

TRAITS AND LEADERS

Aggressive	Creative	Expansive	Financial	Industrious	Organized	Philosophical	Spiritual	
Combat I promotion for and	+2 per city city	+3 per city	+1 on plots with	+50% wonder production	-50% civic upkeep	+100%	No anarchy	<i>Effect</i>
Barracks Drydock	Theatre Colosseum	Granary Harbor		Forge	Lighthouse Courthouse	University	Temple	<i>Double production speed</i>
	Kublai Khan (Mongols) <i>Hereditary Rule</i>	Genghis Khan (Mongols) <i>Police State</i>	Huayna Capac (Inca) <i>Hereditary Rule</i>	Napoleon (France) <i>Representation</i>	Tokugawa (Japan) <i>Mercantilism</i>	Alexander (Greece) <i>Hereditary Rule</i>	Montezuma (Aztec) <i>Police State</i>	Aggressive
		Cyrus (Persia) <i>Representation</i>	Catherine (Russia) <i>Hereditary Rule</i>	Louis XIV (France) <i>Hereditary Rule</i>		Frederick (Germany) <i>Universal Suffrage</i>	Hatshepsut (Egypt) <i>Hereditary Rule</i>	Creative
			Victoria (England) <i>Representation</i>	Bismarck (Germany) <i>Representation</i>	Julius Caesar (Rome) <i>Representation</i>	Peter (Russia) <i>Police State</i>	Isabella (Spain) <i>Police State</i>	Expansive
				Qin Shi Huang (China) <i>Police State</i>	Washington (American) <i>Universal Suffrage</i>	Elizabeth (England) <i>Free Religion</i>	Mansa Musa (Mali) <i>Free Market</i>	Financial
					Roosevelt (America) <i>Universal Suffrage</i>		Gandhi (India) <i>Universal Suffrage</i>	Industrious
						Mao Zedong (China) <i>State Property</i>	Asoka (India) <i>Universal Suffrage</i>	Organized
							Saladin (Arabia) <i>Theocracy</i>	Philosophical

TERRAIN

Base				Mov	Def	Build	Feature				Mov		Def
Coast	1		2	1	+10%		Fallout	-3	-3	-3	2	-0.5	
Desert				1		+25%	Flood Plain	+3					-0.4
Grassland	2			1			Forest		+1		2	+0.4	+50%
Snow				1		+50%	Ice				¥		
Ocean	1		1	1			Jungle	-1			2	-0.25	+50%
Peak				¥			Hill	-1	+1				+25%
Plains	1	1		1			Oasis	+3		+2	2	water	
Tundra	1	1		1			River		+1			+2	+10%

CITY SPECIALISTS

Kind	Regular	Super
Citizen	+1	
Artist	+1 +4 +3	+3 +12
Engineer	+2 +3	+3 +3
Merchant	+3 +3	+1 +6
Priest	+1 +1 +3	+2 +5
Scientist	+3 +3	+1 +6

TERRAIN IMPROVEMENTS

Improvement	Effect	Enabled by	Remark
Cottage	+1	Pottery	grows to Hamlet in 10 turns
Hamlet	+2		grows to Village in 20 turns
Village	+3		grows to Town in 40 turns
Town	+4		+1 [Printing Press] +1 [Universal Suffrage] +2 [Free Speech]
Farm	+1	Agriculture [fresh water or other farm+Civil Service]	+1 [Biology]
Fort		Construction	+25% defense
Lumbermill	+1	Replaceable Parts	+1 [river]
Mine	+2	Mining [hill]	
Watermill	+1	Machinery [river, non-hill]	+1 [Electricity] +1 [Replaceable Parts] +1 [State Property]
Windmill	+1 +1	Machinery [hill]	+1 [Electricity] +1 [Replaceable Parts]
Workshop	-1 +1	Metal Casting [non-hill]	+1 [Guilds] +1 [Chemistry]

LUXURY RESOURCES

Resource	Effect	Improvement	Enables (Obsolete)
Dye	+1	Plantation +4 +1	Calendar
Fur	+1	Camp +3 +1	Hunting (Plastics)
Gems	+1	Mine +1 +5 +1	Mining
Gold	+1	Mine +1 +6 +1	Mining
Incense	+1	Plantation +5 +1	Calendar
Silk	+1	Plantation +3 +1	Calendar
Silver	+1	Mine +1 +4 +1	Mining
Spices	+1	Plantation +1 +2 +1	Calendar
Sugar	+1	Plantation +1 +1 +1	Calendar
Wine	+1	Winery +1 +2 +1	Monarchy

FOOD RESOURCES

Resource	Effect	Improvement	Enables (Obsolete)
Banana	+1	Plantation +2	Calendar
Clam	+1	Fishing Boat +2 +1	Fishing
Corn	+1	Farm +2 +1	Agriculture
Cow	+1	Pasture +2 +2 +1	Animal Husbandry
Crab	+1	Fishing Boat +2 +1	Fishing
Deer	+1	Camp +2 +1	Hunting
Fish	+1	Fishing Boat +3 +1	Fishing
Pig	+1	Pasture +3 +1	Animal Husbandry
Rice	+1	Farm +1 +1	Agriculture
Sheep	+1	Pasture +2 +1 +1	Animal Husbandry
Whale	+1	Whaling Boat +1 +2 +1	Optics (Combustion)
Wheat	+1	Farm +2 +1	Agriculture

STRATEGIC RESOURCES

Resource	Effect	Technology Reveals/Enables	Improvement
Aluminium	+1	Industrialism/Mining	Mine +3 +1
Coal	+1	Steam Power/Mining	Mine +3
Copper	+1	Bronze Working/Mining	Mine +3
Horses	+1	-/Animal Husbandry	Pasture +2 +1
Iron	+1	Iron Working/Mining	Mine +3
Ivory	+1	-/Hunting (obs. Industrialism)	Camp +1 +1 +1
Marble	+1	-/Masonry	Quarry +1 -2
Oil	+1	Scientific Method/Combustion	Well/O.Platform +2 +1
Stone	+1	-/Masonry	Quarry +2
Uranium	+1	Physics/Mining	Mine +3