	15-95	un/pack (ms): 8000 (10000)
bolt-shooter	(2)	$(-,\ 0,\ 250,\ 250,\ 0;\ 20)$	(200/-)	(120)	(8.1)	(200)	(5, 1, 50, -)	(25, 0, 150, -)	(4000)	(26-80)	l. splash: $-(5c+0h+75p)$
oxybeles	4	0, 100, 150, 150, 0; 80	-/-	100	8.0	200	5, 1, 50, 2	0, 0, 100, 50	5000	20-100	un/pack (ms): 8000 (10000)
bolt-shooter	(2)	(-, 0, 250, 250, 0; 20)	(200/-)	(120)	(8.1)	(200)	(5, 1, 50, -)	(25, 0, 150, -)	(4000)	(26-80)	l. splash: $-(5c+0h+75p)$
stone-thrower	4	0, 100, 200, 100, 0; 100	-/-	100	7.0	250	5, 1, 50, 2	120, 0, 0, 0	5000	30-90	un/pack (ms): 12000 (10000
	(2)	(-, 0, 400, 0, 250; 25)	(300/-)	(120)	(7.2)	(250)	(5, 1, 50, -)	(100, 0, 10, -)	(5000)	(26-80)	c. splash: $-(35c+0h+15p)$
small	4	0, 100, 250, 50, 0; 40	-/-	40	6.0	300	5, 1, 50, 2	80, 0, 0, 0	2000	7	garrison capacity: 6 (10)
battering ram	(3)	(-, 0, 350, 200, 0; 30)	(60/-)	(80)	(8.1)	(400)	(5, 1, 50, -)	(150, 0, 0, -)	(1500)	(6.5)	
large	4	0, 100, 350, 50, 0; 50	-/-	40	6.0	375	5, 1, 50, 2	80, 0, 0, 0	2000	9	garrison capacity: 10 (10)
battering ram	(3)	(-, 0, 350, 200, 0; 30)	(60/-)	(80)	(8.1)	(400)	(5, 1, 50, -)	(150, 0, 0, -)	(1500)	(6.5)	
siege tower	6	0, 200, 500, 300, 0; 150	-/-	100	4.0	750	5, 1, 50, 2	3, 0, 9, 0	2000	10-60+15	garrison capacity: 20 (20)
	(3)	(-, 0, 500, 300, 0; 60)	(60/-)	(80)	(6.3)	(500)	(5, 1, 50, -)	(2.5, 0, 12, -)	(2000)	(10-55+10)	arrow count: 2–12 (0–10)

# 2.3.7 Ships

class	pop.	construction costs	exp.	vision	walk	$\mathbf{health}$	armour	damage	$\mathbf{rate}$	range	other
	size	(s, f, w, i, s; time)	loot/up	range	$\mathbf{speed}$		(c, h, p, t)	(c, h, p, t)	(ms)	(m)	stats
fishing	0	0, 15, 60, 0, 0; 20	-/-	75	12.0	150	2, 2, 4, 2	0, 0, 0, 15	2000	5	garrison capacity: 1 (1)
boat	(1)	(-,0,50,0,0;20)	(1/-)	(30)	(9.9)	(200)	(2,2,5,-)	(0, 10, 0, -)	(1000)	(5)	food capacity: 60 (40)
merchant	0	0, 30, 120, 60, 0; 40	-/-	90	11.0	600	3, 3, 6, 3	_	_	_	garrison capacity: 15 (15)
$_{ m ship}$	(1)	(-, 0, 0, 100, 0; 20)	(25/-)	(50)	(12.15)	(400)	(2,2,5,-)	(-)	(-)	(-)	trade gain: $0.75 (0.75)$
fireship	0	0, 0, 150, 0, 0; 15	-/-	60	13.0	450	4, 4, 8, 4	5, 5, 5, 5	100	10	regeneration: $-5(-6)$ ;
	(1)	(-,0,50,0,0;30)	(-/-)	(60)	(14.4)	(500)	(5, 5, 10, -)	(10, 10, 10, -)	(100)	(8)	death damage
barge	0	0, 50, 250, 100, 0; 50	-/-	120	10.0	1800	5, 5, 10, 5	0, 0, 12, 0	2000	60	garrison capacity: 45 (40)
(trireme)	(3)	(-, 0, 150, 150, 0; 40)	(100/-)	(90)	(14.58)	(1600)	(5, 5, 10, -)	(0,0,35,-)	(2000)	(55)	arrow count: 0–20 (3–13)
huge barge	0	0, 100, 400, 150, 0; 80	-/-	120	8.5	2700	5, 5, 10, 5	0, 0, 12, 0	2000	60	garrison capacity: 75 (40)
(trireme)	(3)	(-, 0, 150, 150, 0; 40)	(100/-)	(90)	(14.58)	(1600)	(5, 5, 10, -)	(0,0,35,-)	(2000)	(55)	arrow count: 0–30 (3–13)
triaconter	0	0, 60, 60, 30, 0; 30	-/-	105	10.0	300	5, 5, 10, 5	0, 0, 12, 0	2000	60	garrison capacity: 5 (20)
(bireme)	(2)	(-, 0, 125, 50, 0; 20)	(75/-)	(90)	(13.95)	(800)	(5, 5, 10, -)	(0,0,35,-)	(2000)	(45)	arrow count: 1–3 (2–10)
penteconter	0	0, 100, 100, 50, 0; 45	-/-	105	9.5	500	5, 5, 10, 5	0, 0, 12, 0	2000	60	garrison capacity: 10 (20)
(bireme)	(2)	(-, 0, 125, 50, 0; 20)	(75/-)	(90)	(13.95)	(800)	(5, 5, 10, -)	(0,0,35,-)	(2000)	(45)	arrow count: 1–5 (2–10)
trireme	0	0, 300, 300, 150, 0; 60	-/-	100	8.5	1500	6, 6, 12, 6	0, 0, 12, 0	2000	60	garrison capacity: 20 (30)
(trireme)	(3)	(-, 0, 150, 150, 0; 25)	(100/-)	(90)	(16.2)	(1400)	(5, 5, 10, -)	(0,0,35,-)	(2000)	(55)	arrow count: 2–10 (3–13)
quadrireme	0	0, 400, 400, 200, 0; 75	-/-	100	8.0	2000	6, 6, 12, 6	0, 0, 12, 0	2000	60	garrison capacity: 40 (30)
(trireme)	(3)	(-, 0, 150, 150, 0; 25)	(100/-)	(90)	(16.2)	(1400)	(5, 5, 10, -)	(0,0,35,-)	(2000)	(55)	arrow count: 4–20 (3–13)
quinquereme	0	0, 500, 500, 250, 0; 90	-/-	100	7.5	2500	7, 7, 14, 7	0, 0, 12, 0	2000	60	garrison capacity: 60 (50)
	(3)	(-, 0, 350, 200, 350; 30)	(150/-)	(110)	(16.2)	(2000)	(5, 5, 10, -)	(100, 0, 10, -)	(5000)	(10-72)	arrow count: 6–30 (1–10)

# 2.3.8 Support

class	pop.	training costs	exp.	vision	walk	health	armour	damage	$\mathbf{rate}$	range	other
	size	(s, f, w, i, s; time)	loot/up	range	$\mathbf{speed}$		(c, h, p, t)	(c, h, p, t)	(ms)	(m)	stats
woman	1	0, 30, 0, 0, 0; 60	-/-	60	9.0	50	1, 1, 1, 1	5, 0, 0, 0	2000	15	build rate: $-(1.0)$
(female citizen)	(1)	(-, 50, 0, 0, 0; 8)	(10/-)	(32)	(9.0)	(25)	$(1,\ 1,\ 1,\ -)$	(0, 2, 0, -)	(1000)	(3)	
slave	1	30, 0, 0, 0, 0; 30	-/-	60	9.0	50	1, 1, 1, 1	_	_	_	build rate: $0.5 (0.5)$
	(0)	(-, 0, 0, 50, 0; 20)	(10/-)	(12)	(9.0)	(100)	$(1,\ 1,\ 1,\ -)$	(-)	(-)	(-)	
healer	1	60, 30, 0, 0, 0; 60	-/-	60	9.0	50	1, 1, 1, 1	heal 1 HP	500	12	
	(1)	(-, 250, 0, 0, 0; 8)	(10/150)	(30)	(9.0)	(85)	$(1,\ 1,\ 1,\ -)$	(heal 5 HP)	(2000)	(12)	
trader	1	0, 50, 50, 50, 0; 30	-/-	60	9.0	100	1, 1, 1, 1	_	_	_	trade gain: $0.75 (0.75)$
	(1)	(-, 100, 0, 80, 0; 15)	(10/-)	(60)	(9.0)	(100)	$(1,\ 1,\ 1,\ -)$	(-)	(-)	(-)	
worker	3	0, 150, 0, 0, 0; 45	-/-	60	5.4	400	8, 2, 6, 4	_	_	-	build rate: 2.0 (2.0)
elephant	(1)	(-, 150, 0, 0, 0; 20)	(50/-)	(50)	(5.4)	(300)	(10,5,8,-)	(-)	(-)	(-)	

### 2.3.9 Fauna

class	food	max	exp.	vision	walk	health	armour	damage	$\mathbf{rate}$	range	behaviour
	amount	gatherers	loot	range	$\mathbf{speed}$		(c, h, p, t)	(c, h, p, t)	(ms)	(m)	
chicken	15	1	_	10	1.5	3	1, 1, 1, 1	_	_	_	domestic
peacock	25	1	_	10	2.5	5	1, 1, 1, 1	_	_	_	domestic
goat	75	2	-	10	4.5	15	1, 1, 1, 1	_	_	_	domestic
sheep	100	2	_	10	4.0	20	$1,\ 1,\ 1,\ 1$	_	_	_	domestic
pig	150	2	_	10	3.0	30	$1,\ 1,\ 1,\ 1$	_	_	_	domestic
flaming "	_	_	_	10	9.0	30	$1,\ 1,\ 1,\ 1$	_	_	_	domestic
zebu	300	5	_	10	5.0	60	$1,\ 1,\ 1,\ 1$	_	_	_	domestic
rabbit	20	1	_	10	3.5	10	1, 1, 1, 1	_	_	_	skittish
donkey	120	2	_	10	6.0	40	1, 1, 1, 1	_	_	_	skittish
horse	200	3	_	10	8.0	60	1, 1, 1, 1	_	_	_	skittish
pony	160	2	_	10	6.4	45	1, 1, 1, 1	_	_	_	skittish
dromedary camel	250	4	_	10	7.0	80	1, 1, 1, 1	_	_	_	skittish
deer	130	2	_	10	3.0	65	1, 1, 2, 1	_	_	_	skittish
gazelle	60	2	_	10	12.5	30	1, 1, 1, 1	_	_	_	skittish
giraffe	350	6	_	10	6.0	150	1, 1, 1, 1	_	_	_	skittish
" infant	140	2	_	10	5.4	60	1, 1, 1, 1	_	_	_	skittish
muskox	170	3	_	10	5.5	85	2, 1, 4, 1	_	_	_	skittish
wildebeast	210	3	_	10	8.5	105	2, 1, 2, 1	_	_	_	skittish
zebra	170	3	_	10	9.0	85	1, 1, 1, 1	_	_	_	skittish
African bush elephant	700	11	70	10	5.0	350	5, 3, 4, 2	88, 0, 0, 0	2000	6	defensive
" " " infant	280	4	_	10	4.5	140	4, 2, 3, 1		_	_	skittish
Asian elephant	600	10	60	10	5.0	300	5, 3, 4, 2	80, 0, 0, 0	2000	6	defensive
" " infant	240	4	_	10	4.5	120	4, 2, 3, 1	_	_	_	skittish
North African elephant	500	9	50	10	5.0	250	5, 3, 4, 2	72, 0, 0, 0	2000	6	defensive
" " " infant	200	4	_	10	4.5	100	4, 2, 3, 1	_	_	_	skittish
walrus	320	6	_	10	2.0	160	4, 2, 4, 2	10, 0, 15, 25	2000	5	defensive
bear	280	4	_	10	6.0	140	4, 2, 3, 1	20, 20, 0, 0	2000	6	aggressive
boar	140	2	_	10	8.0	70	3, 1, 2, 1	8, 0, 0, 16	2000	4	aggressive
crocodile	180	3	_	10	4.0	90	7, 3, 9, 5	0, 30, 0, 0	2000	8	aggressive
rhinoceros	400	7	_	10	7.0	200	4, 2, 5, 3	20, 0, 0, 20	2000	6	aggressive
fox (red, arctic)	_	_	_	10	9.0	30	1, 1, 3, 1	0, 5, 5, 0	2000	2	defensive
dog (mastiff, wolfhound)	_	_	_	10	11.0	50	1, 1, 3, 1	0, 10, 10, 0	2000	3	aggressive
wolf (red, arctic)	_	_	_	10	12.0	70	1, 1, 3, 1	0, 15, 15, 0	2000	4	aggressive
lion(ess)	_	_	_	10	13.0	100	1, 1, 3, 1	0, 20, 20, 0	2000	5	violent
tiger	_	_	_	10	14.0	110	1, 1, 3, 1	0, 25, 25, 0	2000	6	violent
shark	_	_	_	10	9.0	180	1, 1, 1, 1		_	_	passive
whale (fin, humpback)	2000	5	_	10	15.0	400	7, 3, 5, 1	_	_	_	skittish

### 2.4 Unit roster

### 2.4.1 Support

	CART	$\operatorname{GAUL}$	KUSH	MACE	MAUR	PTOL	ROME	SELE
woman	V	V	V	V	V	V	V	V
trader	V	V	V	V	V	V	V	V
healer	Т	Τ	Т	Т	Т	Т	Τ	Т
elephant	_	_	_	_	V	_	_	_
slave	С	С	С	С	С	С	С	С

**NB**: -: not available for this faction, V: requires village phase, T: requires town phase, C: requires city phase, M: requires metropolis phase, \*: only available at some captured structures.

### 2.4.2 Infantry

	CART	GAUL	KUSH	MACE	MAUR	PTOL	ROME	SELE
infantry lead-slinger	_	_	_	_	_	_	_	_
" " mercenary	_	_	_	${ m T}$	_	${ m T}$	_	_
" " champion	_	_	_	_	_	_	_	_
infantry archer	V	_	V	_	V	_	_	Τ
" " mercenary	_	_	_	${ m T}$	_	${ m T}$	_	_
" " champion	_	_	$\mathbf{C}$	_	_	_	_	_
infantry crossbowman	_	_	_	_	_	_	_	_
" " mercenary	_	_	_	_	_	_	_	_
" " champion	_	_	_	$\mathbf{C}$	_	_	_	_
infantry stone-slinger	_	Т	_	_	_	V	_	_
" " mercenary	T	_	_	_	_	_	_	_
" " champion	_	_	_	_	_	_	_	_
infantry staff-slinger	_	_	_	_	_	_	_	_
" " mercenary	_	_	_	_	_	_	_	_
" " champion	_	_	_	_	_	_	_	_
infantry javelineer	_	V	_	V	_	_	V	V
" " mercenary	$\Gamma$	_	${ m T}$	_	_	${ m T}$	_	_
" " champion	_	_	_	_	_	_	_	_
infantry axe-thrower	_	_	_	_	_	_	_	_
" " mercenary	_	_	_	_	_	_	_	_
" " champion	_	_	_	_	_	_	_	_
infantry maceman	_	_	_	_	_	_	_	_
" " mercenary	_	_	${ m T}$	_	_	_	_	_
" " champion	_	_	_	_	C	_	_	_
infantry axeman	_	_	_	_	_	_	_	_
" " mercenary	_	_	_	_	_	_	_	_
" " champion	_	_	$\mathbf{C}$	_	_	_	_	_
infantry sabreman	_	_		_	T	_	V	
" " mercenary	_	_	_	_	_	_	_	_
" " champion	_	_	$\mathbf{C}$	_	_	_	_	_
infantry longswordsman	_				_			
" " mercenary	_	_	_	_	_	_	_	_
" " champion	_	_	_	_	_	_	_	_
infantry swordsman	_	V	T		_		Т	
" " mercenary	$\Gamma$	_	_	_	_	${ m T}$	_	_
" " champion	_	$\mathbf{C}$	_	_	_	_	$\mathbf{C}$	_
infantry spearman	V	$\frac{C}{T}$	V		V		$\frac{c}{T}$	V
" " mercenary	$\Gamma$	_	_	${ m T}$		${ m T}$	_	_
" " champion	C	_	_	C	_	_	_	_
infantry pikeman	_		T	V	_	V		Т
" " mercenary		_	_	<b>v</b>	_	M M	_	_
" " champion	_	_	_	_	_	C	_	$^{-}$ C
NB: -: not available f	or this f	action	V· requ	ires villa	 ge_nhase		nuires to	_

**NB**:  $\neg$ : not available for this faction, V: requires village phase, T: requires town phase, C: requires city phase, M: requires metropolis phase, \*: only available at some captured structures.

### 2.4.3 Cavalry

	CART	GAUL	KUSH	MACE	MAUR	PTOL	ROME	SELE
cavalry archer	_	_	_	_	_	_	_	_
" " mercenary	_	_	_	_	_	_	_	${ m T}$
" " champion	_	_	_	_	_	_	_	_
cavalry crossbowman	_	_	_	_	_	_	_	_
" " mercenary	_	_	_	_	_	_	_	_
" " champion	_	_	_	_	_	_	_	_
cavalry javelineer	V	Т	V	Т	V	_	Т	V
" " mercenary	Т	_	_	_	_	${ m T}$	_	_
" " champion	_	_	_	_	_	_	_	_
cavalry maceman	_	_	_	_	_	_	_	_
" " mercenary	_	_	_	_	_	_	_	_
" " champion	_	_	_	_	_	_	_	_
cavalry axeman	_	_	_	_	_	_	_	_
" " mercenary	_	_	_	_	_	_	_	_
" " champion	_	_	_	_	_	_	_	_
cavalry sabreman	_	_	_	_	_	_	_	_
" " mercenary	Т	_	_	_	_	_	_	_
" " champion	_	_	_	_	_	_	_	_
cavalry swordsman	_	V	_	_	Т	_	_	_
" " mercenary	Т	_	_	_	_	_	_	_
" " champion	_	_	_	_	_	_	_	_
cavalry spearman	_	_	Т	_	_	Т	V	_
" " mercenary	Т	_	_	_	_	_	_	
" " champion	_	$\mathbf{C}$	$\mathbf{C}$	_	_	$\mathbf{C}$	_	_
cavalry lancer	_	_	_	V	_	_	_	Т
" " mercenary	_	_	_	_	_	_	_	_
" " champion	С	_	_	$^{\mathrm{C}}$	_	_	_	$\mathbf{C}$
NB: - not available	o for the	ic faction	. V. ro	aniros v	illago ph	ogo T.	roquirog	town n

**NB**:  $\neg$ : not available for this faction, V: requires village phase, T: requires town phase, C: requires city phase, M: requires metropolis phase, \*: only available at some captured structures.

### 2.4.4 Exotic units

	CART	GAUL	KUSH	MACE	MAUR	PTOL	ROME	SELE
camel archer	_	_	_	_	_	_	_	_
" " mercenary	_	_	_	_	_	_	_	${ m T}$
" " champion	_	_	_	_	_	_	_	_
camel javelineer	_	_	_	_	_	_	_	_
" " mercenary	_	_	${ m T}$	_	_	_	_	_
" " champion	_	_	_	_	_	_	_	_
camel spearman	_	_	_	_	_	_	_	_
" " mercenary	_	_	_	_	_	_	_	_
" " champion	_	_	_	_	_	_	_	_
biga archer	_	_	_	_	_	_	_	_
" " mercenary	_	_	_	_	_	_	_	_
" " champion	_	_	_	_	C	_	_	_
biga javelineer	_	_	_	_	_	_	_	_
" " mercenary	_	_	_	_	_	_	_	_
" " champion	_	_	_	_	_	_	_	_
quadriga scythed	_	_	_	_	_	_	_	_
" " mercenary	_	_	_	_	_	_	_	_
" " champion	_	_	_	_	_	_	_	$\mathbf{C}$
Indian elephant	_	_	_	_	Т	_	_	_
" " mercenary	_	_	_	$C^*$	_	_	_	_
" " champion	_	_	_	_	C	_	_	$\mathbf{C}$
North African elephant	_	_	С	_	_	_	_	_
" " mercenary	_	_	_	_	_	_	_	_
" " champion	С	_	_	_	_	$\mathbf{C}$	_	_
war dog	_	-	_		_	_ 	_	_

**NB**:  $\neg$ : not available for this faction, V: requires village phase, T: requires town phase, C: requires city phase, M: requires metropolis phase, \*: only available at some captured structures.

### 2.4.5 Siege engines

	CART	$\operatorname{GAUL}$	KUSH	MACE	MAUR	PTOL	ROME	SELE
scorpio	_	_	_	_	_	_	С	_
polybolos	_	_	_	_	_	С	_	_
oxybeles	С	_	_	С	_	_	_	_
stone-thrower	С	_	_	С	С	С	С	С
small battering ram	Т	Т	_	_	Т	_	_	_
large battering ram	_	_	Т	Т	_	Т	Т	Т
siege tower	_	_	_	С	_	С	_	_

 $\overline{\mathbf{NB}}$ : -: not available for this faction, V: requires village phase, T: requires town phase, C: requires city phase, M: requires metropolis phase, \*: only available at some captured structures.

### **2.4.6** Ships

	CART	$\operatorname{GAUL}$	KUSH	MACE	MAUR	PTOL	ROME	SELE
fishing boat	V	V	V	V	V	V	V	V
merchant ship	Т	Τ	Τ	Τ	Т	Τ	Τ	Т
fireship	_	_	_	_	_	_	_	_
war barge	_	Τ	_	_	Т	_	_	_
war barge huge	_	_	_	_	С	_	_	_
triaconter	_	_	_	_	_	_	_	_
penteconter	_	_	_	Τ	_	_	Τ	Т
trireme	Т	_	Τ	Τ	_	Т	Τ	Т
quadrireme	С	_	_	_	_	С	С	_
quinquereme	С	_	_	_	_	С	С	_

 $\mathbf{NB}$ : -: not available for this faction, V: requires village phase, T: requires town phase, C: requires city phase, M: requires metropolis phase, \*: only available at some captured structures.

# 3 Structures

### 3.1 Base

class	building costs	pop.	armour	capture	garrison	health	territory	vision
	(s, f, w, i, s; time)	$\mathbf{bonus}$	(c, h, p, t)	${f points}$	capacity		(root/radius/weight)	range
centre, crannog	0, 200, 200, 200, 400; 400	10	4, 9, 100, 16	2500	20	2500	1/125/10000	90
(civil center)	(-, 0, 500, 500, 500; 500)	(20)	(3, 25, 35, -)	(2500)	(20)	(3000)	(1/140/10000)	(90)
fortified centre	0, 200, 600, 300, 900; 600	20	4, 9, 100, 16	5000	40	5000	1/125/20000	100
(civil center)	(-, 0, 500, 500, 500; 500)	(20)	(3, 25, 35, -)	(2500)	(20)	(3000)	(1/140/10000)	(90)
wooden house	0, 0, 80, 0, 0; 20	4	4, 9, 100, 16	200	4	400	0/20/20000	30
(small house)	(-, 0, 75, 0, 0; 30)	(5)	(3, 20, 30, -)	(300)	(3)	(800)	(0/16/65535)	(20)
mud brick house	0, 0, 60, 0, 0; 60	6	4, 9, 100, 16	300	6	600	0/20/20000	30
(small house)	(-, 0, 75, 0, 0; 30)	(5)	(3, 20, 30, -)	(300)	(3)	(800)	(0/16/65535)	(20)
normal house	0, 0, 120, 0, 30; 40	8	4, 9, 100, 16	400	8	800	0/20/20000	30
(big house)	(-, 0, 150, 0, 0; 50)	(10)	(3, 20, 30, -)	(300)	(6)	(1200)	(0/20/40000)	(20)
apartment block	0, 0, 180, 0, 60; 60	12	4, 9, 100, 16	600	12	1200	0/20/20000	30
(big house)	(-, 0, 150, 0, 0; 50)	(10)	(3, 20, 30, -)	(300)	(6)	(1200)	(0/20/40000)	(20)
palace	0, 200, 200, 200, 600; 300	10	4, 9, 100, 16	1800	20	3000	1/60/60000	100
(apadana)	(-, 0, 0, 200, 300; 300)	(10)	(3, 20, 30, -)	(500)	(10)	(3000)	(1/48/40000)	(40)

## 3.2 Civic

class	building costs	pop.	armour	capture	garrison	health	territory	vision
	(s, f, w, i, s; time)	bonus	(c, h, p, t)	$\mathbf{points}$	capacity		(root/radius/weight)	range
pillar	0, 0, 75, 0, 75; 75	0	4, 16, 100, 25	_	_	500	_	1
(monument)	(-, 0, 100, 0, 100; 120)	(0)	(3, 20, 30, -)	(-)	(-)	(1200)	(1/38/40000)	(60)
(pillar)	(-, 0, 100, 0, 100; 80)	(0)	(3, 20, 30, -)	(-)	(-)	(1000)	(1/38/40000)	(40)
temple	0, 0, 100, 100, 300; 300	0	4, 16, 100, 25	1000	20	2000	0/50/50000	50
	(-, 0, 0, 0, 300; 200)	(5)	(3, 20, 30, -)	(500)	(20)	(2000)	(0/40/30000)	(40)
library	0, 0, 200, 200, 600; 400	0	4, 16, 100, 25	1500	30	3000	0/50/50000	50
	(-, 0, 200, 0, 200; 200)	(0)	(3, 20, 30, -)	(500)	(5)	(2000)	(0/50/40000)	(40)
lighthouse	0, 0, 250, 250, 750; 500	0	4, 16, 100, 25	2000	40	4000	_	300
	(-, 0, 200, 0, 200; 200)	(0)	(3, 20, 30, -)	(500)	(5)	(2000)	(0/0/40000)	(180)
theatre	0, 0, 300, 300, 900; 600	0	4, 16, 100, 25	2500	50	5000	0/100/50000	50
	(-, 0, 500, 0, 500; 500)	(0)	(3, 20, 30, -)	(500)	(5)	(2000)	(0/100/40000)	(40)
wonder	0, 0, 1000, 1000, 3000; 1200	0	4, 16, 100, 25	3000	60	6000	1/100/65535	100
	(-, 1000, 1000, 1000, 1000; 1000)	(0)	(3, 15, 25, -)	(2000)	(30)	(5000)	(1/100/65535)	(72)

# 3.3 Defensive

class	building costs	pop.	armour	capture	garrison	$\mathbf{health}$	territory	vision
	(s, f, w, i, s; time)	bonus	(c, h, p, t)	$\mathbf{points}$	capacity		(root/radius/weight)	range
outpost	0, 0, 60, 0, 0; 30	0	4, 9, 100, 16	300	1	480	-	1
	(-, 0, 80, 0, 0; 40)	(0)	(1, 5, 20, -)	(500)	(1)	(800)	(-)	(80)
small tower	0, 30, 100, 20, 0; 90	0	4, 9, 100, 16	500	2	750	0/15/30000	90
(sentry tower)	(-, 0, 100, 0, 0; 40)	(0)	(1, 20, 25, -)	(500)	(3)	(500)	(0/16/30000)	(80)
large tower	0, 60, 100, 40, 100; 150	0	4, 9, 100, 16	750	4	1500	0/30/30000	100
(defense tower)	(-, 0, 100, 0, 100; 150)	(0)	(3, 25, 30, -)	(500)	(5)	(1000)	(0/32/40000)	(80)
small fortress	0, 300, 300, 200, 600; 420	0	9, 25, 100, 36	3000	30	4200	1/100/40000	100
(fortress)	(-, 0, 0, 0, 1000; 500)	(10)	(6, 25, 40, -)	(4000)	(20)	(4200)	(0/100/40000)	(80)
medium fortress	0, 300, 400, 200, 800; 510	0	9, 25, 100, 36	3000	40	5100	1/100/40000	100
(fortress)	(-, 0, 0, 0, 1000; 500)	(10)	(6, 25, 40, -)	(4000)	(20)	(4200)	(0/100/40000)	(80)
large fortress	0, 300, 500, 200, 1000; 600	0	9, 25, 100, 36	3000	50	6000	1/100/40000	100
(fortress)	(-, 0, 0, 0, 1000; 500)	(10)	(6, 25, 40, -)	(4000)	(20)	(4200)	(0/100/40000)	(80)
palisade short	0, 0, 10, 0, 0; 5	0	4, 9, 100, 16			400	_	1
•	(-, 0, 4, 0, 0; 5)	(0)	(2, 4, 25, -)	(1200)	(-)	(250)	(-)	(20)
palisade medium	0, 0, 20, 0, 0; 10	0	4, 9, 100, 16		_	600	_	1
•	(-, 0, 7, 0, 0; 8)	(0)	(2, 4, 25, -)	(1200)	(-)	(500)	(-)	(20)
palisade long	0, 0, 30, 0, 0; 15	0	4, 9, 100, 16	_	_	800	_	1
. 0	(-, 0, 13, 0, 0; 11)	(0)	(2, 4, 25, -)	(1200)	(-)	(750)	(-)	(20)
palisade gate	0, 0, +20, 0, 0; +5	0	4, 9, 100, 16		_	1000	_	10
0	(-, 0, +20, 0, 0; +5)	(0)	(2, 4, 25, -)	(1200)	(-)	(637)	(-)	(20)
palisade tower	0, 0, 15, 0, 0; 12	0	4, 9, 100, 16	_	_	500	_	1
,	(-, 0, 5, 0, 0; 7)	(0)	(2, 4, 25, -)	(1200)	(-)	(750)	(-)	(20)
wooden wall short	0, 0, 30, 0, 0; 15	0	4, 16, 100, 25	_	2	1000	_	1
(siege wall short)	(-, 0, 20, 0, 0; 15)	(0)	(5, 15, 35, -)	(1200)	(-)	(750)	(-)	(20)
wooden wall medium	0, 0, 60, 0, 0; 30	0	4, 16, 100, 25	_	4	1500	_	1
(siege wall medium)	(-, 0, 40, 0, 0; 30)	(0)	(5, 15, 35, -)	(1200)	(3)	(1500)	(-)	(20)
wooden wall long	0, 0, 90, 0, 0; 45	0	4, 16, 100, 25	-	6	2000	_	1
(siege wall long)	(-, 0, 60, 0, 0; 45)	(0)	(5, 15, 35, -)	(1200)	(5)	(2250)	(-)	(20)
wooden wall gate	0, 0, +30, +30, 0; 28	0	4, 16, 100, 25	(1200)	-	1250		20
(siege wall gate)	(-, 0, +80, 0, 0; 45)	(0)	(5, 15, 35, -)	(1200)	(-)	(1912)	(-)	(20)
wooden wall tower	0, 0, 120, 0, 0; 60	0	4, 16, 100, 25	(1200)	2	2500		1
(siege wall tower)	(-, 0, 100, 0, 0; 80)	(0)	(5, 15, 35, -)	(1200)	(2)	(3000)	(-)	(60)
city wall short	0, 0, 20, 0, 60; 40	0	9, 25, 100, 36	(1200)	2	1800		1
city wan short	(-, 0, 0, 0, 15; 15)	(0)	(3, 25, 30, -)	(1200)	(-)	(1000)	(0/20/65535)	(20)
city wall medium	0, 0, 30, 0, 90; 60	0	9, 25, 100, 36	- (1200)	4	2700	(0/20/00000)	1
nty wan mearam	(-, 0, 0, 0, 22; 30)	(0)	(3, 25, 30, -)	(1200)	(3)	(2000)	(0/20/65535)	(20)
city wall long	0, 0, 40, 0, 120; 80	0	9, 25, 100, 36	(1200)	6	3600	(0/20/00000)	1
ny wan iong	(-, 0, 0, 0, 120, 80)	(0)	(3, 25, 30, -)	(1200)	(5)	(3000)	(0/20/65535)	(20)
city wall gate	0, 0, +40, +40, 0; 50	0	9, 25, 100, 36	(1200)	(0)	2250	(0/20/0000)	30
nty wan gate	(-, 0, 0, +40, +40, 0; 50)	(0)	(3, 25, 30, -)	(1200)	_ (-)	(2550)	(0/20/65535)	(20)
city wall tower	0, 0, 50, 0, 150; 100	0	9, 25, 100, 36	(1200)	2	4500	(0/20/0000)	(20)
nty wan tower	(-, 0, 0, 0, 130; 100)		(3, 25, 30, -)	(1200)			(0/20/65535)	(60)
	(-, 0, 0, 0, 90, 80)	(0)	(3, 20, 30, -)	(1200)	(2)	(4000)	(0/20/0000)	(00)

# 3.4 Economic

class	building costs (s, f, w, i, s; time)	pop. bonus	<b>armour</b> (c, h, p, t)	$rac{ ext{capture}}{ ext{points}}$	garrison capacity	health	territory (root/radius/weight)	vision range
corral	0, 0, 100, 0, 0; 30	0	1, 4, 100, 9	150	3	450		30
	(-, 0, 100, 0, 0; 50)	(0)	(1, 1, 20, -)	(500)	(-)	(500)	(0/20/30000)	(20)
storehouse	0, 0, 100, 0, 0; 40	0	1, 4, 100, 9	200	4	600	_	30
	(-, 0, 100, 0, 0; 40)	(0)	(1, 5, 20, -)	(300)	(-)	(800)	(0/20/30000)	(20)
farmstead	0, 0, 100, 0, 0; 50	0	1, 4, 100, 9	250	5	750	_	30
	(-, 0, 100, 0, 0; 45)	(0)	(1, 5, 20, -)	(300)	(-)	(900)	(0/20/30000)	(20)
rotary mill	0, 100, 100, 0, 100; 60	0	1, 4, 100, 9	300	6	900	_	30
	(-, 0, 200, 0, 100; 100)	(2)	(3, 20, 30, -)	(500)	(-)	(2000)	(0/32/40000)	(40)
forge	0, 0, 200, 0, 100; 80	0	1, 4, 100, 9	400	8	1200	_	30
(blacksmith)	(-, 0, 200, 0, 0; 200)	(0)	(3, 20, 35, -)	(500)	(1)	(2000)	(0/38/30000)	(32)
market	0, 0, 250, 0, 0; 100	0	1, 4, 100, 9	500	10	1500	_	30
	(-, 0, 300, 0, 0; 150)	(0)	(1, 5, 20, -)	(500)	(-)	(1500)	(0/40/30000)	(32)
dock	0, 0, 200, 0, 0; 120	0	1, 4, 100, 9	600	12	1800	_	30
	(-, 0, 200, 0, 0; 150)	(5)	(3, 20, 35, -)	(500)	(1)	(2500)	(-)	(40)

# 3.5 Military

class	building costs	pop.	armour	capture	garrison	$\mathbf{health}$	territory	vision
	(s, f, w, i, s; time)	bonus	(c, h, p, t)	$\mathbf{points}$	capacity		(root/radius/weight)	range
arsenal	0, 100, 300, 0, 0; 200	0	4, 9, 100, 16	1000	2	2000	0/40/40000	40
(workshop)	(-, 0, 300, 0, 0; 200)	(0)	(3, 20, 35, -)	(500)	(2)	(2000)	(0/38/40000)	(40)
barracks	0, 100, 300, 0, 0; 150	0	4, 9, 100, 16	1000	15	2000	0/40/40000	40
	(-, 0, 300, 0, 0; 150)	(0)	(3, 20, 35, -)	(500)	(10)	(2000)	(0/50/40000)	(32)
cavalry stable	0, 100, 300, 0, 0; 150	0	4, 9, 100, 16	1000	10	2000	0/40/40000	40
	(-, 0, 0, 0, 200; 150)	(0)	(3, 20, 35, -)	(500)	(10)	(2000)	(0/50/40000)	(32)
elephant stable	0, 100, 300, 0, 0; 250	0	4, 9, 100, 16	1000	5	2000	0/40/40000	40
	(-, 0, 0, 200, 200; 300)	(0)	(3, 20, 35, -)	(500)	(5)	(3000)	(0/38/40000)	(40)
hall	0, 0, 200, 0, 0; 150	0	4, 9, 100, 16	1000	6	2000	0/40/40000	40
	(-, 0, 0, 250, 250; 300)	(0)	(3, 20, 30, -)	(500)	(10)	(3000)	(0/38/40000)	(40)
mercenary camp	0, 0, 200, 0, 0; 150	0	4, 9, 100, 16	1000	6	2000	0/40/40000	40
(embassy)	(-, 0, 100, 200, 100; 150)	(0)	(3, 20, 30, -)	(500)	(6)	(2000)	(0/25/40000)	(24)
practice range	0, 100, 300, 0, 0; 150	0	4, 9, 100, 16	1000	10	2000	0/40/40000	40
	(-, 0, 300, 0, 0; 150)	(0)	(3, 20, 35, -)	(500)	(10)	(2000)	(0/50/40000)	(32)
shipyard	0, 100, 300, 0, 0; 150	0	4, 9, 100, 16	1000	5	2000	_	40
(dock)	(-, 0, 200, 0, 0; 150)	(5)	(3, 20, 35, -)	(500)	(1)	(2500)	(-)	(40)

# 3.6 Resource

${f class}$	building costs	pop.	armour	capture	garrison	health	$\operatorname{territory}$	vision
	(s, f, w, i, s; time)	bonus	(c, h, p, t)	${f points}$	capacity		(root/radius/weight)	range
field	0, 0, 100, 0, 0; 60	0	4, 1, 100, 16	100	_	300	_	1
	(-, 0, 100, 0, 0; 50)	(0)	(5, 15, 40, -)	(500)	(-)	(250)	(-)	(0)

### 4 Auras

### 4.1 Structures

- {Centre} Settlement Core (75 m): workers +20% build rate, -20% resource gather base speed.
- {Library} Power of Knowledge (global): technologies -20% research time per library owned.
- {Iberian Pillar} Religious Fervour (50 m): soldiers +20% melee and ranged attack damage.
- {Mauryan Pillar}] Edicts of Ashoka (75 m): traders +20% movement speed.
- {Rotary Mill} Farming Bonus (60 m): workers +20% farming gather rate.
- {Theatre} Hellenization (global): units -5% training time per theatre owned.
- {Wonder} Monumental Awe (100 m): enemy units -5% movement speed.
- {Wonder} **Symbol of Greatness** (global): structures +10% territory influence radius per wonder owned.
- {Wonder} Glorious Expansion (global): +10% maximum population limit per wonder owned (requires "Glorious Expansion" technology).

### 4.2 Team bonuses

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# 5 Technologies

### 5.1 Class bonuses

- Champion: +200% silver cost, +100% training time, +50% health, +2 armour levels, +100% capture attack strength, +50% melee and ranged attack damage.
- Veteran: +50% silver cost, +50% training time, +20% health, +1 armour levels, +50% capture attack strength, +30% melee and ranged attack damage.
- Mercenary: +100% silver cost, 0 other resource costs, -50% training time, +10% health, +25% capture attack strength, +15% melee and ranged attack damage.
- Cataphract: +20% silver cost, +2 armour levels, -5% movement speed.
- Fanatic: -3 armour levels, +15% melee attack damage, +30% movement speed.

### 5.2 Civilization bonuses

All bonuses and penalties from the default distribution have been removed.

### 5.2.1 Carthage

- markets -50% wood cost;
- city walls +25% stone cost, -25% wood cost, +20% build time, +20% health;
- merchant ships and traders -15% training time.

### **5.2.2** Gauls

- centres 0 stone cost, +150% wood cost, -20% build time, -20% health, -10% territory influence radius;
- economic structures -15% build time, -15% health;
- fortresses -50% stone cost, +100% wood cost;
- military structures -20% build time, -20% health;
- city walls -10% build time, -10% health;
- temples 0 stone cost, +200% wood cost, -40% build time, -40% health;
- healers +2 armour levels;
- melee cavalry -15% training time.

### 5.2.3 Kush

- economic structures -70% wood cost, +100% build time;
- healers +3 healing range.

### 5.2.4 Macedon

- military structures -10% build time;
- siege engines -15% construction time.

### 5.2.5 Mauryas

- centres 0 stone cost, +200\% wood cost, +5 population bonus, +10 garrison capacity;
- economic structures -10% wood cost, -10% build time, -10% health;
- city walls 0 stone cost, +200% wood cost, -25% build time, -25% health;
- temples 0 stone cost, +300% wood cost, -20% build time, -20% health;
- elephants -15% training time;
- healers -50% silver cost.

### 5.2.6 Ptolemies

- economic structures -70% wood cost, +100% build time;
- healers -20% healing time.

### 5.2.7 Rome

- wooden walls -10% build time;
- city walls +10% build time, +10% health;
- $\bullet$  stone throwers +25% wood cost, +20% health, +25% ranged attack crush damage.

### 5.2.8 Seleucids

• starting centre +30% resource costs, +30% build time, +5 population bonus, +10 garrison capacity, +30% health, +30% capture points, +11% territory influence and weight, +10 vision range.