Keyboard Shortcuts

Units - All	
Disband	D
Explore	E
Fortify	F
Go to	G
Go to (city)	Ctrl-Shift-G
Go to (stack)	J
Load / unload	L
Sleep (wake on all)	Y
Sleep (wake on enemy)	Shift-Y
Skip turn	Spc
Upgrade	U
Upgrade (all)	Shift-U
Wait	W or Tab

Units - Military	
Airdrop	A
Airlift	T
Bombard	B
Pillage	P

Units - Aircraft	
Air superiority	S
Bombing	B
Precision strike	P
Rebase	Shift-R
Recon	R

Units - Leaders	
Build army	B
Hurry production	Ctrl-H

Units - Settlers / Workers	
Automate	A
Automate (keep existing)	Shift-A
Automate (this city)	Shift-I
Automate (keep existing & this city)	Ctrl-Shift-I
Automate (clear forests)	Shift-F
Automate (clear jungle)	Shift-J
Automate (clear pollution)	Shift-P
Build city / colony	B
Clear (forest / jungle / pollution)	Shift-C
Fortress	Ctrl-F
Irrigate	I
Irrigate (to nearest city)	Ctrl-I
Join city	B
Mine	M
Plant forest	N
Railroad	Shift-R
Railroad (to square)	Ctrl-Shift-R
Road	R
Road (to square)	Ctrl-R
Road (to square & colony)	Ctrl-B
Trade network	Ctrl-N

Game - General	
Build embassy	Ctrl-E
Change government	Shift-G
Diplomacy	Shift-D
End turn	Space or Enter
End turn (now)	Shift-Enter
Espionage	Shift-E
Mobilize	Shift-M
Plant spy	Ctrl-Shift-E

Game - Main View	
Centre on active unit	C
Centre on capital	H
Change production	Shift-Rclick
Clean up map	Ctrl-Shift-M
Grid	Ctrl-G
Locate city	Shift-L
Toggle button positions	Backspace
Toggle interface	Del
Zoom	Z

Game - City View	
Add to queue	Shift-Click
Contact governors	G
Delete from queue	Del
Hurry production	H
Load queue	Q
Save queue	Shift-Q

Game - Information	
Domestic advisor	F1
Trade advisor	F2
Military advisor	F3
Foreign advisor	F4
Cultural advisor	F5
Science advisor	F6
Wonders	F7
Histograph	F8
Palace	F9
Spaceship	F10
Demographics	F11
Civilopedia	Ctrl-C

Real World	
Game menu	Ctrl-M
Load game	Ctrl-L
Main menu	Ctrl-Shift-Q
Preferences	Ctrl-P
Quit	Esc
Resign	Ctrl-Q
Save game	Ctrl-S
Sound options	Shift-S

Units

Name	Prerequisite	Resources	Cost	Nation	Upgrade	A	D	M	B	R	F	T	O	Notes
AEGIS cruiser	Robotics	Aluminium, uranium	160			12	10	5	4	2	2			Radar, sees subs, ZoC
Archer	Warrior code		20		Longbowman	2	1	1						
Army			400			0	0	1				3*		Battles use all units, only carries ground units
Artillery	Replaceable parts		80		Radar artillery	0	0	1	12	2	2			
Battleship	Mass production	Oil	200			18	12	5	8	2	2			
Bomber	Flight	Oil	100			0	2	-	8	-	3		6	Bombing and re-base only
Bowman	Warrior code		20	Babylon	Longbowman	2	2	1						
Cannon	Metallurgy	Iron, saltpeter	40		Artillery	0	0	1	8	1	1			Wheeled
Caravel	Astronomy		40		Galleon	1	2	3				3		Sinks in ocean
Carrier	Mass production	Oil	180			1	8	4				4		Radar, only carries air units
Catapult	Mathematics		20		Cannon	0	0	1	4	1	1			Wheeled
Cavalry	Military tradition	Horses, saltpeter	80			6	3	3						Fast, ZoC
Chariot	The wheel	Horses	20		Horseman	1	1	2						Wheeled, fast
Cossack	Military tradition	Horses, saltpeter	80	Russia		6	4	3						Fast, ZoC
Cruise missile	Rocketry	Aluminium	60						16	2	3			
Destroyer	Combustion	Oil	120			12	8	5	6	1	2			
Explorer	Navigation		20			0	0	2						All terain as roads
F-15	Rocketry	Oil, aluminium	100	America		8	4	-	4	-	2		6	All air missions, radar
Fighter	Flight	Oil	80		Jet fighter	4	2	-	2	-	1		4	No precision strikes
Frigate	Magnetism	Iron, saltpeter	60			2	2	4	2	1	2			
Galleon	Magnetism		60		Transport	1	2	4				4		
Galley	Map making		30		Caravel	1	1	3				2		Sinks in sea
Helicopter	Advanced flight	Oil, rubber	100			0	2	-	0	-	0	1	6	Only carries foot units, airdrop
Hoplite	Bronze working		20	Greece	Musketman	1	3	1						Draft
Horseman	Horseback riding	Horses	30		Knight	2	1	2						Fast
ICBM	Satellites	Aluminium, uranium	500							∞				
Immortals	Iron working	Iron	30	Persia		4	2	1						
Impi	Bronze working		20	Zululand	Musketman	1	2	2						Draft
Infantry	Replaceable parts	Rubber	90		Mech infantry	6	10	1						Draft
Ironclad	Steam power	Coal, Iron	80			4	4	4	4	1	2			
Jaguar warrior			10	Aztec	Swordsman	1	1	2						
Jet fighter	Rocketry	Oil, aluminium	100			8	4	-	2	-	1		6	No precision strikes
Knight	Chivalry	Horses, iron	70		Cavalry	4	3	2						Fast
Leader						0	0	3						Hurries production, builds army
Legionary	Iron working	Iron	30	Rome		3	3	1						
Longbowman	Invention		40			4	4	1						
Man-o-war	Magnetism	Iron, saltpeter	60	England		3	2	4	3	1	2			
Marine	Amphibious warfare	Rubber	100			8	6	1						Amphibious attack, ZoC
Mech infantry	Computers	Oil, rubber	110			12	18	2						Fast, ZoC, draft
Modern armor	Synthetic fibres	Oil, rubber, aluminium	120			24	16	3						Fast, ZoC, blitz
Mounted warrior	Horseback riding	Horses	30	Iroquois	Knight	3	1	2						Fast
Musketeer	Gunpowder	Saltpeter	60	France	Rifleman	3	4	1						Draft
Musketman	Gunpowder	Saltpeter	60		Rifleman	2	4	1						Draft
Nuclear sub	Fission	Uranium	140			8	4	4				1		Only carries t. nukes, invisible, radar, sees subs
Panzer	Motorized transport	Oil, rubber	100	Germany	Modern armor	16	8	3						Fast, ZoC, blitz
Paratrooper	Advanced flight	Oil, rubber	100			6	8	1						Airdrops, ZoC
Pikeman	Feudalism	Iron	30		Musketman	1	3	1						Draft
Privateer	Magnetism	Iron, saltpeter	60			2	1	3						Hidden nationality
Radar artillery	Robotics	Aluminium	120			0	0	1	16	2	2			Radar, ZoC
Rider	Chivalry	Horses, iron	70	China	Cavalry	4	3	3						Fast
Rifleman	Nationalism		80		Infantry	4	6	1						Draft
Samurai	Chivalry	Iron	70	Japan	Cavalry	4	4	2						
Scout			10	Exp. civs	Explorer	0	0	2						Applicable civs start with one
Settler			30			0	0	1						Costs 2 population
Spearman	Bronze working		20		Pikeman	1	2	1						Draft
Stealth bomber	Stealth	Oil, aluminium	240			0	0	-	8	-	3		8	No air sup. or recon, lower detection chance
Stealth fighter	Stealth	Oil, aluminium	120			0	0	-	4	-	2		6	No air sup., lower detection chance
Submarine	Mass production	Oil	100			8	4	3						Invisible, sees subs
Swordsman	Iron working	Iron	30			3	2	1						
Tactical nuke	Space flight	Aluminium, uranium	300							6				
Tank	Motorized transport	Oil, rubber	100		Modern armor	16	8	2						Fast, ZoC, blitz
Transport	Combustion	Oil	100			1	4	5				8		
War chariot	The wheel	Horses	20	Egypt	Knight	2	1	2						Wheeled
War elephant	Chivalry			India	Cavalry	4	3	2						Fast
Warrior			10		Swordsman	1	1	1						
Worker			10			0	0	1						Costs 1 population

* 4 with pentagon

Buildings

City Improvements

Name	Prerequisite	Requirements	Cost	Upkeep	Culture	Poll.	Effect
Airport	Flight		160	2	0	1	Veteran air units, air trade
Aqueduct	Construction		100	1	0	0	Allows city, not needed if fresh water is in radius
Bank	Banking	Marketplace	160	1	0	0	+50% tax
Barracks			40	1	0	0	Veteran ground units
Cathedral	Monotheism	Temple	160	2	3	0	3 content citizens
City walls	Masonry		20	0	0	0	+50% defence, 8 bombard defence, towns only
Coal plant	Industrialization	Factory, coal	160	3	0	2	+50% production, replaces other plants
Coastal fortress	Metallurgy	Iron, saltpeter	40	0	0	0	8 naval defence / bombard defence, attacks ships
Colosseum	Construction		120	2	2	0	2 content citizens
Courthouse	Code of laws		80	1	0	0	Increases propaganda resistance, lowers corruption
Factory	Industrialization	Iron	240	3	0	2	+50% production
Granary	Pottery		60	1	0	0	Doubles city growth rate
Harbour	Map making		80	1	0	0	Veteran naval units, water trade, +1 food from water
Hospital	Sanitation		160	2	0	0	Allows metro
Hydro plant	Electronics	Factory, river in radius	240	3	0	0	+50% production, replaces other plants
Library	Literature		80	1	3	0	+50% research
Manufacturing plant	Robotics	Factory	320	3	0	2	+50% production
Marketplace	Currency		100	1	0	0	+50% tax, increases luxury bonuses
Mass transit system	Ecology	Rubber	200	2	0	0	Removes population pollution
Nuclear plant	Nuclear power	Factory, uranium, fresh water	240	3	0	0	+150% production, chance of meltdown
Offshore platform	Miniaturization		240	3	0	2	+1 shield from water
Palace	Masonry		Varies	0	1	0	Centre of empire
Police station	Communism		160	2	0	0	Reduces corruption and war weariness
Recycling plant	Recycling		200	2	0	0	Reduces production pollution
Research lab	Computers	University	200	2	2	1	+50% research
SAM missle battery	Rocketry	Aluminium	80	2	0	0	8 air defence
Solar plant	Ecology	Factory	320	3	0	0	+50% production
Temple	Ceremonial burial		60	1	1	0	1 content citizen
University	Eduction	Library	200	2	4	0	+50% research

Great Wonders

Name	Prerequisite	Characteristics	Cost	Culture	Obsolete	Effect
Colossus	Bronze working	Expansionist, religious	200	3	Flight	+1 commerce in any square already producing commerce
Copernicus' observatory	Astronomy	Expansionist	400	4		Doubles science output of city
Cure for cancer	Genetics	Scientific	1000	3		1 content citizen in every city
Great Library	Literature	Scientific	400	6	Education	Gives advance any other 2 known civs have
Great Lighthouse	Map making	Expansionist, commercial	300	2	Magnetism	Galleys safe in sea, +1 naval movement
Great Wall	Construction	Militaristic, industrious	200	2	Metallurgy	Doubles strength vs. barbarians, doubles city wall effect
Hanging gardens	Monarchy	Industrious	300	4	Steam power	3 content citizens in city, 1 content citizen in other cities
Hoover dam	Electronics	Industrious	800	2		Hydro plant in every city on continent
J.S. bach's cathedral	Music theory	Religious	600	6		2 content citizens in every city on continent
Leonardo's workshop	Invention	Militaristic	600	2		Halves unit upgrade costs
Longevity	Genetics	Scientific	1000	3		Cities grow by 2 when food box fills
Magellan's voyage	Navigation	Expansionist, commercial	400	3		+1 naval movement
Manhattan project*	Fission	Militaristic, industrious	800	2		Allows nuclear weapons for all civs
Newton's university	Theory of gravity	Scientific	400	6		Doubles science output of city
Oracle	Mysticism	Religious	300	4	Theology	Doubles temple effect
Pyramids	Masonry	Industrious, religious	400	4		Granary in every city on continent
SETI programme	Computers	Expansionist	1000	3		Doubles science output of city
Shakespeare's theatre	Free artistry		400	8		8 content citizens in city
Sistine chapel	Theology	Religious	600	6		Doubles cathedral effect
Smith's trading company	Economics	Commercial	600	3		Pays upkeep for harbours, marketplaces, banks and airports
Sun tzu's art of war	Feudalism	Militaristic	600	2		Barracks in every city on continent
Theory of evolution	Scientific method	Scientific	600	3		2 free advances
United nations	Fission	Commercial	1000	4		Allows diplomatic victory
Universal suffrage	Industrialization	Militaristic	800	4		Reduces war weariness in all cities

Small Wonders

Name	Requirement	Cost	Culture	Effect
Apollo programme	Space flight, aluminium	500	2	Allows spaceship construction
Battlefield medicine	5 hospitals	500	1	Units can heal in enemy territory
Forbidden palace	8 cities**	200	2	Acts as a second capital
Heroic epic	Victorious army	200	4	Increases chance of leader appearing
Intelligence agency	Espionage	400	1	Allows spy missions
Iron works	Coal & iron in city radius	300	2	Doubles city production
Military academy	Victorious army	400	1	City can build armies
Pentagon	3 armies	400	1	Armies can contain 4 units
Strategic missile defence	5 SAM missle batteries	500	1	75% of intercepting ICBMs
Wall street	5 banks	300	2	Earns 5% interest on treasury per turn (max. 50 gold per turn)

* Requires uranium

**For standard map, varies for other sizes

Miscellaneous

Terrain

Name	Moving	Defence	F (I)	S (M)	C (R)	Resources
Coast	1	10	1 (+0)	0 (+0)	2 (+0)	Fish
Desert	1	10	0 (+1)	1 (+1)	0 (+1)	Incense, saltpeter, oil
Flood plain	1	10	3 (+1)	0 (+0)	0 (+1)	Wheat
Forest	2	25	1 (+0)	2 (+0)	0 (+1)	Game, furs, dyes, spice, ivory, silk, uranium, rubber
Grassland	1	10	2 (+1)	0* (+1)	0 (+1)	Cattle, wheat, wine, horses
Hills	2	50	1 (+0)	1 (+2)	0 (+1)	Gold, wine, incense, horses, iron, saltpeter, coal, aluminium
Jungle	3	25	1 (+0)	0 (+0)	0 (+1)	Dyes, spice, silk, gems, coal, rubber
Lake	1	10	2 (+0)	0 (+0)	2 (+0)	
Mountains	3	100	0 (+1)	1 (+2)	0 (+1)	Gold, gems, iron, saltpeter, coal, uranium
Ocean	1	10	0 (+0)	0 (+0)	0 (+0)	
Plains	1	10	1 (+1)	1 (+1)	0 (+1)	Cattle, wheat, wine, ivory, horses
Sea	1	10	1 (+0)	0 (+0)	1 (+0)	Whales, fish
Tundra	1	10	1 (+0)	0 (+1)	0 (+1)	Game, furs, oil, aluminium

Strategic Resources

Name	Prerequisite	F	S	C	Terrain
Aluminium	Rocketry	+0	+2	+0	Hills, tundra
Coal	Steam power	+0	+2	+1	Hills, jungle, mountains
Horses	The wheel	+0	+0	+1	Grassland, hills, plains
Iron	Iron working	+0	+1	+0	Hills, mountains
Oil	Refining	+0	+1	+2	Desert, tundra
Rubber	Replaceable parts	+0	+0	+2	Forest, jungle
Saltpeter	Gunpowder	+0	+0	+1	Desert, hills, mountains
Uranium	Fission	+0	+2	+3	Forest, mountains

Luxury Resources

Name	F	S	C	Terrain
Dyes	+0	+0	+1	Forest, jungle
Furs	+0	+1	+1	Forest, tundra
Gems	+0	+0	+4	Jungle, mountains
Incense	+0	+0	+1	Desert, hills
Ivory	+0	+0	+2	Forest, plains
Silk	+0	+0	+3	Forest, jungle
Spice	+0	+0	+2	Forest, jungle
Wine	+1	+0	+1	Grassland, hills, plains

Bonus Resources

Name	F	S	C	Terrain
Cattle	+2	+1	+0	Grassland, plains
Fish	+2	+0	+1	Coast, lake, ocean, sea
Game	+2	+0	+0	Forest, tundra
Gold	+0	+0	+4	Hills, mountains
Whales	+1	+1	+2	Sea
Wheat	+2	+0	+0	Flood plain, grassland, plain

Governments

Name	Workers	Hurrying	Corruption	Draft	Police	Support	Notes
Anarchy	50%	None	Catastrophic	0	0	∞	No upkeep, production or research, tile penalty
Communism	100%	Labour	Communal	2	4	2.4.8	Veteran spies
Democracy	150%	Paid	Minimal	1	0	0.0.0	Immune to prop., trade & shield bonus, high weariness
Despotism	100%	Labour	Rampant	2	2	4.4.4	Tile penalty
Monarchy	100%	Paid	Problematic	2	3	2.4.8	
Republic	100%	Paid	Nuisance	1	0	0.0.0	Trade bonus, low war weariness

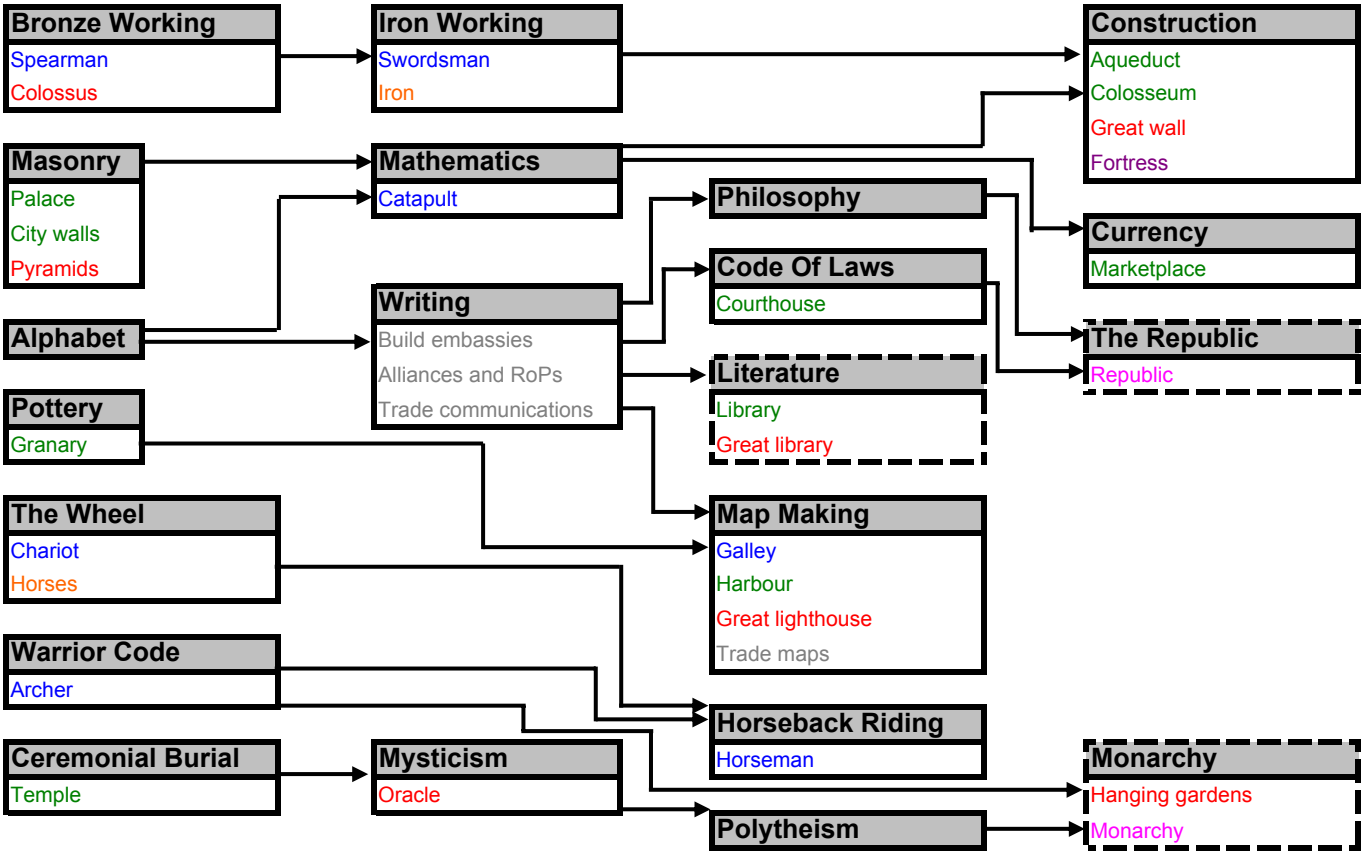
Civs

Name	Characteristics	Start Techs	Unique Unit	Replaces
America	Expansionist, industrious	Pottery, masonry	F-15	Jet fighter
Aztec	Religious, militaristic	Warrior code, ceremonial burial	Jaguar warrior	Warrior
Babylon	Scientific, religious	Bronze working, ceremonial burial	Bowman	Archer
China	Militaristic, industrious	Warrior code, masonry	Rider	Knight
Egypt	Industrious, religious	Ceremonial burial, masonry	War chariot	Chariot
England	Expansionist, commercial	Alphabet, pottery	Man-o-war	Frigate
France	Commercial, industrious	Alphabet, masonry	Musketeer	Musketman
Germany	Militaristic, scientific	Warrior code, bronze working	Panzer	Tank
Greece	Scientific, commercial	Alphabet, bronze working	Hoplite	Spearman
India	Commercial, religious	Ceremonial burial, alphabet	War elephant	Knight
Iroquois	Expansionist, religious	Ceremonial burial, pottery	Mounted warrior	Horseman
Japan	Religious, militaristic	Ceremonial burrial, the wheel	Samurai	Knight
Persia	Industrious, scientific	Masonry, bronze working	Immortals	Swordsman
Rome	Militaristic, commercial	Warrior code, alphabet	Legionary	Swordsman
Russia	Expansionist, scientific	Pottery, bronze working	Cossack	Cavalry
Zululand	Expansionist, militaristic	Warrior code, pottery	Impi	Spearman

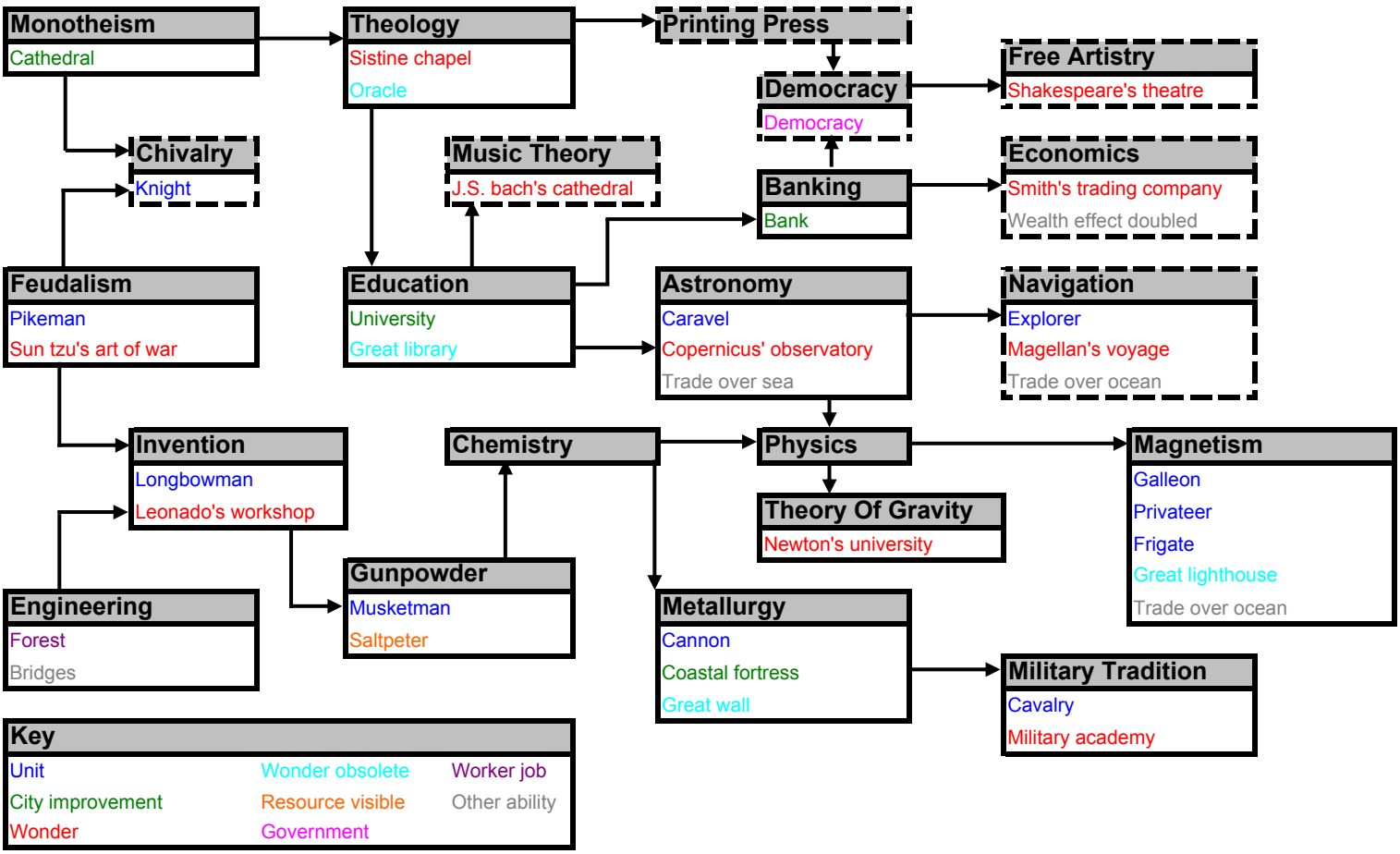
*Sometimes 1

Research (Early)

Ancient Times

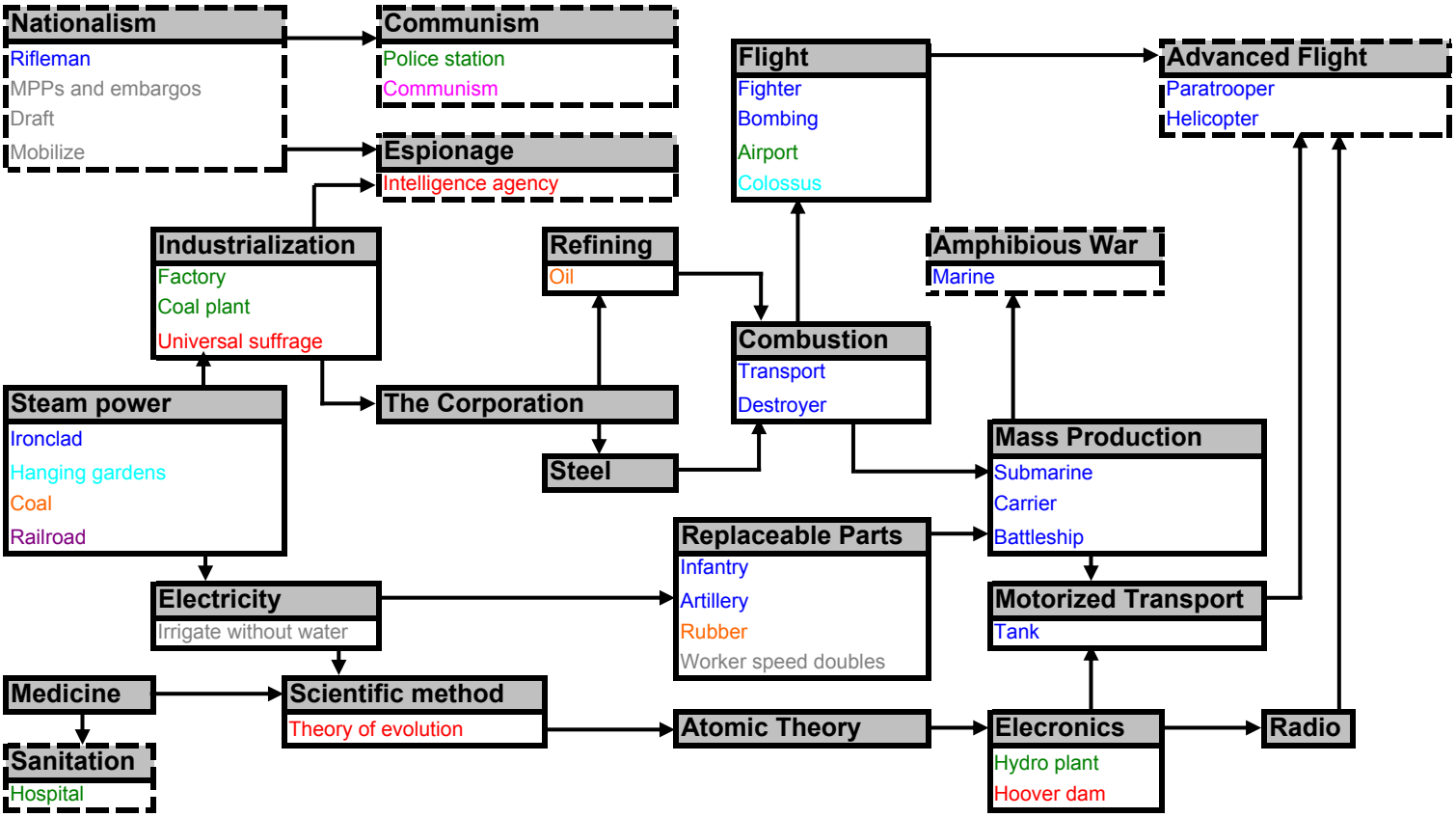


Middle Ages

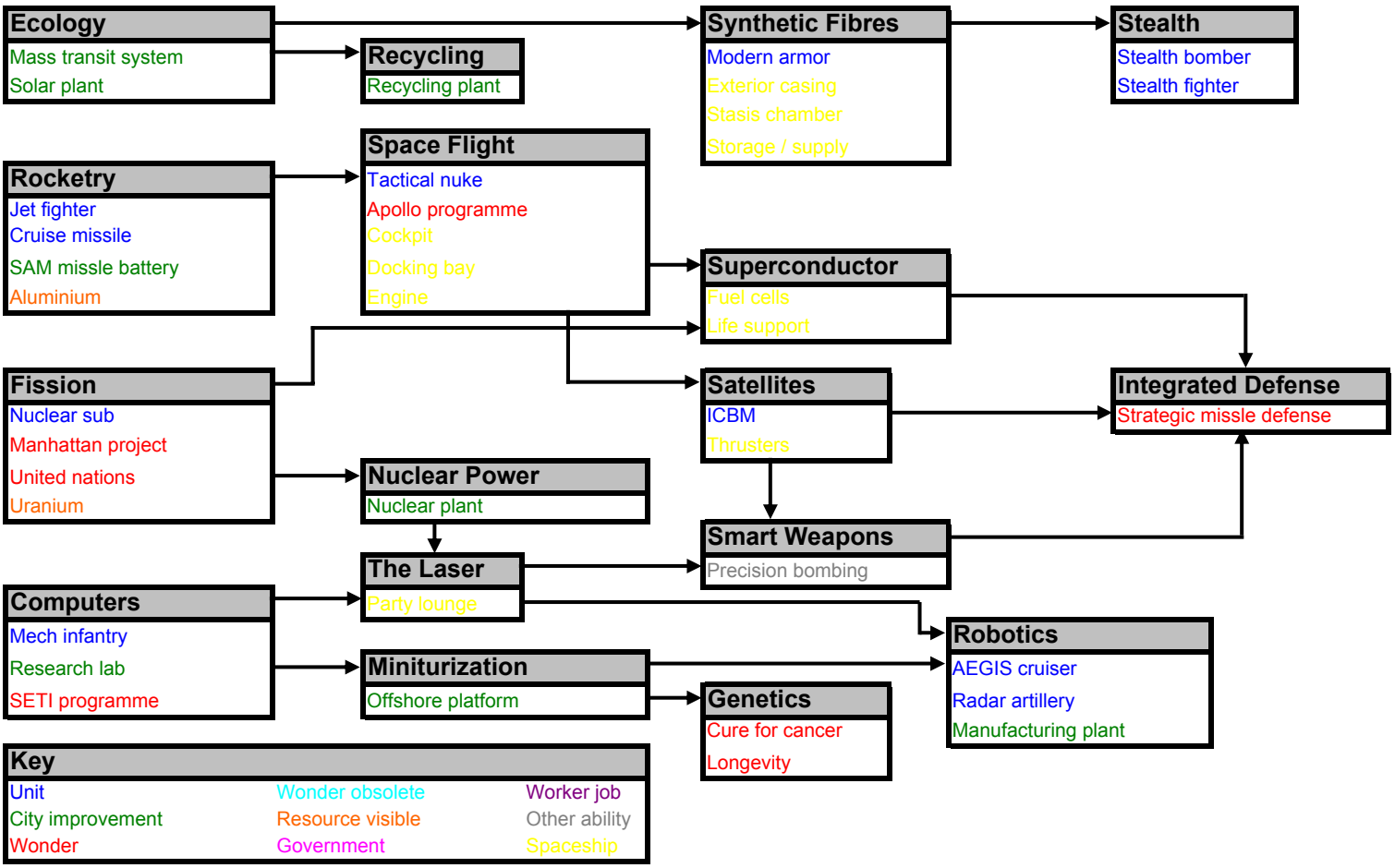


Research (Late)

Industrial Ages



Modern Times



Key

Unit	Wonder obsolete	Worker job
City improvement	Resource visible	Other ability
Wonder	Government	Spaceship