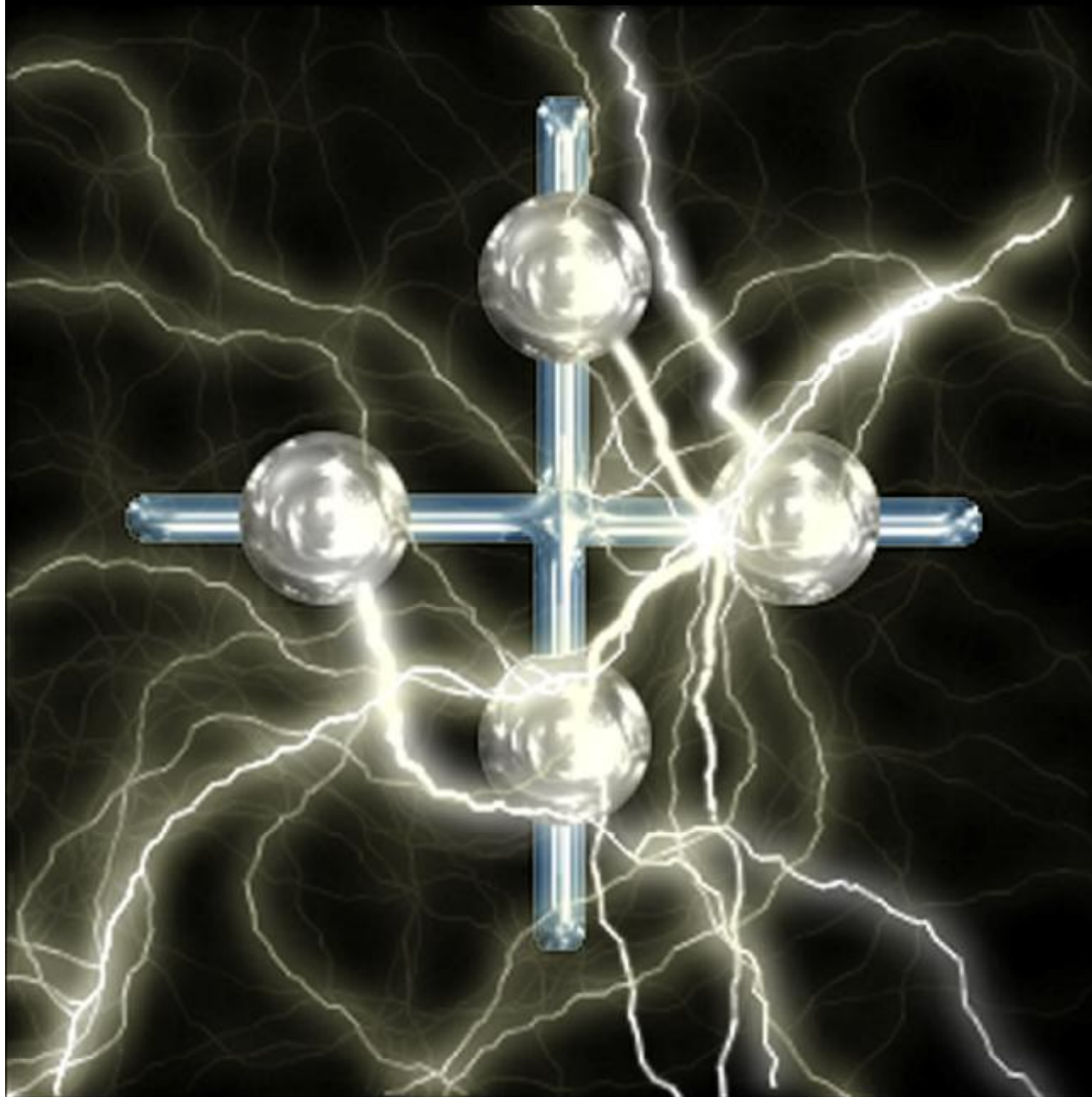


Advancement



H.R.Harding

Advancement

Have you noticed that where humans have lived the longest are now desert?

Introduction

Human history is defined by the advancement of new and exciting technologies that change the world. In the game of Advancement you control the destiny of a people as they attempt to become the most advanced humans on the planet. This is a balancing act of gathering resources, diplomacy and expansion. All the while risking stripping Earth to the bone and leaving nothing but barren desert. Are you up to the challenge?

Components

1 x Map Board

8 x Player Score Cards

168 x Advancement Cards

8 sets of 192 player tiles (12 each of Population/Military, Land/Sea transport, Crops/Desert, City/Desert)

204 x Resource tiles

6 sided dice

Lots of counters!

The Game

The game is designed for 2 to 4 players (but can accommodate up to 8) – and is estimated to last 3–4 hours of game play. It is a strategy game of reasonable complexity.

The Map

The game is set many hundreds of thousands of years ago when the Earth was covered with forest and humans have just begun to explore the planet. The map has two types of Locations where counters may sit – ***circular Sea Locations*** and ***Square Land Locations***. The number in the middle of these Locations is the ***Biome Limit*** of that Location. This number represents the number of Natural Resources at a Location (explained under Units – Resources) as well as the maximum number of Population counters a Location may hold.

The type of Biome (shown in the Map Key) gives an indication of the original distribution of dominant plant types (Evergreen Forest, Deciduous Forest, Grassland or Tundra) – which directly relates to the Natural Resources that Location can provide.

Movement of counters (such as Population, Land Transport or Sea Transport Units) can be made to adjacent Locations as long as the level of advancement in

Transport allows it. For instance if that player has the “Sailing Ship” Advancement they can move a Sea Transport from one Sea Location to an adjoining sea Location.

Unit Types

There are a number of counter types that are placed at Locations on the Map: Resources, Population, City, Transport and Biome Damage counters. All counters have a flip side – usually representing an alternate state of that type of Unit – such as Military Units, an alternate of a Population Unit. Most counters are movable (and follow normal movement rules) except for Biome Damage counters which cannot be moved.

- **Natural Resources**

There are three types of Natural Resources – Forest, Mineral/Oil and Wild Animal. At the beginning of the game these are randomly distributed on the Map Locations. **Forest Resources** represent wood resources, once a Forest Resource is used (the forest is cleared) the counter is turned over revealing the **Grassland** Biome type. Grassland Biomes may be replaced with **Crops** or **City** counters as Advancement cards allow. **Mineral/Oil Resources** represent naturally occurring sources of ore, gas, oil and other raw materials. Once a Mineral/Oil Resource is used the counter is turned over revealing the **Pollution** counter (see Biome Damage). **Wild Animal Resources** represent diverse animal biota; these can be flipped over and converted to **Domestic Animals** with the right Advancements. Wild Animal counters may be replaced with a human **Population** counter if they are used up as food.

- **Population**

Human Population counters represent human biota in a region. There are two types of human counters – **Population** or **Military Units** (the reverse side of Population). A Population unit may be converted to a Military Unit if the player has any appropriate Military Advancements. Human biota requires food to sustain it. Normally it takes **2 Natural Resources** of either Forest, Grassland or Wild Animals to **support 1 Population/Military** unit. With advancements like Herding or Farming each Population and Military Unit requires only 1 **Domestic Animal** or **Crop** Resource to sustain it each turn. This can be mitigated by Medical advancements which allow greater Populations than resources allow. Population counters may be moved by Land or Sea Transport counters to adjacent Locations according to Transport Advancements. For each Population counter a player has at the beginning of a turn a new Advancement Card may be drawn. Military Units cannot draw Advancement cards but may attack other population units and may add to defence when being attacked. Populations also create Crops or Cities. **Crops** are created in areas where there are Population counters where a player may choose to replace a Grassland counter with a Crop counter. **City** counters can be created where there is a build up of human population. When there are 3 Population counters at the same Location those counters may be replaced with 1 City counter. The number of Biomes a Location has limits the number of Population AND City counters that Location may hold. The **number of Biomes** at a Location is found during the initial game setup stage, typically it is found by adding the number of Forest and Wild Animal counters together (refer to How to Play for more detail). The **Capital** of a people is represented by the Population or City counter

with a circle on it. The starting Population counter will be the players Capital. This may be converted to a City at that Location once 3 Population counters has been reached (as described above).

- **Transport**

There are two types of Transport counters – Land or Sea. Land Transport counters move along adjacent square Land Locations, while Sea Transport counters move along adjacent circular Sea Locations. Sea Transport counters may be placed on Land Locations that are adjacent to a Sea Location, however they cannot move to neighbouring Land locations, they must move to a Sea Location first. Transport counters can “carry” Resources or Population units. According to the players Transport Advancements the Transport unit may carry more than one Population, Military or Resource counter.

- **Biome Damage**

There are two types of Biome Damage counters – Desert and Pollution, both are created from resource use. **Desert** is created once a **Crop** resource is used to feed a Population unit or to gain an Advancement card. Certain Advancements allow Crops to be used a number of times before becoming desert or in some cases not at all. Deserts can also be created if a **City** is destroyed by being attacked or if the population dies out from other means (such as lack of food). **Pollution** is always created when a **Mineral/Oil** counter is used. Additional Pollution counters may also be added when gaining certain Advancement cards. Pollution and Desert counters count toward the total **number of Biomes** of a Location – which in turn limits the Population that can be sustained there.

Advancement Cards

There are 7 types of Advancement: Bio, Power, Materials, Communication, Medical, Transport and Military. These cards are then broken into 3 categories – Basic, Medium or Advanced. Each Advancement card has set prerequisites (“prereqs:”) – which represent what other Advancement cards they must have in order to use that Advancement. They also may list requirements such as the use of Natural Resources. These requirements must be met before the Advancement can be used by that player.

The card will then describe what advantage that Advancement gives and how it affects game play. Once an Advancement card has come into effect the advantage take effect immediately – on all that players units in play and all new units there– after. Note that a players Communication advancement level will dictate how distant and Advancement card can be USED, however the actual advancement itself affects all of the players units.

For example a player has +3 Communication and gains the Military “Rifle/Cannon” advancement. If it is their first Military advancement they may now convert any Population units up to 3 Locations away from their Capital to Military units. If they already had the advancement of “Bow” then all existing units are now capable of +2 Attacks (rather than +1 Attacks from “Bow”).


In general each type of Advancement have the following uses:

- **Bio (green)**
Biological advancements typically allow for improved Natural Resource use, and are essential sustaining population growth.
- **Power (yellow)**
Power advancements are required for the use of other technical Advancement Cards. Those Advancements with a lightning bolt on them can be used to power certain Transport counters and other technologies.
- **Materials (brown)**
Material advancements represent the use or understanding of new material types, which in turn allow for many other technologies.
- **Communication (orange)**
Communication advancements allow a player to more effectively relay technologies to outlying Populations or other players. The number of Locations an advancement takes effect or which players can be traded with is relative to the distance from the players Capital.
- **Medical (blue)**
Medical advancements allow for more Population units to be sustained by the existing resources.
- **Transport (purple)**
Transport advancements allow for the addition of Land or Sea Transport counters onto the board. Natural Resources are usually used to create Transport units. Where–ever a Natural Resource is used a new Transport unit is placed. Sea Transport units are placed on land and may then move to adjacent Sea Locations.
- **Military (red)**
Military advancements allow for the creation of military units. This also improves the Attack ability of each existing and new military unit.

When describing the Advancement there are a number of short–hands to get used to on the Advancement cards themselves:

- **Uses X Forest or Grassland or Mineral/Oil or Wild/Domestic Animal**
A use of X number of Resources requires them to be converted to their alternate state or in the case of Animals removed from the board. A use of a Forest converts it to Grassland. The use of a Grassland counter converts it to Desert. The use of a Mineral/Oil converts it to Pollution. The use of a Wild or Domestic Animal typically removes it from the board (unless it specifies otherwise).
- **+1 Population**
Adds 1 additional Population unit to that Biome, alternatively if a conversion of a Resource is required then add 1 Population counter for each Resource converted.
- **+1 Forest/Wild Animal/Mineral**
Will add 1 Forest, Wild Animal or Mineral counter in each Location where that player has a Population counter, regardless of the Locations Biome Limit.
- **Convert one counter type to another**
For each Location where that player has Population counters you may choose

to exchange counters of the first type for the other counter type as specified.

- **Feeds 1 Population each turn**
This allows that unit type (Crop or Domestic Animal) to keep 1 Population alive during the population assessment phase.
- **Double one counter type**
For each Location where that player has Population counters you may choose to add the equivalent number of counters of the specified type.
- **+1 Pollution**
For each counter the player has of the specified type they must add the same number of Pollution counters. Each Pollution counter reduces the number of Biomes by 1.
- **Power  Source symbol**
Any Advancements that say they require “Power Source” or “Power” in their prerequisites can have their requirements met by this Advancement.
- **+X Attack/ +X Defence**
All Military units that player has now adds X to their Attack or Defence dice roll.
- **Range of X Locations**
The effect of the Advancement can be used up to X number of Locations away from the unit type that advancement affects.
- **+X Communication**
Units X number of Locations (including across Sea Locations unless specified otherwise) away from the players Capital may utilise newly gained Advancements and also trade with other players if they have Populations within X number of Locations away.
- **Allows X Population and/or Y Resource to move Z Land/Sea Locations**
All existing or new Transport units of the type specified can now move X and/or Y number of units with them for Z number of Locations.

Game Setup

The setup of the game board defines how the game will be played and what strategies players might employ to advance and survive. Follow these steps to prepare the game board:

1. **Sort the Advancement cards into three decks** according to if they are labelled **[Basic]**, **[Medium]** or **[Advanced]** and then shuffle them.
2. The **Natural Resource** counters are best kept in a bag and drawn from that while laying out the board. Starting with the **Sea Locations draw 2** counters for each Location– all Forest counters are put back and redrawn.
3. Then do the same for the Land Locations: draw the Biome Number of Resources therefore **draw 2 counters** for each Location with a **Biome Limit of 2**, **4 counters** for a **Biome Limit of 4** and **6 counters** for a **Biome Limit of 6**. No Location may only have Wild Animal or Mineral/Oil counters, in this case exchange replace 1 Mineral/Oil (or Wild Animal if there is no Mineral/Oil) for the dominant biome type (Forest or Grassland). In Locations where there is just forest make sure that all Forest/Grassland counters are **turned over to Forest**. The same is true for locations where there is **just grassland**. In mixed Locations where forest is dominant but grassland exists make sure **at least 1** Forest is

turned over to **Grassland** counter and visa versa when grassland is dominant. In Locations with **Deciduous Forest remove 1 additional Mineral/Oil counter** (or Wild Animal if there is no Mineral/Oil) and **replace it with 1 Forest**.

4. Once all the Natural Resources have been placed the starting player (usually found by rolling a dice – the highest number is the starter) may place their Capital Population at any Land Location on the board. Other players follow suit anti-clockwise around the board until all players have placed their Capital. The last player to place their Capital then has a full turn and players each have their turns in clockwise fashion as normal.

How to Play

Each turn the following actions can be made by each player:

1. Population is assessed

A player MUST **add 1 Population counter** to each Location that can support an additional Population unit (unless they have Contraception which allows them the choice of adding or not). The total number of Population/Military counters at a Location is limited to the number of Biomes that Location has. At the start of the game this is found by adding the number of Forest/Grassland and Wild Animal counters together. As the game progresses the number of Biomes will change as Biome Damage increases or as certain Advancement cards are played

Each Population counter must be **fed** by Forest, Grassland, Crop, Wild Animal or Domestic Animal counters. Without any advancements it takes 2 Forest, Grassland or Wild Animal counters to support 1 Population counter. **Remove Population counters** if the player cannot support the existing Population at that Location to the limit set by the food available.

The formula for assessing the Population that a player may have at a Location is worked out as follows: The number of Population able to be sustained (Forest/Wild Animals + Domestic Animals + Crops) plus any Advancement gains (from +1 Population cards) minus the number of Pollution counters AND Populations of other players in that Location (a mixed Population). If the number of mixed Populations exceeds the Populations sustainable then the player being assessed on their turn loses the excess Population. The bonuses gained from population sustainability Advancements can be kept track of using the Population Sustainability score on the players score board.

2. Gain Advancements

For each Population counter a player has on the board they may take 1 Advancement card. A player can always take from the [BASIC] deck, they can only take from the [MEDIUM] deck once they have at least 1 [BASIC] card and they can only take from the [ADVANCED] deck once they have at least 1 [MEDIUM] card. Advancement cards that can be played are placed face up in front of the player. Advancement cards can only be played if the **prerequisites** are met in at least one Location where they have a Population counter. The

affects of the card are immediate and all existing units are upgraded as applicable. Also note the new advancements by placing markers on the player's Advancement Board.

3. Use Existing Advancements

The player may then use existing advancements to convert Natural Resources, add Transport counters, convert Population to Military units and so on. Advancements are limited to the Capital Location unless the player has Communication advancements allowing them to use advancements in Locations further away. There are no limits to the number of Transport counters at a Location.

4. Movement and Expansion

The player may move as many units as they have on the board during the movement phase. *Without suitable Transport Population* units can move from one Land Location to an adjacent Land Location at a rate of 1 Location every 2 turns. The moving Population is placed on the border of the two connected Locations and may NOT be used for gaining Advancement cards at the start of their next turn. If the player *has Transport units* that can carry Population they can move both the Population and Transport unit as many Locations as specified by the Transport Advancement. Natural Resources can also be moved by certain Transport units in the same way. Military units move at the same rate as Population units and may be moved by Transport units that can move Population.

5. Combat

Once all movement has been made a player may choose to attack another player's units with their Military. Military units are the only units that can attack. Military counters can be on Transport counters and move at the rate of their highest transport Advancement. An attack is usually made at the same Location where the Military unit is located, however certain Advancements allow ranged attack. Combat is made against any type of unit – Resource, Transport, Population or Military. Multiple attacks are possible against a target, roll additional dice for each Military unit engaged in that attack. Once a Military unit has attacked that turn it cannot make any more attacks that turn. Combat is resolved using dice. For each Military unit attacking roll a dice and add any bonuses gained from Military advancements. The defending player may roll a dice to defend (unless it is a Resource in which case it gets no defence die). A roll of a 1 is always a failure to attack or defend, otherwise the highest number in the attack wins.

If the attacker succeeds they may choose according to what they attacked:

- If they *attacked a Resource* they may choose to steal the resource (but only if they have the applicable transport to carry it away) or destroy the resource (turn the counter over).
- If they attacked a *Population/Military* unit they may choose to capture that unit – this allows the captive Population to count towards Advancement and the Military unit to be used in attacks. It also allows the attacker to take one non-Military/non-Transport Advancement from the defeated Population or one Military Advancement from the defeated Military. However all the

attacking Military units MUST stay with the defeated Population or Military from then onwards. Those Military engaged in this activity cannot attack other units and may be attacked by the defeated Military in successive turns. If a players **Capital Population or City** is ever destroyed they may choose another Capital on their next turn.

- If they attacked a **Transport** unit then they may choose to capture the unit and take one Transport advancement from the defeated player. Alternatively they may choose to destroy that unit completely.

If the Defender wins then they may either destroy or capture Military and/or Transport units just as the attacker could.

6. Player Trading

If the player has no Communication Advancements they may trade once with one other player for 1 Advancement card (this can be explained by travellers coming into contact with other civilisations). Alternatively the player may trade up to 3 Advancement with any other players up to X number of Locations away from their Capital as specified by their highest Communication Advancement. However there is NO LIMIT to the number of Advancements that can be traded for Populations that share Locations.

Anything on the board may be traded. Most trades are done by swapping Advancements, in this case the holder of an Advancement card allows the receiver to gain knowledge of that Advancement which is noted on the players score card. However Advancements recorded on their score card **cannot be traded** only Advancements gained from Advancement cards can be traded.

Trades for units are more complex as Natural Resources must be transported between Populations, Transport units must be delivered to populated Locations; and Military and Population units must be delivered/transported too. These trades carry diplomatic risk as delivery is not guaranteed! Players may choose not to deliver on their promises if they so choose.

Traded units also allow Advancements to be gained. If units are received from a more advanced player the receiving player may take one Advancement card of the applicable type from the delivering player:

- Population units allow Bio, Power, Materials, Communications or Medical advancements to be gained.
- Transport units allow only Transport advancements to be gained.
- Military units allow only Military advancements to be gained.

Winning Conditions

Typically the first player to gain 3 [Advanced] technologies wins the game (feel free to make your own winning conditions such as a 1 [Advanced] technology for a shorter game or 6 for a much longer game). Alternatively the last player left alive may also be the winner.

Advancements

Basic Advancements

BIO ADVANCEMENTS

Association

Prerequisites: Requires 1 Forest, Grassland or Wild Animal to get this advancement.

Advantage: At each Location within Communication range from your Capital you may use 1 Forest or 1 Wild Animal to support 1 Population unit each turn.

Description: Humans and other species are related as prey, hunter or symbiant. Like the Wolf befriended humans and gastrointestinal flora formed a symbiotic relationship with our bodies. Forming relationships with other species allows for many new options.

Herding

Prerequisites: Requires 1 Wild Animal and 1 Grassland or 1 Forest on each Location used.

Advantage: Converts Wild Animals to Domestic Animal which feeds 1 Population for a turn. However for each Population fed using a Domestic Animal 1 Forest becomes Grassland or 1 Grassland becomes a Desert.

Description: By domesticating wild animal species humans are able to control their food supply. However domesticated animals eventually defoliate forests and degrade grassland to desert over considerable periods of time.

Farming

Prerequisites: Requires 1 Grassland on each Location used.

Advantage: Convert 1 Grassland to 1 Cropland which feeds 1 Population for a turn. When the Crop is next used to feed a Population it becomes a Desert.

Description: By spreading seeds and encouraging the growth of food grain species for a controlled food supply population can increase. However over long periods of time Farming monocultures of food species destroys the delicate soil/ecosystem balance which leads to desertification.

Breeding

Prerequisites: Requires Herding Advancement.

Advantage: Double Domestic Animal counters on each Location that has one. All new conversions of Wild Animals to Domestic Animals using Herding creates 2 Domestic Animal Counters.

Description: Improving the lineage of domesticated animals greatly enhances the production of those species.

POWER ADVANCEMENTS

Mechanisms

Prerequisites: The Wood or Metal Advancements.

Uses: 1 Forest or 1 Mineral/Oil must be used to gain this Advancement. Once used the Forest counter should be turned over to become Grassland or the Mineral/Oil becomes Pollution.

Description: Using dead plant or animal parts humans developed tools for a number of uses. The discovery of levers, weights and joinery to name a few lead to many other advancements.

Wheel

Prerequisites: Wood or Metal Advancements.

Uses: 1 Mineral/Oil or Forest is used to gain this advancement. Turn over the Mineral/Oil counter to Pollution or Forest to Grassland.

Description: With the advent of circular objects a number of methods become available for converting movement to energy as well as new transport possibilities.

Furnace

Prerequisites: Wood

Uses: 1 Forest counter gets converted to Grassland and add 1 Pollution to gain this advancement.

Description: With the discovery of fire and charcoal in a confined, well ventilated space new materials can be created.

Turbine

Prerequisites: Mechanisms and Wheels.

Uses: 1 Mineral/Oil or Forest to gain this advancement. Advancements that require Energy can use Wind/Water Turbines at no cost

Description: The creation of the wheel allows water or wind motion to be utilised as a source of cheap power.

MATERIAL ADVANCEMENTS

Oils

Prerequisites: At least one Mineral/Oil in one Location within the Capitals Communication radius.

Description: The discovery of oils from plant, animal or underground sources leads to new energy sources, materials and mechanisms.

Fibres

Prerequisites: At least one Grassland in one Location within the Capitals Communication radius.

Description: The discovery of fibres from plant, animal or inorganic sources lead to new materials and mechanisms.

Wood

Prerequisites: At least one Forest in one Location within the Capitals Communication radius.

Description: By utilising dead plant material such as wood for fire, tools, building

materials and weapons humans take advantage of an abundant and potentially renewable resource (with prudent management).

Metal

Prerequisites: At least one Mineral/Oil in one Location within the Capitals Communication radius as well as the Furnace Advancement.

Description: The advent of metal by smelting mined ore in a furnace leads to a plethora of new and exciting materials.

COMMUNICATION ADVANCEMENTS

Messenger

Prerequisites: Animal Transport

Uses: 1 Domestic Animal is required in one of your Locations with a Population.

Advantage: This advancement allows +1 Communication on Land Locations only.

Description: Sending a rider on horse, camel or other animal is an effective method of long distance communication.

Paper

Prerequisites: Oils and Wood

Uses: 1 Forest becomes Grassland

Advantage: This advancement allows +2 Communication over Land and Sea Locations.

Description: By pulping paper and drawing on it allows for storage and accumulation of knowledge for long periods of time.

Cable

Prerequisites: Metal & Batteries

Uses: 1 Mineral/Oil converts to Pollution

Advantage: This advancement allows +3 Communication over Land and Sea Locations.

Description: By passing a small current down a metal cable long distance communication and transmission of electricity becomes possible.

Telephone

Prerequisites: Cable, Electricity & Power source

Uses: 1 Mineral/Oil converts to Pollution

Advantage: This advancement allows +4 Communication over Land and Sea Locations.

Description: Utilising magnetic field disruption to create microphones and speakers allows for voice to be transmitted down existing electric cable.

MEDICAL ADVANCEMENTS

Hygiene

Advantage: Add 1 Population unit to all Locations which have existing Populations. The Biome number is also increased by 1 for that Player which allows more Population at each of their Locations.

Description: The simple application of soaps, cleaning and washing regularly greatly reduces the spread of disease allowing for population growth.

Bandage

Prerequisites: Fibres

Uses: 1 Crop gets converted to Desert

Advantage: Add 1 Population unit for each Crop converted. The Biome number is also increased by 1 for that Player.

Description: The application of bandages and swabs to wounds improves medical procedures.

Herbal Remedies

Prerequisites: must have 1 Forest or Grassland at the Locations where it is used

Advantage: Add 1 Population unit to all Locations which have existing Populations. The Biome number is also increased by 1 for that Player which allows more Population at each of their Locations.

Description: Exploring botanical remedies leads to numerous herbal cures.

Pills

Prerequisites: Herbal Remedies

Uses: 1 Crop gets converted to Desert

Advantage: Add 1 Population unit for each Crop converted. The Biome number is also increased by 1 for that Player.

Description: The advent of grinding materials into small pellets allows for medicine to be quickly absorbed.

TRANSPORT ADVANCEMENTS

Animal Transport

Prerequisites: 1 Wild or Domestic Animal at the Location you want a Land Transport

Uses: Convert 1 Wild or Domesticated Animal to a Land Transport

Advantage: Allows for 1 Population to be moved 1 Location on the Land Transport counter

Description: Taking advantage of associated animals as a mode of transport improves the speed populations may move from location to location.

Cart/Carriage

Prerequisites: Animal and Wood

Uses: Convert 1 Forest to Grassland and use 1 Domestic Animal to create 1 Land Transport

Advantage: Allows for Population or Resource to move 1 Location

Description: Attaching a wooden cart or carriage to a domesticated animal allows for improved resource and population transport.

Canoe

Prerequisites: Wood

Uses: Convert 1 Forest to Grassland which creates 1 Sea Transport

Advantage: Allows Wild Animal (fish) to be used as food from Sea Locations adjacent Populations.

Description: By carving out a wooden trunk and creating a canoe or raft allows for better fishing and near-shore transport.

Galley

Prerequisites: Mechanisms and Wood or Metal

Uses: Convert 1 Forest to Grassland or 1 Mineral/Oil to create 1 Sea Transport

Advantage: Allows 1 Population to be moved 1 Location at a time and Resources to be used from Sea Locations adjacent to land

Description: The advent of oars, rudders and ramps allows for larger hauls to be transported by boat.

MILITARY ADVANCEMENTS

Spear

Prerequisites: Wood or Animal

Uses: 1 Forest becomes Grassland or 1 Wild Animal is removed from the board

Advantage: Add +1 when making an Attack roll

Description: A simple wooden or bone spear can be used as a very effective weapon.

Bow

Prerequisites: Fibres, Mechanisms and Wood or Animal or Metal

Uses: 1 Forest becomes Grassland or 1 Wild Animal is removed or 1 Mineral/Oil becomes Pollution

Advantage: Add +1 when making an Attack roll

Description: Using composite limbs of wooden, metal or bone to pull a fibre string taught allows an arrow to be launched as a deadly weapon.

Blade

Prerequisites: Metal

Uses: 1 Mineral/Oil gets converted to Pollution

Advantage: Add +1 when making an Attack roll

Description: By shaping metal into a sharp blade makes an effective cutting axe, sword or other type of cleaving weapon.

Rifle/Cannon

Prerequisites: Chemicals and Metal

Uses: 1 Mineral/Oil becomes Pollution

Advantage: Add +2 when making an Attack roll

Description: The advent of gun powder allows for metal projectiles to be launched at high velocity creating a devastating weapon.

Medium Advancements

BIO ADVANCEMENTS

Irrigation

Prerequisites: Requires Farming and Mechanism Advancements.

Advantage: Allows Crops to be used twice before becoming Desert. Use counters to keep track of Crops which have been used in this way.

Description: By using simple Mechanisms such as Levers, dams and pumps water can be diverted from other sources to feed crops.

Fertiliser/Pesticides

Prerequisites: Requires Chemicals and a Land Transport Advancement.

Advantage: Double the Crop counters you have. For each 1 Grassland used when Farming make 2 Crops. However For each 2 Crops add 1 Pollution.

Description: Using chemicals to kill off animals and insects that feed on crops and added nutrients greatly increases their yield, but fertiliser runoff and chemical mutagens poison the environment for years to come.

Forestry

Prerequisites: Requires the Breeding Advancement.

Advantage: Turns 1 Crops or Grassland counter to Forest.

Description: The advent of breeding, planting, pruning and tending trees as a resource or for pleasure allows for the climax ecosystem to be restored.

Eco-Engineering

Prerequisites: Irrigation and Forestry Advancements.

Advantage: Convert 1 Desert or 1 Pollution to Forest once per turn.

Description: Understanding ecosystems and applying the knowledge to tree husbandry, nutrient and water retention systems allows deserts to be rejuvenated to lush forest.

POWER ADVANCEMENTS

Steam

Prerequisites: Turbine and Metal.

Uses: 1 Forest or 1 Mineral/Oil to gain this advancement. Advancements that require Energy can use Steam at a cost of 1 Forest or Mineral/Oil per use and will create 1 Pollution regardless if a Forest or Minerals are used.

Description: By heating water and driving the steam through a turbine greater energy can be produced.

Batteries

Prerequisite: Chemicals and Electronics

Uses: 1 Mineral/Oil, which adds +1 Pollution, to gain this advancement

Description: With the development of electronics and comprehension of chemicals holding electric charge batteries are able to store energy produced by other means.

Engine

Prerequisites: Oils, Metal and Turbine

Uses: 1 Mineral/Oil and adds +1 pollution to gain this advancement. Advancements

that require Energy can use Combustion at a cost of 1 Mineral per use

Description: Utilising the combustion of high energy oils to drive pistons a new highly efficient power source comes into play.

Nuclear

Prerequisites: Engines and Computers

Uses: 1 Mineral/Oil to gain this advancement (which of course creates 1 Pollution).

Advancements that require Energy can use Nuclear at no cost

Description: The knowledge that matter itself is a huge energy source leads to nuclear fission – the ability to split heavy atoms releasing their energy to drive steam turbines that in turn can be converted to electricity.

MATERIAL ADVANCEMENTS

Glass/Crystal

Prerequisites: 1 Mineral/Oil at one of your Locations and the Furnace Advancement.

Description: Mixing sand and certain mined ore leads to the manufacture of transparent crystalline materials.

Chemicals

Prerequisites: Oils and Glass/Crystal Advancements.

Description: By breaking down organic materials and understanding their composition new materials can be manufactured.

Electronics

Prerequisites: Metals and a Power source

Description: Comprehending the magnetic and electric characteristic of metals leads to the utilisation of electric potential.

Lasers

Prerequisites: Glass and Electricity

Advantage: Add +1 to all Defence rolls in combat

Description: Harnessing electric light effects concentrated in mirrored chambers leads to laser light.

COMMUNICATION ADVANCEMENTS

Radio

Prerequisites: Glass/Crystal, Electricity and Power source

Uses: 1 Mineral/Oil converts to Pollution

Advantage: This advancement allows +5 Communication over Land and Sea Locations.

Description: Harnessing the crystal resonance by electric fields allows for long distance communication by radio waves.

Television

Prerequisites: Radio, Chemicals and Power source

Uses: 1 Mineral/Oil converts to Pollution

Advantage: This advancement allows +6 Communication over Land and Sea Locations.

Description: The creation of phosphorus, crystal or LED displays allows for video to be transmitted as well as audio.

Computers

Prerequisites: Television, Telephone and Power

Uses: 1 Mineral/Oil converts to Pollution

Advantage: This advancement allows +7 Communication over Land and Sea Locations.

Description: The advent of the valves, cathodes and transistors married with displays used in television devices allows for the creation of computational devices. Interconnecting these computers via existing electrically powered Telephone networks allows for greater information sharing.

Cyberware

Prerequisites: Computers and Transplants

Uses: 1 Mineral/Oil converts to Pollution

Advantage: This advancement allows +8 Communication over Land and Sea Locations.

Description: Inserting or grafting computational devices into human tissue allows for sense replacement, enhanced mental faculties and greatly improved communication.

MEDICAL ADVANCEMENTS

Contraception

Prerequisites: Chemicals and Pills

Uses: 1 Mineral/Oil becomes Pollution

Advantage: allows the player to choose if they add Population or not during Population assessment phase.

Description: The advent of contraception allows greater control over population growth.

Penicillin

Prerequisites: Glass/Crystals and Pills

Uses: 1 Crop gets converted to Desert

Advantage: Add 1 Population unit for each Crop converted. The Biome number is also increased by 1 for that Location for that turn only.

Description: The discovery of naturally occurring anti-bacteria using glass Petri dishes with a suitable substrate leads to a major cure of many diseases.

Surgery

Prerequisites: Hygiene, Penicillin and Blades

Advantage: Add 1 Population unit to all Locations which have existing Populations. The Biome number is also increased by 1 for that Player which allows more Population at each of their Locations.

Description: The advent of surgical procedure: using a hygienic environment with

sterile surgical tools and penicillin to fight infection allows for transplants, reconstructive and remedial surgery.

Genetics

Prerequisites: Chemicals and Breeding

Advantage: Add 1 Population unit to all Locations which have existing Populations. The Biome number is also increased by 1 for that Player which allows more Population at each of their Locations.

Description: Understanding inherited genetic phenotypes can greatly improve the human breeding population.

TRANSPORT ADVANCEMENTS

Sailing Ship

Prerequisites: Fibres & Wood/Metal

Uses: Convert 1 Forest to Grassland or 1 Mineral/Oil to Pollution to create 1 Sea Transport

Advantage: Allows 1 Population and 1 Resources to be moved to be used from Sea Locations

Description: By using rope and crude sails ships are able to move populations and resources over long distances at sea.

Propeller Ship

Prerequisites: Mechanisms, Metal & Power

Uses: Convert 1 Mineral/Oil to Pollution and 1 Forest to Grassland to create 1 Sea Transport

Advantage: Allows 1 Population and 1 Resource to be moved up to 2 Sea Locations

Description: The discovery of the propeller allows for faster movement and greater capacity of sea ships.

Trains

Prerequisites: Cables, Mechanisms & Power

Uses: Convert 1 Mineral/Oil to Pollution to create 1 Land Transport

Advantage: Allows 1 Population and 1 Resource to be moved up to 2 Land Locations

Description: Powered vehicles can haul resources and people over high speed tracks very efficiently.

Cars

Prerequisites: Metal Mechanisms and a Power Source

Uses: Convert 1 Mineral/Oil to Pollution to create 1 Land Transport

Advantage: Allows 1 Population and 1 Resource to be moved up to 2 Land Locations

Description: Powered metal carriages can transport resources and people very effectively.

MILITARY ADVANCEMENTS

Machine Gun

Prerequisites: Mechanisms, Rifle/Cannon & Cables

Uses: 1 Mineral/Oil becomes Pollution

Advantage: Add +3 when making an Attack roll

Description: The advent of repeating and trigger based rifles leads to a lethal killing machine.

Rocket

Prerequisites: Chemicals and Metal

Uses: 1 Mineral/Oil becomes Pollution

Advantage: Add +2 to Attack rolls. Enables attack of targets at a range of 3 Locations away

Description: The ability to lob explosive payloads over large distances has a massive effect on enemies.

Nuke

Prerequisites: Rockets and Nuclear Power

Uses: 1 Mineral/Oil becomes Pollution

Advantage: +6 Attack at a range of 3 Locations. All Forest, Grassland and Crops at the target Location are replaced with Desert counters. All Wild and Domestic Animals are removed from that Location. Any Cities at the target Location are turned into Desert.

Description: Launching a nuclear payload on a rocket leads devastates the target location.

Plasma

Prerequisites: Syth and Fusion Power

Uses: 1 Mineral/Oil becomes Pollution

Advantage: +3 Attack at a range of 3 Locations

Description: Focusing plasma jets using Syth manipulation allows for long distance disintegration of a target.

Advanced Advancements

BIO ADVANCEMENTS

Symbiosis

Prerequisites: Association Advancement

Advantage: Allows for an additional 1 Wild Animal and 1 Population beyond the normal Biome number for each Location. Add 1 Wild Animal and 1 Population counter to each Location within your Communication radius.

Description: By understanding how different species inter-relate and how they coordinate – symbiotic relationships can be established which benefit both humans and wild animals.

Bio-Integration

Prerequisites: Symbiosis and Eco-Engineering Advancement.

Advantage: Converting Wild Animals to Domestic Animals or Forests to Grasslands is no longer required for Advancements.

Description: By establishing symbiotic relationships and understanding biological communications humans are able to utilise animals and plants without domesticating them.

Ecosys

Prerequisites: Bio-Integration and Genetics

Advantage: Add 1 Forest and 1 Population counter to each Location. For each Forest counter in a Location remove 1 Pollution counter at that Location.

Description: With bio-integration and the manipulation of the human genome it is possible to create humans that integrate as functional units within an ecosystem.

POWER ADVANCEMENTS

Solar

Prerequisites: Chemicals and Batteries

Uses: 1 Mineral/Oil to gain this advancement (which of course creates 1 Pollution).

Advancements that require Energy can use Solar at no cost

Description: Harnessing the energy from the sun is a huge step forward for renewable energy with minimal material consumption.

Fusion

Prerequisites: Lasers and Superconductors

Uses: 1 Mineral/Oil to gain this advancement (which of course creates 1 Pollution).

Advancements that require Energy can use Fusion at no cost

Description: Recreating the fusion process used by systems such as the Sun – fusion creates a long life power source with minimal material consumption.

Quotronic

Prerequisites: Lasers and Magnostatic

Uses: 1 Mineral/Oil to gain this advancement (which of course creates 1 Pollution).

Advancements that require Energy can use Quotronic at no cost

Description: Understanding quantum light entanglement and magnetic resonance materials can be phased to release considerable energy in a long term fashion with minimal material consumption.

Magnaflex

Prerequisites: Phased Materials

Uses: 1 Mineral/Oil to gain this advancement (which of course creates 1 Pollution).

Advancements that require Energy can use Magnflux and add 1 Mineral back!

Description: Utilising phased materials in an unstable state enables energy to be released over a long period which actually produces new materials.

MATERIAL ADVANCEMENTS

Super-Conductors

Prerequisites: Electronics and Nuclear Power

Description: Harnessing knowledge gained from nuclear material eventually room temperature materials are discovered that have almost non-existent electrical

resistance.

Bots

Prerequisites: Artificial Intelligence and a Power Source

Advantage: Add +1 to all Defence rolls in combat. Add 1 Population per Location with a counter on it (to signify a Bot) that are not limited by Biome number nor do they require food (they must have a power source however).

Description: The advent of Artificial Intelligence allows for self automated machines which radically change the culture of a civilisation as the menial labour class is potentially not required.

Phased Materials

Prerequisites: Quotronic Power source and Computers

Advantage: Add +2 to all Defence rolls in combat.

Description: The process of quotronic entanglement leads to the creation of quantum phased materials, which are immensely useful materials for distorting dimensional vectors.

Quo Materials

Prerequisites: Phased Materials & Power Source

Advantage: Add +3 to all Defence rolls in combat.

Description: By stabilising phased materials this leads to quotronic wave forms enabling faster than light capabilities.

COMMUNICATION ADVANCEMENTS

Artificial Intelligence

Prerequisites: Cyberware and a Power Source

Uses: 1 Mineral/Oil converts to Pollution

Advantage: This advancement allows +8 Communication over Land and Sea Locations as +1 Defence

Description: Understanding neural processes from cyber implant technologies allows for the advent of artificially intelligent machines.

Syth Shields

Prerequisites: Artificial Intelligence, Magnostrat and a Power Source

Uses: 1 Mineral/Oil converts to Pollution

Advantage: This advancement allows +9 Communication over Land and Sea Locations as +2 Defence

Description: The advent of Artificial Intelligence allows leaps forward in the control of complex quantum systems such as magnetic field manipulation leading to Syth shielding, greatly enhancing security and communications.

Phero-Comms

Prerequisites: Chemicals, Bio-Integration and a Power Source

Uses: 1 Mineral/Oil converts to Pollution

Advantage: This advancement allows +10 Communication over Land and Sea

Locations.

Description: By understanding pheromone signals integrated through existing ecosystems humans can effectively communicate via the biosphere.

Quo-Comm

Prerequisites: Quo Materials, Syth Shield and a Power Source

Advantage: No limit to Communications

Description: Manipulating quotronic transmissions with Syth shields allows for instant communications anywhere

MEDICAL ADVANCEMENTS

Scanners

Prerequisites: Electricity, Glass/Crystals and a Power Source

Uses: 1 Mineral/Oil becomes Pollution

Advantage: Add 2 Population unit for each Mineral/Oil converted. The Biome number is also increased by 2 for all your Locations.

Description: By developing various methods of examining patients and displaying the results diagnosis and appropriate treatment is greatly improved.

Cloning

Prerequisites: Surgery, Scanners and Transplants

Uses: Convert 1 Mineral/Oil to Pollution

Advantage: Double all your existing Population counters. During Population assessment add 2 Population rather than 1.

Description: The ability to clone organs or fully grown bodies allows for easy access to replacement organs or more population.

Regeneration

Prerequisites: Bots, Chemicals, Genetics and a Power Source

Advantage: Military/Population units cannot be killed in normal combat.

Description: Utilising nano-bots to manipulate and repair damaged organs and modify DNA it is possible to regenerate living tissue.

Stasis

Prerequisites: Phased Materials, Syth Shields, Computers and a Power Source

Advantage: No Population ever dies

Description: By manipulating phased materials with syth fields computers are able to keep inactive tissue alive indefinitely.

TRANSPORT ADVANCEMENTS

Planes

Prerequisites: Mechanisms, Wood/Metal & Power

Uses: Convert 1 Mineral/Oil to Pollution or 1 Forest to Grassland to create 1 Land or Sea Transport unit. Place the land plane on a Land Location or sea plane on a Sea Location. Planes can fly over any type of Location but must land on a Location of the type that they were made as (Land or Sea).

Advantage: Allows 1 Population or 1 Resources to be moved 2 Land or Sea Locations

Description: The advent of the propeller allows for flying machines. Land based planes can take off from cleared strips of land while sea based planes land at sea locations.

Bio-Transport

Prerequisites: Animal and Ecosys

Uses: Convert 1 Wild or Domesticated Animal to create 1 Land or Sea Transport

Advantage: Allows 1 Population or 1 Resources to be moved 3 Land or Sea Locations

Description: By integrating with flying, amphibious or sea creatures diverse travel methods become available for eco-integrated humans

Magnostrat

Prerequisites: Computers, Super Conductors and a Power Source

Uses: Convert 1 Mineral/Oil to Pollution to create 1 Land Transport

Advantage: Allows 1 Population and 1 Resource to be moved up to 5 Land or Sea Locations

Description: Utilising highly charged magnetic fields it is possible to utilise the Earth's magnetic field as a transport vector.

DTM

Prerequisites: Agkir, Quo Materials and a Power Source

Advantage: Allows 1 Population, City or Resource to be moved to any Land or Sea Location on the board

Description: By manipulating light phasing one can teleport materials over vast distances.

MILITARY ADVANCEMENTS

Self Replicating Nanobots (SRN)

Prerequisites: Bots and Genetics

Uses: 1 Mineral/Oil becomes Pollution

Advantage: Add +3 to Attack rolls

Description: By understanding genetic replication and miniaturising robots it is possible to create material eating robots, altogether a new type of menace.

Agkir

Prerequisites: Syth Shields, Phased Materials and a Power Source

Uses: 1 Mineral/Oil becomes Pollution

Advantage: Add +3 to Attack rolls, allows Military units to attack any Location on the board.

Description: Highly unstable phased materials propelled by Syth assisted gauss canons can be used to strike anywhere on the planet.

Biological Self Replicating Nanobots

Prerequisites: Cloning and SRN

Advantage: A successfully attacked unit becomes your unit (replace the counter with

one of your unused Population/Military counters).

Description: Utilising cloning technologies to manufacture biological equivalents of SRN leads to the ultimate in body mind control.

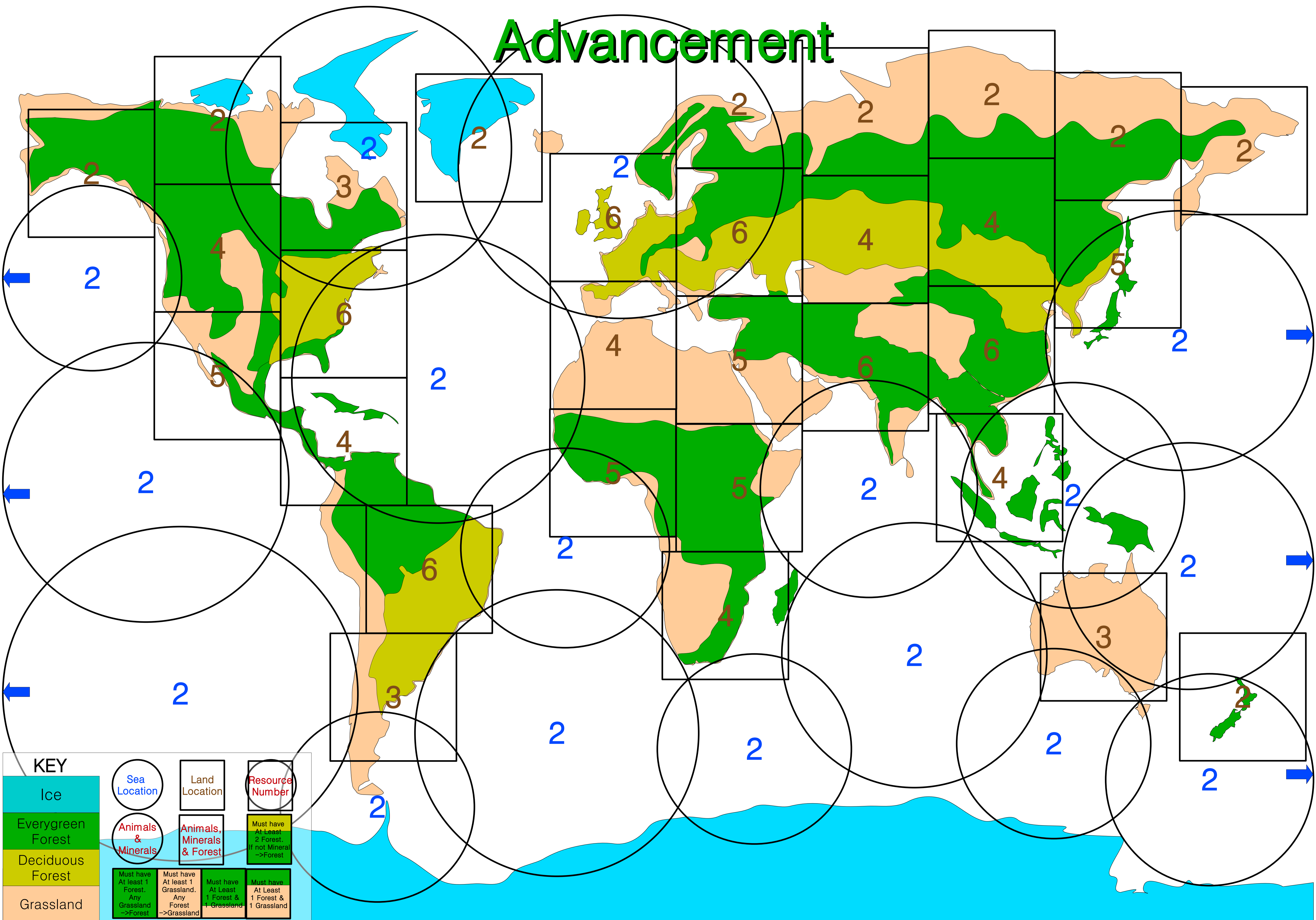
Quo-Strike

Prerequisites: Radio, Quo Materials and a Power Source

Advantage: Add +3 to Attack roll, allows Military unit to attack targets on any Location on the board. The Population or Military target gets no Defence roll.

Description: By manipulating light phased transmissions un-blockable attacks can be made over vast distances through any barriers.

Advancement





Advancements

Attack

/Defence

+1	+2	+3	+6	+1	+2	+3
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Population Sustainability

Communication Range

+1	+2	+3	+4	+5	+6	+7	+8	+9	+10	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10
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Bio	Power	Material	Comms	Medical	Transport	Military	
Herding Prereq: Wild Animal & Grassland Convert 1 Wild Animal to 1 Domestic Animal. Feed 1 Pop. Forest → Grassland → Desert	Wheel Prereq: Wood/Metal Uses 1 Mineral/Oil or 1 Forest to gain this advancement	Wood Prereq: 1 Forest at that Location	Messenger Prereq: Animal Transport Requires 1 Domestic Animal allowing +1 Communication on Land Locations only	Hygiene Allows for +1 Population	Animal Transport Prereq: 1 Domestic Animal. Convert 1 Animal to Land Transport. Allows 1 Population to move 1	Spear Prereq: Wood or Animal Uses 1 Forest or Animal Adds +1 in Attacks	TURN ORDER 1. Population Assessed •Add Popn •Feed Popn 2. Gain Adv Cards +1 per Popn 3. Use Advances Limited by Comms range 4. Move •1 Popn/ Military 2 turns to adjacent Location •Transports carry Popn /Military /Resources 5. Combat •Attack Dice +Attack Bonus vs •Defence Dice +Defence bonus 6. Trading •1 trade for no Comms •Unlimited Trade at Same Location •Max 3 trades if in Comms range
Farming Prereq: 1 Grassland Convert Grassland to Cropland which feeds 1 Popn. Grassland → Crops → Desert	Furnace Prereq: Wood Uses 1 Forest and adds 1 Pollution to gain this advancement	Fibres Prereq: 1 Grassland at that Location	Paper Prereq: Oils & Wood Uses 1 Forest allowing +2 Communication	Bandage Prereq: Fibres Uses 1 Crop allowing for +1 Population	Cart/Carriage Prereq: Animal & Wood. Uses 1 Forest & 1 Domestic Animal to create 1 Land Trans. Popn/Resource move 1	Bow Prereq: Fibres, Mechanisms & Wood/Animal/Metal Uses 1 Forest /Animal /Mineral. +1 Attack	
Breeding Prereq: Herding Double Domestic Animals	Mechanisms Prereq: Wood or Metals Uses 1 Forest or 1 Mineral to gain this advancement	Oils Prereq: 1 Mineral/Oil at that Location	Cable Prereq: Metal & Batteries Uses 1 Mineral allowing +3 Communication	Herbal Remedies Prereq: must have 1 Forest or Grassland at Locations used Allows +1 Population	Canoe Prereq: Wood. Uses 1 Forest to create 1 Sea Trans. Can use Wild Animal (fish) from adjacent Sea Locations	Blade Prereq: Metal Uses 1 Mineral/Oil +1 Attack	
Association Prereq: 1 Forest, Grassland or Wild Animal. Allows 1 Forest or 1 Wild Animal feed 1 Popn	Turbine Prereq: Mechanisms & Wheels. Use 1 Mineral or Forest. Provides Power	Metal Prereq: 1 Mineral/Oil at that Location & Furnace	Telephone Prereq: Cable, Electricity & Power source Uses 1 Mineral allowing +4 Communication	Pills Prereq: Herbal Remedies Uses 1 Crop allowing for +1 Population	Galley Prereq: Mechanisms & Wood or Metal. Uses 1 Forest/Mineral to create 1 Sea Trans. Allows 1 Population / Resource to be moved	Rifle/Cannon Prereq: Chemicals & Metal Uses 1 Mineral Adds +2 in Attacks	
Irrigation Prereq: Farming & Mechanisms. Allows Crops to be used twice before becoming Desert	Steam Prereq: Turbine Uses 1 Forest or 1 Mineral. Provides Power at cost of 1 Forest or Mineral per use	Glass/Crystal Prereq: 1 Mineral/Oil & Furnace	Radio Prereq: Glass/Crystal, Electricity & Power Source Uses 1 Mineral allowing +5 Communication	Contraception Prereq: Chemicals & Pills. Uses 1 Mineral allows choice to add Population during Population assessment	Sailing Ship Prereq: Fibres & Wood /Metal. Uses 1 Forest /Mineral to create 1 Sea Trans. Moves 1 Popn & 1 Resource	Machine Gun Prereq: Mechanisms, Rifle/Cannon & Cables Uses 1 Mineral. Adds +3 in Attacks	
Fertiliser/Pesticides Prereq: Chemicals & Mining. Double Crops. For every 2 Crops add 1 Pollution	Batteries Prereq: Chemicals & Electronics Uses 1 Mineral/Oil. Provides Power	Chemicals Prereq: Oils & Glass	Television Prereq: Radio, Chemicals & Power source Uses 1 Mineral allowing +6 Communication	Penicillin Prereq: Glass/Crystals & Pills Uses 1 Crop allowing for +1 Population	Propeller Ship Prereq: Mechanisms, Metal & Power. Uses 1 Min & 1 Forest. 1 Sea Trans carries 1 Pop & 1 Res moves 2 Sea Locns	Rocket Prereq: Chemicals & Metal. Uses 1 Mineral. +2 Attack at a range of 3 Locations	
Forestry Prereq: Breeding Convert 1 Crops or Grassland to 1 Forest	Engine Prereq: Oils, Metal & Turbine. Uses 1 Mineral & +1 pollution. Provides Power at a cost of 1 Mineral per use	Electronics Prereq: Metals & Power source	Computers Prereq: Television, Telephone & Power Uses 1 Mineral allowing +7 Communication	Surgery Prereq: Hygiene, Penicillin & Blades Allows for +1 Population	Cars Prereq: Metal, Mechanisms & Power. Uses 1 Min +1 Poll. 1 Land Trans moves 1 Pop & 1 Res 2 Locns	Nuke Prereq: Rockets & Nuclear Power. Uses 1 Mineral. +6 Attack at range of 3 Locns makes Desert at target	
Eco-Engineering Prereq: Irrigation & Forestry. Convert 1 Desert or 1 Pollution to Forest. Once per turn	Nuclear Prereq: Engines & Computers. Uses 1 Mineral. Provides Power	Lasers Prereq: Glass & Electricity +1 to Defence in combat	Cyberware Prereq: Computers & Transplants Uses 1 Mineral allowing +8 Communication	Genetics Prereq: Chemicals & Breeding Allows for +1 Population	Trains Prereq: Cables, Mechanisms & Power Uses 1 Min +1 Pollution. 1 Land Trans. Moves 1 Pop & 1 Res 3 Land	Plasma Prereq: Syth & Fusion Uses 1 Mineral +3 Attack at a range of 3 Locations	
Symbiosis Prereq: Association Allows for +1 Wild Animal +1 Population	Solar Prereq: Chemicals & Batteries. Uses 1 Mineral. Provides Power	Super-Conductors Prereq: Electronics & Nuclear Power	Artificial Intelligence Prereq: Cyberware & Power Source. Uses 1 Mineral. Allows +8 Comm's & +1 Defence	Scanners Prereq: Electricity, Glass/Crystals & Power Source. Uses 1 Mineral allowing for +2 Population	Planes Prereq: Mechanisms, Wood/Metal & Power. Uses 1 Forest/Min. 1 Land/Sea Trans. Move 1 Pop/Res any 2 Locn	Self Replicating Nanobots (SRN) Prereq: Bots & Power Source. Uses 1 Mineral Adds +3 Attack	
Bio-Integration Prereq: Symbiosis & Phero-Comms. Converting Wild Animals or Forests not required for Advancements	Fusion Prereq: Lasers & Superconductors. Uses 1 Mineral. Provides Power	Bots Prereq: Artificial Intelligence & Power Source. +1 to Def. +1 Bot Population requires no food	Syth Shields Prereq: Artificial Intelligence, Magnostrat & Power Source. Uses 1 Mineral allowing +9 Comm's & +2 Defence	Cloning Prereq: Surgery, Scanners & Power. Uses 1 Mineral to double Population	Bio-Transport Prereq: Animal & Ecosys. Convert 1 Animal to 1 Land/Sea Trans. Move 1 Pop /Res any 3 Locations	Agkir Prereq: Syth, Phased Materials & Power Source Uses 1 Mineral. +3 Attack to any Location	
Ecosys Prereq: Bio-Integration & Genetics Allows +1 Forest +1 Population remove 1 Pollution per Forest	Quotronic Prereq: Lasers & Magnostratic. Uses 1 Mineral. Provides Power	Phased Materials Prereq: Quotronic & Computers. +2 to Defence in combat	Phero-Comms Prereq: Chemicals, Bio-Integration & Power. Uses 1 Mineral allowing +10 Communication	Regeneration Prereq: Bots, Chemicals, Genetics & Power Source. If attacked Pop /Military units are not killed	Magnostrat Prereq: Computers, Super Conductors & Power. Uses 1 Mineral makes 1 Land Trans. Move 1 Pop & 1 Res any 5 Locations	Biological SRN Prereq: Cloning & SRN. +3 Attack. A successfully attacked unit becomes yours	
Autotrophy Prereq: Ecosys & Solar. No Crops or Domesticated Animals required to feed Population units	Magnaflux Prereq: Phased Materials Uses 1 Mineral. Provides Power & 1 Mineral back!	Quo Materials Prereq: Phased Materials & Power Source. +3 to Defence in combat	Quo-Comm Prereq: Quo Materials, Syth & Power Source No limit to Communications	Stasis Prereq: Phased Materials, Syth, Computers & Power Uses 1 Mineral. No Population ever dies	DTM Prereq: Agkir, Quo Materials & Power Source. Move any 1 unit to any Land or Sea Location on the board	Quo-Strike Prereq: Radio, Quo Materials & Power Source Attack any Location no Defence possible	



Advancements

Attack

/Defence

+1	+2	+3	+6	+1	+2	+3
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Population Sustainability

Communication Range

+1	+2	+3	+4	+5	+6	+7	+8	+9	+10	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10
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Bio	Power	Material	Comms	Medical	Transport	Military	
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Eco-Engineering Prereq: Irrigation & Forestry. Convert 1 Desert or 1 Pollution to Forest. Once per turn	Nuclear Prereq: Engines & Computers. Uses 1 Mineral. Provides Power	Lasers Prereq: Glass & Electricity +1 to Defence in combat	Cyberware Prereq: Computers & Transplants Uses 1 Mineral allowing +8 Communication	Genetics Prereq: Chemicals & Breeding Allows for +1 Population	Trains Prereq: Cables, Mechanisms & Power Uses 1 Min +1 Pollution. 1 Land Trans. Moves 1 Pop & 1 Res 3 Land	Plasma Prereq: Syth & Fusion Uses 1 Mineral +3 Attack at a range of 3 Locations	
Symbiosis Prereq: Association Allows for +1 Wild Animal +1 Population	Solar Prereq: Chemicals & Batteries. Uses 1 Mineral. Provides Power	Super-Conductors Prereq: Electronics & Nuclear Power	Artificial Intelligence Prereq: Cyberware & Power Source. Uses 1 Mineral. Allows +8 Comm's & +1 Defence	Scanners Prereq: Electricity, Glass/Crystals & Power Source. Uses 1 Mineral allowing for +2 Population	Planes Prereq: Mechanisms, Wood/Metal & Power. Uses 1 Forest/Min. 1 Land/Sea Trans. Move 1 Pop/Res any 2 Locn	Self Replicating Nanobots (SRN) Prereq: Bots & Power Source. Uses 1 Mineral Adds +3 Attack	
Bio-Integration Prereq: Symbiosis & Phero-Comms. Converting Wild Animals or Forests not required for Advancements	Fusion Prereq: Lasers & Superconductors. Uses 1 Mineral. Provides Power	Bots Prereq: Artificial Intelligence & Power Source. +1 to Def. +1 Bot Population requires no food	Syth Shields Prereq: Artificial Intelligence, Magnostrat & Power Source. Uses 1 Mineral allowing +9 Comm's & +2 Defence	Cloning Prereq: Surgery, Scanners & Power. Uses 1 Mineral to double Population	Bio-Transport Prereq: Animal & Ecosys. Convert 1 Animal to 1 Land/Sea Trans. Move 1 Pop /Res any 3 Locations	Agkir Prereq: Syth, Phased Materials & Power Source Uses 1 Mineral. +3 Attack to any Location	
Ecosys Prereq: Bio-Integration & Genetics Allows +1 Forest +1 Population remove 1 Pollution per Forest	Quotronic Prereq: Lasers & Magnostratic. Uses 1 Mineral. Provides Power	Phased Materials Prereq: Quotronic & Computers. +2 to Defence in combat	Phero-Comms Prereq: Chemicals, Bio-Integration & Power. Uses 1 Mineral allowing +10 Communication	Regeneration Prereq: Bots, Chemicals, Genetics & Power Source. If attacked Pop /Military units are not killed	Magnostrat Prereq: Computers, Super Conductors & Power. Uses 1 Mineral makes 1 Land Trans. Move 1 Pop & 1 Res any 5 Locations	Biological SRN Prereq: Cloning & SRN. +3 Attack. A successfully attacked unit becomes yours	
Autotrophy Prereq: Ecosys & Solar. No Crops or Domesticated Animals required to feed Population units	Magnaflux Prereq: Phased Materials Uses 1 Mineral. Provides Power & 1 Mineral back!	Quo Materials Prereq: Phased Materials & Power Source. +3 to Defence in combat	Quo-Comm Prereq: Quo Materials, Syth & Power Source No limit to Communications	Stasis Prereq: Phased Materials, Syth, Computers & Power Uses 1 Mineral. No Population ever dies	DTM Prereq: Agkir, Quo Materials & Power Source. Move any 1 unit to any Land or Sea Location on the board	Quo-Strike Prereq: Radio, Quo Materials & Power Source Attack any Location no Defense possible	



Advancements

Attack

/Defence

+1	+2	+3	+6	+1	+2	+3
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Population Sustainability

Communication Range

+1	+2	+3	+4	+5	+6	+7	+8	+9	+10	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10
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Bio

Power

Material

Comms

Medical

Transport

Military

Herding Prereq: Wild Animal & Grassland Convert 1 Wild Animal to 1 Domestic Animal. Feed 1 Pop. Forest → Grassland → Desert	Wheel Prereq: Wood/Metal Uses 1 Mineral/Oil or 1 Forest to gain this advancement	Wood Prereq: 1 Forest at that Location	Messenger Prereq: Animal Transport Requires 1 Domestic Animal allowing +1 Communication on Land Locations only	Hygiene Allows for +1 Population	Animal Transport Prereq: 1 Domestic Animal. Convert 1 Animal to Land Transport. Allows 1 Population to move 1	Spear Prereq: Wood or Animal Uses 1 Forest or Animal Adds +1 in Attacks
Farming Prereq: 1 Grassland Convert Grassland to Cropland which feeds 1 Popn. Grassland → Crops → Desert	Furnace Prereq: Wood Uses 1 Forest and adds 1 Pollution to gain this advancement	Fibres Prereq: 1 Grassland at that Location	Paper Prereq: Oils & Wood Uses 1 Forest allowing +2 Communication	Bandage Prereq: Fibres Uses 1 Crop allowing for +1 Population	Cart/Carriage Prereq: Animal & Wood. Uses 1 Forest & 1 Domestic Animal to create 1 Land Trans. Popn/Resource move 1	Bow Prereq: Fibres, Mechanisms & Wood/Animal/Metal Uses 1 Forest /Animal /Mineral. +1 Attack
Breeding Prereq: Herding Double Domestic Animals	Mechanisms Prereq: Wood or Metals Uses 1 Forest or 1 Mineral to gain this advancement	Oils Prereq: 1 Mineral/Oil at that Location	Cable Prereq: Metal & Batteries Uses 1 Mineral allowing +3 Communication	Herbal Remedies Prereq: must have 1 Forest or Grassland at Locations used Allows +1 Population	Canoe Prereq: Wood. Uses 1 Forest to create 1 Sea Trans. Can use Wild Animal (fish) from adjacent Sea Locations	Blade Prereq: Metal Uses 1 Mineral/Oil +1 Attack
Association Prereq: 1 Forest, Grassland or Wild Animal. Allows 1 Forest or 1 Wild Animal feed 1 Popn	Turbine Prereq: Mechanisms & Wheels. Use 1 Mineral or Forest. Provides Power	Metal Prereq: 1 Mineral/Oil at that Location & Furnace	Telephone Prereq: Cable, Electricity & Power source Uses 1 Mineral allowing +4 Communication	Pills Prereq: Herbal Remedies Uses 1 Crop allowing for +1 Population	Galley Prereq: Mechanisms & Wood or Metal. Uses 1 Forest/Mineral to create 1 Sea Trans. Allows 1 Population / Resource to be moved	Rifle/Cannon Prereq: Chemicals & Metal Uses 1 Mineral Adds +2 in Attacks
Irrigation Prereq: Farming & Mechanisms. Allows Crops to be used twice before becoming Desert	Steam Prereq: Turbine Uses 1 Forest or 1 Mineral. Provides Power at cost of 1 Forest or Mineral per use	Glass/Crystal Prereq: 1 Mineral/Oil & Furnace	Radio Prereq: Glass/Crystal, Electricity & Power Source Uses 1 Mineral allowing +5 Communication	Contraception Prereq: Chemicals & Pills. Uses 1 Mineral allows choice to add Population during Population assessment	Sailing Ship Prereq: Fibres & Wood /Metal. Uses 1 Forest /Mineral to create 1 Sea Trans. Moves 1 Popn & 1 Resource	Machine Gun Prereq: Mechanisms, Rifle/Cannon & Cables Uses 1 Mineral. Adds +3 in Attacks
Fertiliser/Pesticides Prereq: Chemicals & Mining. Double Crops. For every 2 Crops add 1 Pollution	Batteries Prereq: Chemicals & Electronics Uses 1 Mineral/Oil. Provides Power	Chemicals Prereq: Oils & Glass	Television Prereq: Radio, Chemicals & Power source Uses 1 Mineral allowing +6 Communication	Penicillin Prereq: Glass/Crystals & Pills Uses 1 Crop allowing for +1 Population	Propeller Ship Prereq: Mechanisms, Metal & Power. Uses 1 Min & 1 Forest. 1 Sea Trans carries 1 Pop & 1 Res moves 2 Sea Locns	Rocket Prereq: Chemicals & Metal. Uses 1 Mineral. +2 Attack at a range of 3 Locations
Forestry Prereq: Breeding Convert 1 Crops or Grassland to 1 Forest	Engine Prereq: Oils, Metal & Turbine. Uses 1 Mineral & +1 pollution. Provides Power at a cost of 1 Mineral per use	Electronics Prereq: Metals & Power source	Computers Prereq: Television, Telephone & Power Uses 1 Mineral allowing +7 Communication	Surgery Prereq: Hygiene, Penicillin & Blades Allows for +1 Population	Cars Prereq: Metal, Mechanisms & Power. Uses 1 Min +1 Poll. 1 Land Trans moves 1 Pop & 1 Res 2 Locns	Nuke Prereq: Rockets & Nuclear Power. Uses 1 Mineral. +6 Attack at range of 3 Locns makes Desert at target
Eco-Engineering Prereq: Irrigation & Forestry. Convert 1 Desert or 1 Pollution to Forest. Once per turn	Nuclear Prereq: Engines & Computers. Uses 1 Mineral. Provides Power	Lasers Prereq: Glass & Electricity +1 to Defence in combat	Cyberware Prereq: Computers & Transplants Uses 1 Mineral allowing +8 Communication	Genetics Prereq: Chemicals & Breeding Allows for +1 Population	Trains Prereq: Cables, Mechanisms & Power Uses 1 Min +1 Pollution. 1 Land Trans. Moves 1 Pop & 1 Res 3 Land	Plasma Prereq: Syth & Fusion Uses 1 Mineral +3 Attack at a range of 3 Locations
Symbiosis Prereq: Association Allows for +1 Wild Animal +1 Population	Solar Prereq: Chemicals & Batteries. Uses 1 Mineral. Provides Power	Super-Conductors Prereq: Electronics & Nuclear Power	Artificial Intelligence Prereq: Cyberware & Power Source. Uses 1 Mineral. Allows +8 Comm's & +1 Defence	Scanners Prereq: Electricity, Glass/Crystals & Power Source. Uses 1 Mineral allowing for +2 Population	Planes Prereq: Mechanisms, Wood/Metal & Power. Uses 1 Forest/Min. 1 Land/Sea Trans. Move 1 Pop/Res any 2 Locn	Self Replicating Nanobots (SRN) Prereq: Bots & Power Source. Uses 1 Mineral Adds +3 Attack
Bio-Integration Prereq: Symbiosis & Phero-Comms. Converting Wild Animals or Forests not required for Advancements	Fusion Prereq: Lasers & Superconductors. Uses 1 Mineral. Provides Power	Bots Prereq: Artificial Intelligence & Power Source. +1 to Def. +1 Bot Population requires no food	Syth Shields Prereq: Artificial Intelligence, Magnostrat & Power Source. Uses 1 Mineral allowing +9 Comm's & +2 Defence	Cloning Prereq: Surgery, Scanners & Power. Uses 1 Mineral to double Population	Bio-Transport Prereq: Animal & Ecosys. Convert 1 Animal to 1 Land/Sea Trans. Move 1 Pop /Res any 3 Locations	Agkir Prereq: Syth, Phased Materials & Power Source Uses 1 Mineral. +3 Attack to any Location
Ecosys Prereq: Bio-Integration & Genetics Allows +1 Forest +1 Population remove 1 Pollution per Forest	Quotronic Prereq: Lasers & Magnostratic. Uses 1 Mineral. Provides Power	Phased Materials Prereq: Quotronic & Computers. +2 to Defence in combat	Phero-Comms Prereq: Chemicals, Bio-Integration & Power. Uses 1 Mineral allowing +10 Communication	Regeneration Prereq: Bots, Chemicals, Genetics & Power Source. If attacked Pop /Military units are not killed	Magnostrat Prereq: Computers, Super Conductors & Power. Uses 1 Mineral makes 1 Land Trans. Move 1 Pop & 1 Res any 5 Locations	Biological SRN Prereq: Cloning & SRN. +3 Attack. A successfully attacked unit becomes yours
Autotrophy Prereq: Ecosys & Solar. No Crops or Domesticated Animals required to feed Population units	Magnaflux Prereq: Phased Materials Uses 1 Mineral. Provides Power & 1 Mineral back!	Quo Materials Prereq: Phased Materials & Power Source. +3 to Defence in combat	Quo-Comm Prereq: Quo Materials, Syth & Power Source No limit to Communications	Stasis Prereq: Phased Materials, Syth, Computers & Power Uses 1 Mineral. No Population ever dies	DTM Prereq: Agkir, Quo Materials & Power Source. Move any 1 unit to any Land or Sea Location on the board	Quo-Strike Prereq: Radio, Quo Materials & Power Source Attack any Location no Defence possible

TURN ORDER

- Population Assessed
•Add Popn
•Feed Popn
- Gain Adv Cards
+1 per Popn
- Use Advances Limited by Comms range
- Move
•1 Popn/ Military
2 turns to adjacent Location
•Transports carry Popn /Military /Resources
- Combat
•Attack Dice
+Attack Bonus vs
•Defence Dice
+Defence bonus
- Trading
•1 trade for no Comms
•Unlimited Trade at Same Location
•Max 3 trades if in Comms range



Advancements

Attack

/Defence

+1	+2	+3	+6	+1	+2	+3
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Population Sustainability

Communication Range

+1	+2	+3	+4	+5	+6	+7	+8	+9	+10	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10
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Bio	Power	Material	Comms	Medical	Transport	Military	
Herding Prereq: Wild Animal & Grassland Convert 1 Wild Animal to 1 Domestic Animal. Feed 1 Pop. Forest → Grassland → Desert	Wheel Prereq: Wood/Metal Uses 1 Mineral/Oil or 1 Forest to gain this advancement	Wood Prereq: 1 Forest at that Location	Messenger Prereq: Animal Transport Requires 1 Domestic Animal allowing +1 Communication on Land Locations only	Hygiene Allows for +1 Population	Animal Transport Prereq: 1 Domestic Animal. Convert 1 Animal to Land Transport. Allows 1 Population to move 1	Spear Prereq: Wood or Animal Uses 1 Forest or Animal Adds +1 in Attacks	TURN ORDER 1. Population Assessed •Add Popn •Feed Popn 2. Gain Adv Cards +1 per Popn 3. Use Advances Limited by Comms range 4. Move •1 Popn/ Military 2 turns to adjacent Location •Transports carry Popn /Military /Resources 5. Combat •Attack Dice +Attack Bonus vs •Defence Dice +Defence bonus 6. Trading •1 trade for no Comms •Unlimited Trade at Same Location •Max 3 trades if in Comms range
Farming Prereq: 1 Grassland Convert Grassland to Cropland which feeds 1 Popn. Grassland → Crops → Desert	Furnace Prereq: Wood Uses 1 Forest and adds 1 Pollution to gain this advancement	Fibres Prereq: 1 Grassland at that Location	Paper Prereq: Oils & Wood Uses 1 Forest allowing +2 Communication	Bandage Prereq: Fibres Uses 1 Crop allowing for +1 Population	Cart/Carriage Prereq: Animal & Wood. Uses 1 Forest & 1 Domestic Animal to create 1 Land Trans. Popn/Resource move 1	Bow Prereq: Fibres, Mechanisms & Wood/Animal/Metal Uses 1 Forest /Animal /Mineral. +1 Attack	
Breeding Prereq: Herding Double Domestic Animals	Mechanisms Prereq: Wood or Metals Uses 1 Forest or 1 Mineral to gain this advancement	Oils Prereq: 1 Mineral/Oil at that Location	Cable Prereq: Metal & Batteries Uses 1 Mineral allowing +3 Communication	Herbal Remedies Prereq: must have 1 Forest or Grassland at Locations used Allows +1 Population	Canoe Prereq: Wood. Uses 1 Forest to create 1 Sea Trans. Can use Wild Animal (fish) from adjacent Sea Locations	Blade Prereq: Metal Uses 1 Mineral/Oil +1 Attack	
Association Prereq: 1 Forest, Grassland or Wild Animal. Allows 1 Forest or 1 Wild Animal feed 1 Popn	Turbine Prereq: Mechanisms & Wheels. Use 1 Mineral or Forest. Provides Power	Metal Prereq: 1 Mineral/Oil at that Location & Furnace	Telephone Prereq: Cable, Electricity & Power source Uses 1 Mineral allowing +4 Communication	Pills Prereq: Herbal Remedies Uses 1 Crop allowing for +1 Population	Galley Prereq: Mechanisms & Wood or Metal. Uses 1 Forest/Mineral to create 1 Sea Trans. Allows 1 Population / Resource to be moved	Rifle/Cannon Prereq: Chemicals & Metal Uses 1 Mineral Adds +2 in Attacks	
Irrigation Prereq: Farming & Mechanisms. Allows Crops to be used twice before becoming Desert	Steam Prereq: Turbine Uses 1 Forest or 1 Mineral. Provides Power at cost of 1 Forest or Mineral per use	Glass/Crystal Prereq: 1 Mineral/Oil & Furnace	Radio Prereq: Glass/Crystal, Electricity & Power Source Uses 1 Mineral allowing +5 Communication	Contraception Prereq: Chemicals & Pills. Uses 1 Mineral allows choice to add Population during Population assessment	Sailing Ship Prereq: Fibres & Wood /Metal. Uses 1 Forest /Mineral to create 1 Sea Trans. Moves 1 Popn & 1 Resource	Machine Gun Prereq: Mechanisms, Rifle/Cannon & Cables Uses 1 Mineral. Adds +3 in Attacks	
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Forestry Prereq: Breeding Convert 1 Crops or Grassland to 1 Forest	Engine Prereq: Oils, Metal & Turbine. Uses 1 Mineral & +1 pollution. Provides Power at a cost of 1 Mineral per use	Electronics Prereq: Metals & Power source	Computers Prereq: Television, Telephone & Power Uses 1 Mineral allowing +7 Communication	Surgery Prereq: Hygiene, Penicillin & Blades Allows for +1 Population	Cars Prereq: Metal, Mechanisms & Power. Uses 1 Min +1 Poll. 1 Land Trans moves 1 Pop & 1 Res 2 Locns	Nuke Prereq: Rockets & Nuclear Power. Uses 1 Mineral. +6 Attack at range of 3 Locns makes Desert at target	
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Symbiosis Prereq: Association Allows for +1 Wild Animal +1 Population	Solar Prereq: Chemicals & Batteries. Uses 1 Mineral. Provides Power	Super-Conductors Prereq: Electronics & Nuclear Power	Artificial Intelligence Prereq: Cyberware & Power Source. Uses 1 Mineral. Allows +8 Comm's & +1 Defence	Scanners Prereq: Electricity, Glass/Crystals & Power Source. Uses 1 Mineral allowing for +2 Population	Planes Prereq: Mechanisms, Wood/Metal & Power. Uses 1 Forest/Min. 1 Land/Sea Trans. Move 1 Pop/Res any 2 Locn	Self Replicating Nanobots (SRN) Prereq: Bots & Power Source. Uses 1 Mineral Adds +3 Attack	
Bio-Integration Prereq: Symbiosis & Phero-Comms. Converting Wild Animals or Forests not required for Advancements	Fusion Prereq: Lasers & Superconductors. Uses 1 Mineral. Provides Power	Bots Prereq: Artificial Intelligence & Power Source. +1 to Def. +1 Bot Population requires no food	Syth Shields Prereq: Artificial Intelligence, Magnostrat & Power Source. Uses 1 Mineral allowing +9 Comm's & +2 Defence	Cloning Prereq: Surgery, Scanners & Power. Uses 1 Mineral to double Population	Bio-Transport Prereq: Animal & Ecosys. Convert 1 Animal to 1 Land/Sea Trans. Move 1 Pop /Res any 3 Locations	Agkir Prereq: Syth, Phased Materials & Power Source Uses 1 Mineral. +3 Attack to any Location	
Ecosys Prereq: Bio-Integration & Genetics Allows +1 Forest +1 Population remove 1 Pollution per Forest	Quotronic Prereq: Lasers & Magnostratic. Uses 1 Mineral. Provides Power	Phased Materials Prereq: Quotronic & Computers. +2 to Defence in combat	Phero-Comms Prereq: Chemicals, Bio-Integration & Power. Uses 1 Mineral allowing +10 Communication	Regeneration Prereq: Bots, Chemicals, Genetics & Power Source. If attacked Pop /Military units are not killed	Magnostrat Prereq: Computers, Super Conductors & Power. Uses 1 Mineral makes 1 Land Trans. Move 1 Pop & 1 Res any 5 Locations	Biological SRN Prereq: Cloning & SRN. +3 Attack. A successfully attacked unit becomes yours	
Autotrophy Prereq: Ecosys & Solar. No Crops or Domesticated Animals required to feed Population units	Magnaflux Prereq: Phased Materials Uses 1 Mineral. Provides Power & 1 Mineral back!	Quo Materials Prereq: Phased Materials & Power Source. +3 to Defence in combat	Quo-Comm Prereq: Quo Materials, Syth & Power Source No limit to Communications	Stasis Prereq: Phased Materials, Syth, Computers & Power Uses 1 Mineral. No Population ever dies	DTM Prereq: Agkir, Quo Materials & Power Source. Move any 1 unit to any Land or Sea Location on the board	Quo-Strike Prereq: Radio, Quo Materials & Power Source Attack any Location no Defence possible	



Advancements

Attack

/Defence

+1	+2	+3	+6	+1	+2	+3
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Population Sustainability

Communication Range

+1	+2	+3	+4	+5	+6	+7	+8	+9	+10	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10
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Bio	Power	Material	Comms	Medical	Transport	Military	
Herding Prereq: Wild Animal & Grassland Convert 1 Wild Animal to 1 Domestic Animal. Feed 1 Pop. Forest → Grassland → Desert	Wheel Prereq: Wood/Metal Uses 1 Mineral/Oil or 1 Forest to gain this advancement	Wood Prereq: 1 Forest at that Location	Messenger Prereq: Animal Transport Requires 1 Domestic Animal allowing +1 Communication on Land Locations only	Hygiene Allows for +1 Population	Animal Transport Prereq: 1 Domestic Animal. Convert 1 Animal to Land Transport. Allows 1 Population to move 1	Spear Prereq: Wood or Animal Uses 1 Forest or Animal Adds +1 in Attacks	TURN ORDER 1. Population Assessed •Add Popn •Feed Popn 2. Gain Adv Cards +1 per Popn 3. Use Advances Limited by Comms range 4. Move •1 Popn/ Military 2 turns to adjacent Location •Transports carry Popn /Military /Resources 5. Combat •Attack Dice +Attack Bonus vs •Defence Dice +Defence bonus 6. Trading •1 trade for no Comms •Unlimited Trade at Same Location •Max 3 trades if in Comms range
Farming Prereq: 1 Grassland Convert Grassland to Cropland which feeds 1 Popn. Grassland → Crops → Desert	Furnace Prereq: Wood Uses 1 Forest and adds 1 Pollution to gain this advancement	Fibres Prereq: 1 Grassland at that Location	Paper Prereq: Oils & Wood Uses 1 Forest allowing +2 Communication	Bandage Prereq: Fibres Uses 1 Crop allowing for +1 Population	Cart/Carriage Prereq: Animal & Wood. Uses 1 Forest & 1 Domestic Animal to create 1 Land Trans. Popn/Resource move 1	Bow Prereq: Fibres, Mechanisms & Wood/Animal/Metal Uses 1 Forest /Animal /Mineral. +1 Attack	
Breeding Prereq: Herding Double Domestic Animals	Mechanisms Prereq: Wood or Metals Uses 1 Forest or 1 Mineral to gain this advancement	Oils Prereq: 1 Mineral/Oil at that Location	Cable Prereq: Metal & Batteries Uses 1 Mineral allowing +3 Communication	Herbal Remedies Prereq: must have 1 Forest or Grassland at Locations used Allows +1 Population	Canoe Prereq: Wood. Uses 1 Forest to create 1 Sea Trans. Can use Wild Animal (fish) from adjacent Sea Locations	Blade Prereq: Metal Uses 1 Mineral/Oil +1 Attack	
Association Prereq: 1 Forest, Grassland or Wild Animal. Allows 1 Forest or 1 Wild Animal feed 1 Popn	Turbine Prereq: Mechanisms & Wheels. Use 1 Mineral or Forest. Provides Power	Metal Prereq: 1 Mineral/Oil at that Location & Furnace	Telephone Prereq: Cable, Electricity & Power source Uses 1 Mineral allowing +4 Communication	Pills Prereq: Herbal Remedies Uses 1 Crop allowing for +1 Population	Galley Prereq: Mechanisms & Wood or Metal. Uses 1 Forest/Mineral to create 1 Sea Trans. Allows 1 Population / Resource to be moved	Rifle/Cannon Prereq: Chemicals & Metal Uses 1 Mineral Adds +2 in Attacks	
Irrigation Prereq: Farming & Mechanisms. Allows Crops to be used twice before becoming Desert	Steam Prereq: Turbine Uses 1 Forest or 1 Mineral. Provides Power at cost of 1 Forest or Mineral per use	Glass/Crystal Prereq: 1 Mineral/Oil & Furnace	Radio Prereq: Glass/Crystal, Electricity & Power Source Uses 1 Mineral allowing +5 Communication	Contraception Prereq: Chemicals & Pills. Uses 1 Mineral allows choice to add Population during Population assessment	Sailing Ship Prereq: Fibres & Wood /Metal. Uses 1 Forest /Mineral to create 1 Sea Trans. Moves 1 Popn & 1 Resource	Machine Gun Prereq: Mechanisms, Rifle/Cannon & Cables Uses 1 Mineral. Adds +3 in Attacks	
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Ecosys Prereq: Bio-Integration & Genetics Allows +1 Forest +1 Population remove 1 Pollution per Forest	Quotronic Prereq: Lasers & Magnostratic. Uses 1 Mineral. Provides Power	Phased Materials Prereq: Quotronic & Computers. +2 to Defence in combat	Phero-Comms Prereq: Chemicals, Bio-Integration & Power. Uses 1 Mineral allowing +10 Communication	Regeneration Prereq: Bots, Chemicals, Genetics & Power Source. If attacked Pop /Military units are not killed	Magnostrat Prereq: Computers, Super Conductors & Power. Uses 1 Mineral makes 1 Land Trans. Move 1 Pop & 1 Res any 5 Locations	Biological SRN Prereq: Cloning & SRN. +3 Attack. A successfully attacked unit becomes yours	
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Advancements

Attack

/Defence

+1	+2	+3	+6	+1	+2	+3
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Population Sustainability

Communication Range

+1	+2	+3	+4	+5	+6	+7	+8	+9	+10	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10
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Bio	Power	Material	Comms	Medical	Transport	Military	
Herding Prereq: Wild Animal & Grassland Convert 1 Wild Animal to 1 Domestic Animal. Feed 1 Pop. Forest → Grassland → Desert	Wheel Prereq: Wood/Metal Uses 1 Mineral/Oil or 1 Forest to gain this advancement	Wood Prereq: 1 Forest at that Location	Messenger Prereq: Animal Transport Requires 1 Domestic Animal allowing +1 Communication on Land Locations only	Hygiene Allows for +1 Population	Animal Transport Prereq: 1 Domestic Animal. Convert 1 Animal to Land Transport. Allows 1 Population to move 1	Spear Prereq: Wood or Animal Uses 1 Forest or Animal Adds +1 in Attacks	TURN ORDER 1. Population Assessed •Add Popn •Feed Popn 2. Gain Adv Cards +1 per Popn 3. Use Advances Limited by Comms range 4. Move •1 Popn/ Military 2 turns to adjacent Location •Transports carry Popn /Military /Resources 5. Combat •Attack Dice +Attack Bonus vs •Defence Dice +Defence bonus 6. Trading •1 trade for no Comms •Unlimited Trade at Same Location •Max 3 trades if in Comms range
Farming Prereq: 1 Grassland Convert Grassland to Cropland which feeds 1 Popn. Grassland → Crops → Desert	Furnace Prereq: Wood Uses 1 Forest and adds 1 Pollution to gain this advancement	Fibres Prereq: 1 Grassland at that Location	Paper Prereq: Oils & Wood Uses 1 Forest allowing +2 Communication	Bandage Prereq: Fibres Uses 1 Crop allowing for +1 Population	Cart/Carriage Prereq: Animal & Wood. Uses 1 Forest & 1 Domestic Animal to create 1 Land Trans. Popn/Resource move 1	Bow Prereq: Fibres, Mechanisms & Wood/Animal/Metal Uses 1 Forest /Animal /Mineral. +1 Attack	
Breeding Prereq: Herding Double Domestic Animals	Mechanisms Prereq: Wood or Metals Uses 1 Forest or 1 Mineral to gain this advancement	Oils Prereq: 1 Mineral/Oil at that Location	Cable Prereq: Metal & Batteries Uses 1 Mineral allowing +3 Communication	Herbal Remedies Prereq: must have 1 Forest or Grassland at Locations used Allows +1 Population	Canoe Prereq: Wood. Uses 1 Forest to create 1 Sea Trans. Can use Wild Animal (fish) from adjacent Sea Locations	Blade Prereq: Metal Uses 1 Mineral/Oil +1 Attack	
Association Prereq: 1 Forest, Grassland or Wild Animal. Allows 1 Forest or 1 Wild Animal feed 1 Popn	Turbine Prereq: Mechanisms & Wheels. Use 1 Mineral or Forest. Provides Power	Metal Prereq: 1 Mineral/Oil at that Location & Furnace	Telephone Prereq: Cable, Electricity & Power source Uses 1 Mineral allowing +4 Communication	Pills Prereq: Herbal Remedies Uses 1 Crop allowing for +1 Population	Galley Prereq: Mechanisms & Wood or Metal. Uses 1 Forest/Mineral to create 1 Sea Trans. Allows 1 Population / Resource to be moved	Rifle/Cannon Prereq: Chemicals & Metal Uses 1 Mineral Adds +2 in Attacks	
Irrigation Prereq: Farming & Mechanisms. Allows Crops to be used twice before becoming Desert	Steam Prereq: Turbine Uses 1 Forest or 1 Mineral. Provides Power at cost of 1 Forest or Mineral per use	Glass/Crystal Prereq: 1 Mineral/Oil & Furnace	Radio Prereq: Glass/Crystal, Electricity & Power Source Uses 1 Mineral allowing +5 Communication	Contraception Prereq: Chemicals & Pills. Uses 1 Mineral allows choice to add Population during Population assessment	Sailing Ship Prereq: Fibres & Wood /Metal. Uses 1 Forest /Mineral to create 1 Sea Trans. Moves 1 Popn & 1 Resource	Machine Gun Prereq: Mechanisms, Rifle/Cannon & Cables Uses 1 Mineral. Adds +3 in Attacks	
Fertiliser/Pesticides Prereq: Chemicals & Mining. Double Crops. For every 2 Crops add 1 Pollution	Batteries Prereq: Chemicals & Electronics Uses 1 Mineral/Oil. Provides Power	Chemicals Prereq: Oils & Glass	Television Prereq: Radio, Chemicals & Power source Uses 1 Mineral allowing +6 Communication	Penicillin Prereq: Glass/Crystals & Pills Uses 1 Crop allowing for +1 Population	Propeller Ship Prereq: Mechanisms, Metal & Power. Uses 1 Min & 1 Forest. 1 Sea Trans carries 1 Pop & 1 Res moves 2 Sea Locns	Rocket Prereq: Chemicals & Metal. Uses 1 Mineral. +2 Attack at a range of 3 Locations	
Forestry Prereq: Breeding Convert 1 Crops or Grassland to 1 Forest	Engine Prereq: Oils, Metal & Turbine. Uses 1 Mineral & +1 pollution. Provides Power at a cost of 1 Mineral per use	Electronics Prereq: Metals & Power source	Computers Prereq: Television, Telephone & Power Uses 1 Mineral allowing +7 Communication	Surgery Prereq: Hygiene, Penicillin & Blades Allows for +1 Population	Cars Prereq: Metal, Mechanisms & Power. Uses 1 Min +1 Poll. 1 Land Trans moves 1 Pop & 1 Res 2 Locns	Nuke Prereq: Rockets & Nuclear Power. Uses 1 Mineral. +6 Attack at range of 3 Locns makes Desert at target	
Eco-Engineering Prereq: Irrigation & Forestry. Convert 1 Desert or 1 Pollution to Forest. Once per turn	Nuclear Prereq: Engines & Computers. Uses 1 Mineral. Provides Power	Lasers Prereq: Glass & Electricity +1 to Defence in combat	Cyberware Prereq: Computers & Transplants Uses 1 Mineral allowing +8 Communication	Genetics Prereq: Chemicals & Breeding Allows for +1 Population	Trains Prereq: Cables, Mechanisms & Power Uses 1 Min +1 Pollution. 1 Land Trans. Moves 1 Pop & 1 Res 3 Land	Plasma Prereq: Syth & Fusion Uses 1 Mineral +3 Attack at a range of 3 Locations	
Symbiosis Prereq: Association Allows for +1 Wild Animal +1 Population	Solar Prereq: Chemicals & Batteries. Uses 1 Mineral. Provides Power	Super-Conductors Prereq: Electronics & Nuclear Power	Artificial Intelligence Prereq: Cyberware & Power Source. Uses 1 Mineral. Allows +8 Comm's & +1 Defence	Scanners Prereq: Electricity, Glass/Crystals & Power Source. Uses 1 Mineral allowing for +2 Population	Planes Prereq: Mechanisms, Wood/Metal & Power. Uses 1 Forest/Min. 1 Land/Sea Trans. Move 1 Pop/Res any 2 Locn	Self Replicating Nanobots (SRN) Prereq: Bots & Power Source. Uses 1 Mineral Adds +3 Attack	
Bio-Integration Prereq: Symbiosis & Phero-Comms. Converting Wild Animals or Forests not required for Advancements	Fusion Prereq: Lasers & Superconductors. Uses 1 Mineral. Provides Power	Bots Prereq: Artificial Intelligence & Power Source. +1 to Def. +1 Bot Population requires no food	Syth Shields Prereq: Artificial Intelligence, Magnostrat & Power Source. Uses 1 Mineral allowing +9 Comm's & +2 Defence	Cloning Prereq: Surgery, Scanners & Power. Uses 1 Mineral to double Population	Bio-Transport Prereq: Animal & Ecosys. Convert 1 Animal to 1 Land/Sea Trans. Move 1 Pop /Res any 3 Locations	Agkir Prereq: Syth, Phased Materials & Power Source Uses 1 Mineral. +3 Attack to any Location	
Ecosys Prereq: Bio-Integration & Genetics Allows +1 Forest +1 Population remove 1 Pollution per Forest	Quotronic Prereq: Lasers & Magnostratic. Uses 1 Mineral. Provides Power	Phased Materials Prereq: Quotronic & Computers. +2 to Defence in combat	Phero-Comms Prereq: Chemicals, Bio-Integration & Power. Uses 1 Mineral allowing +10 Communication	Regeneration Prereq: Bots, Chemicals, Genetics & Power Source. If attacked Pop /Military units are not killed	Magnostrat Prereq: Computers, Super Conductors & Power. Uses 1 Mineral makes 1 Land Trans. Move 1 Pop & 1 Res any 5 Locations	Biological SRN Prereq: Cloning & SRN. +3 Attack. A successfully attacked unit becomes yours	
Autotrophy Prereq: Ecosys & Solar. No Crops or Domesticated Animals required to feed Population units	Magnaflux Prereq: Phased Materials Uses 1 Mineral. Provides Power & 1 Mineral back!	Quo Materials Prereq: Phased Materials & Power Source. +3 to Defence in combat	Quo-Comm Prereq: Quo Materials, Syth & Power Source No limit to Communications	Stasis Prereq: Phased Materials, Syth, Computers & Power Uses 1 Mineral. No Population ever dies	DTM Prereq: Agkir, Quo Materials & Power Source. Move any 1 unit to any Land or Sea Location on the board	Quo-Strike Prereq: Radio, Quo Materials & Power Source Attack any Location no Defence possible	



Advancements

Attack

/Defence

+1	+2	+3	+6	+1	+2	+3
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Population Sustainability

Communication Range

+1	+2	+3	+4	+5	+6	+7	+8	+9	+10	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10
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Bio	Power	Material	Comms	Medical	Transport	Military	
Herding Prereq: Wild Animal & Grassland Convert 1 Wild Animal to 1 Domestic Animal. Feed 1 Pop. Forest → Grassland → Desert	Wheel Prereq: Wood/Metal Uses 1 Mineral/Oil or 1 Forest to gain this advancement	Wood Prereq: 1 Forest at that Location	Messenger Prereq: Animal Transport Requires 1 Domestic Animal allowing +1 Communication on Land Locations only	Hygiene Allows for +1 Population	Animal Transport Prereq: 1 Domestic Animal. Convert 1 Animal to Land Transport. Allows 1 Population to move 1	Spear Prereq: Wood or Animal Uses 1 Forest or Animal Adds +1 in Attacks	TURN ORDER 1. Population Assessed •Add Popn •Feed Popn 2. Gain Adv Cards +1 per Popn 3. Use Advances Limited by Comms range 4. Move •1 Popn/ Military 2 turns to adjacent Location •Transports carry Popn /Military /Resources 5. Combat •Attack Dice +Attack Bonus vs •Defence Dice +Defence bonus 6. Trading •1 trade for no Comms •Unlimited Trade at Same Location •Max 3 trades if in Comms range
Farming Prereq: 1 Grassland Convert Grassland to Cropland which feeds 1 Popn. Grassland → Crops → Desert	Furnace Prereq: Wood Uses 1 Forest and adds 1 Pollution to gain this advancement	Fibres Prereq: 1 Grassland at that Location	Paper Prereq: Oils & Wood Uses 1 Forest allowing +2 Communication	Bandage Prereq: Fibres Uses 1 Crop allowing for +1 Population	Cart/Carriage Prereq: Animal & Wood. Uses 1 Forest & 1 Domestic Animal to create 1 Land Trans. Popn/Resource move 1	Bow Prereq: Fibres, Mechanisms & Wood/Animal/Metal Uses 1 Forest /Animal /Mineral. +1 Attack	
Breeding Prereq: Herding Double Domestic Animals	Mechanisms Prereq: Wood or Metals Uses 1 Forest or 1 Mineral to gain this advancement	Oils Prereq: 1 Mineral/Oil at that Location	Cable Prereq: Metal & Batteries Uses 1 Mineral allowing +3 Communication	Herbal Remedies Prereq: must have 1 Forest or Grassland at Locations used Allows +1 Population	Canoe Prereq: Wood. Uses 1 Forest to create 1 Sea Trans. Can use Wild Animal (fish) from adjacent Sea Locations	Blade Prereq: Metal Uses 1 Mineral/Oil +1 Attack	
Association Prereq: 1 Forest, Grassland or Wild Animal. Allows 1 Forest or 1 Wild Animal feed 1 Popn	Turbine Prereq: Mechanisms & Wheels. Use 1 Mineral or Forest. Provides Power	Metal Prereq: 1 Mineral/Oil at that Location & Furnace	Telephone Prereq: Cable, Electricity & Power source Uses 1 Mineral allowing +4 Communication	Pills Prereq: Herbal Remedies Uses 1 Crop allowing for +1 Population	Galley Prereq: Mechanisms & Wood or Metal. Uses 1 Forest/Mineral to create 1 Sea Trans. Allows 1 Population / Resource to be moved	Rifle/Cannon Prereq: Chemicals & Metal Uses 1 Mineral Adds +2 in Attacks	
Irrigation Prereq: Farming & Mechanisms. Allows Crops to be used twice before becoming Desert	Steam Prereq: Turbine Uses 1 Forest or 1 Mineral. Provides Power at cost of 1 Forest or Mineral per use	Glass/Crystal Prereq: 1 Mineral/Oil & Furnace	Radio Prereq: Glass/Crystal, Electricity & Power Source Uses 1 Mineral allowing +5 Communication	Contraception Prereq: Chemicals & Pills. Uses 1 Mineral allows choice to add Population during Population assessment	Sailing Ship Prereq: Fibres & Wood /Metal. Uses 1 Forest /Mineral to create 1 Sea Trans. Moves 1 Popn & 1 Resource	Machine Gun Prereq: Mechanisms, Rifle/Cannon & Cables Uses 1 Mineral. Adds +3 in Attacks	
Fertiliser/Pesticides Prereq: Chemicals & Mining. Double Crops. For every 2 Crops add 1 Pollution	Batteries Prereq: Chemicals & Electronics Uses 1 Mineral/Oil. Provides Power	Chemicals Prereq: Oils & Glass	Television Prereq: Radio, Chemicals & Power source Uses 1 Mineral allowing +6 Communication	Penicillin Prereq: Glass/Crystals & Pills Uses 1 Crop allowing for +1 Population	Propeller Ship Prereq: Mechanisms, Metal & Power. Uses 1 Min & 1 Forest. 1 Sea Trans carries 1 Pop & 1 Res moves 2 Sea Locns	Rocket Prereq: Chemicals & Metal. Uses 1 Mineral. +2 Attack at a range of 3 Locations	
Forestry Prereq: Breeding Convert 1 Crops or Grassland to 1 Forest	Engine Prereq: Oils, Metal & Turbine. Uses 1 Mineral & +1 pollution. Provides Power at a cost of 1 Mineral per use	Electronics Prereq: Metals & Power source	Computers Prereq: Television, Telephone & Power Uses 1 Mineral allowing +7 Communication	Surgery Prereq: Hygiene, Penicillin & Blades Allows for +1 Population	Cars Prereq: Metal, Mechanisms & Power. Uses 1 Min +1 Poll. 1 Land Trans moves 1 Pop & 1 Res 2 Locns	Nuke Prereq: Rockets & Nuclear Power. Uses 1 Mineral. +6 Attack at range of 3 Locns makes Desert at target	
Eco-Engineering Prereq: Irrigation & Forestry. Convert 1 Desert or 1 Pollution to Forest. Once per turn	Nuclear Prereq: Engines & Computers. Uses 1 Mineral. Provides Power	Lasers Prereq: Glass & Electricity +1 to Defence in combat	Cyberware Prereq: Computers & Transplants Uses 1 Mineral allowing +8 Communication	Genetics Prereq: Chemicals & Breeding Allows for +1 Population	Trains Prereq: Cables, Mechanisms & Power Uses 1 Min +1 Pollution. 1 Land Trans. Moves 1 Pop & 1 Res 3 Land	Plasma Prereq: Syth & Fusion Uses 1 Mineral +3 Attack at a range of 3 Locations	
Symbiosis Prereq: Association Allows for +1 Wild Animal +1 Population	Solar Prereq: Chemicals & Batteries. Uses 1 Mineral. Provides Power	Super-Conductors Prereq: Electronics & Nuclear Power	Artificial Intelligence Prereq: Cyberware & Power Source. Uses 1 Mineral. Allows +8 Comm's & +1 Defence	Scanners Prereq: Electricity, Glass/Crystals & Power Source. Uses 1 Mineral allowing for +2 Population	Planes Prereq: Mechanisms, Wood/Metal & Power. Uses 1 Forest/Min. 1 Land/Sea Trans. Move 1 Pop/Res any 2 Locn	Self Replicating Nanobots (SRN) Prereq: Bots & Power Source. Uses 1 Mineral Adds +3 Attack	
Bio-Integration Prereq: Symbiosis & Phero-Comms. Converting Wild Animals or Forests not required for Advancements	Fusion Prereq: Lasers & Superconductors. Uses 1 Mineral. Provides Power	Bots Prereq: Artificial Intelligence & Power Source. +1 to Def. +1 Bot Population requires no food	Syth Shields Prereq: Artificial Intelligence, Magnostrat & Power Source. Uses 1 Mineral allowing +9 Comm's & +2 Defence	Cloning Prereq: Surgery, Scanners & Power. Uses 1 Mineral to double Population	Bio-Transport Prereq: Animal & Ecosys. Convert 1 Animal to 1 Land/Sea Trans. Move 1 Pop /Res any 3 Locations	Agkir Prereq: Syth, Phased Materials & Power Source Uses 1 Mineral. +3 Attack to any Location	
Ecosys Prereq: Bio-Integration & Genetics Allows +1 Forest +1 Population remove 1 Pollution per Forest	Quotronic Prereq: Lasers & Magnostratic. Uses 1 Mineral. Provides Power	Phased Materials Prereq: Quotronic & Computers. +2 to Defence in combat	Phero-Comms Prereq: Chemicals, Bio-Integration & Power. Uses 1 Mineral allowing +10 Communication	Regeneration Prereq: Bots, Chemicals, Genetics & Power Source. If attacked Pop /Military units are not killed	Magnostrat Prereq: Computers, Super Conductors & Power. Uses 1 Mineral makes 1 Land Trans. Move 1 Pop & 1 Res any 5 Locations	Biological SRN Prereq: Cloning & SRN. +3 Attack. A successfully attacked unit becomes yours	
Autotrophy Prereq: Ecosys & Solar. No Crops or Domesticated Animals required to feed Population units	Magnaflux Prereq: Phased Materials Uses 1 Mineral. Provides Power & 1 Mineral back!	Quo Materials Prereq: Phased Materials & Power Source. +3 to Defence in combat	Quo-Comm Prereq: Quo Materials, Syth & Power Source No limit to Communications	Stasis Prereq: Phased Materials, Syth, Computers & Power Uses 1 Mineral. No Population ever dies	DTM Prereq: Agkir, Quo Materials & Power Source. Move any 1 unit to any Land or Sea Location on the board	Quo-Strike Prereq: Radio, Quo Materials & Power Source Attack any Location no Defence possible	



Advancements

Attack

/Defence

+1	+2	+3	+6	+1	+2	+3
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Population Sustainability

Communication Range

+1	+2	+3	+4	+5	+6	+7	+8	+9	+10	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10
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Bio	Power	Material	Comms	Medical	Transport	Military	
Herding Prereq: Wild Animal & Grassland Convert 1 Wild Animal to 1 Domestic Animal. Feed 1 Pop. Forest → Grassland → Desert	Wheel Prereq: Wood/Metal Uses 1 Mineral/Oil or 1 Forest to gain this advancement	Wood Prereq: 1 Forest at that Location	Messenger Prereq: Animal Transport Requires 1 Domestic Animal allowing +1 Communication on Land Locations only	Hygiene Allows for +1 Population	Animal Transport Prereq: 1 Domestic Animal. Convert 1 Animal to Land Transport. Allows 1 Population to move 1	Spear Prereq: Wood or Animal Uses 1 Forest or Animal Adds +1 in Attacks	TURN ORDER 1. Population Assessed •Add Popn •Feed Popn 2. Gain Adv Cards +1 per Popn 3. Use Advances Limited by Comms range 4. Move •1 Popn/ Military 2 turns to adjacent Location •Transports carry Popn /Military /Resources 5. Combat •Attack Dice +Attack Bonus vs •Defence Dice +Defence bonus 6. Trading •1 trade for no Comms •Unlimited Trade at Same Location •Max 3 trades if in Comms range
Farming Prereq: 1 Grassland Convert Grassland to Cropland which feeds 1 Popn. Grassland → Crops → Desert	Furnace Prereq: Wood Uses 1 Forest and adds 1 Pollution to gain this advancement	Fibres Prereq: 1 Grassland at that Location	Paper Prereq: Oils & Wood Uses 1 Forest allowing +2 Communication	Bandage Prereq: Fibres Uses 1 Crop allowing for +1 Population	Cart/Carriage Prereq: Animal & Wood. Uses 1 Forest & 1 Domestic Animal to create 1 Land Trans. Popn/Resource move 1	Bow Prereq: Fibres, Mechanisms & Wood/Animal/Metal Uses 1 Forest /Animal /Mineral. +1 Attack	
Breeding Prereq: Herding Double Domestic Animals	Mechanisms Prereq: Wood or Metals Uses 1 Forest or 1 Mineral to gain this advancement	Oils Prereq: 1 Mineral/Oil at that Location	Cable Prereq: Metal & Batteries Uses 1 Mineral allowing +3 Communication	Herbal Remedies Prereq: must have 1 Forest or Grassland at Locations used Allows +1 Population	Canoe Prereq: Wood. Uses 1 Forest to create 1 Sea Trans. Can use Wild Animal (fish) from adjacent Sea Locations	Blade Prereq: Metal Uses 1 Mineral/Oil +1 Attack	
Association Prereq: 1 Forest, Grassland or Wild Animal. Allows 1 Forest or 1 Wild Animal feed 1 Popn	Turbine Prereq: Mechanisms & Wheels. Use 1 Mineral or Forest. Provides Power	Metal Prereq: 1 Mineral/Oil at that Location & Furnace	Telephone Prereq: Cable, Electricity & Power source Uses 1 Mineral allowing +4 Communication	Pills Prereq: Herbal Remedies Uses 1 Crop allowing for +1 Population	Galley Prereq: Mechanisms & Wood or Metal. Uses 1 Forest/Mineral to create 1 Sea Trans. Allows 1 Population / Resource to be moved	Rifle/Cannon Prereq: Chemicals & Metal Uses 1 Mineral Adds +2 in Attacks	
Irrigation Prereq: Farming & Mechanisms. Allows Crops to be used twice before becoming Desert	Steam Prereq: Turbine Uses 1 Forest or 1 Mineral. Provides Power at cost of 1 Forest or Mineral per use	Glass/Crystal Prereq: 1 Mineral/Oil & Furnace	Radio Prereq: Glass/Crystal, Electricity & Power Source Uses 1 Mineral allowing +5 Communication	Contraception Prereq: Chemicals & Pills. Uses 1 Mineral allows choice to add Population during Population assessment	Sailing Ship Prereq: Fibres & Wood /Metal. Uses 1 Forest /Mineral to create 1 Sea Trans. Moves 1 Popn & 1 Resource	Machine Gun Prereq: Mechanisms, Rifle/Cannon & Cables Uses 1 Mineral. Adds +3 in Attacks	
Fertiliser/Pesticides Prereq: Chemicals & Mining. Double Crops. For every 2 Crops add 1 Pollution	Batteries Prereq: Chemicals & Electronics Uses 1 Mineral/Oil. Provides Power	Chemicals Prereq: Oils & Glass	Television Prereq: Radio, Chemicals & Power source Uses 1 Mineral allowing +6 Communication	Penicillin Prereq: Glass/Crystals & Pills Uses 1 Crop allowing for +1 Population	Propeller Ship Prereq: Mechanisms, Metal & Power. Uses 1 Min & 1 Forest. 1 Sea Trans carries 1 Pop & 1 Res moves 2 Sea Locns	Rocket Prereq: Chemicals & Metal. Uses 1 Mineral. +2 Attack at a range of 3 Locations	
Forestry Prereq: Breeding Convert 1 Crops or Grassland to 1 Forest	Engine Prereq: Oils, Metal & Turbine. Uses 1 Mineral & +1 pollution. Provides Power at a cost of 1 Mineral per use	Electronics Prereq: Metals & Power source	Computers Prereq: Television, Telephone & Power Uses 1 Mineral allowing +7 Communication	Surgery Prereq: Hygiene, Penicillin & Blades Allows for +1 Population	Cars Prereq: Metal, Mechanisms & Power. Uses 1 Min +1 Poll. 1 Land Trans moves 1 Pop & 1 Res 2 Locns	Nuke Prereq: Rockets & Nuclear Power. Uses 1 Mineral. +6 Attack at range of 3 Locns makes Desert at target	
Eco-Engineering Prereq: Irrigation & Forestry. Convert 1 Desert or 1 Pollution to Forest. Once per turn	Nuclear Prereq: Engines & Computers. Uses 1 Mineral. Provides Power	Lasers Prereq: Glass & Electricity +1 to Defence in combat	Cyberware Prereq: Computers & Transplants Uses 1 Mineral allowing +8 Communication	Genetics Prereq: Chemicals & Breeding Allows for +1 Population	Trains Prereq: Cables, Mechanisms & Power Uses 1 Min +1 Pollution. 1 Land Trans. Moves 1 Pop & 1 Res 3 Land	Plasma Prereq: Syth & Fusion Uses 1 Mineral +3 Attack at a range of 3 Locations	
Symbiosis Prereq: Association Allows for +1 Wild Animal +1 Population	Solar Prereq: Chemicals & Batteries. Uses 1 Mineral. Provides Power	Super-Conductors Prereq: Electronics & Nuclear Power	Artificial Intelligence Prereq: Cyberware & Power Source. Uses 1 Mineral. Allows +8 Comm's & +1 Defence	Scanners Prereq: Electricity, Glass/Crystals & Power Source. Uses 1 Mineral allowing for +2 Population	Planes Prereq: Mechanisms, Wood/Metal & Power. Uses 1 Forest/Min. 1 Land/Sea Trans. Move 1 Pop/Res any 2 Locn	Self Replicating Nanobots (SRN) Prereq: Bots & Power Source. Uses 1 Mineral Adds +3 Attack	
Bio-Integration Prereq: Symbiosis & Phero-Comms. Converting Wild Animals or Forests not required for Advancements	Fusion Prereq: Lasers & Superconductors. Uses 1 Mineral. Provides Power	Bots Prereq: Artificial Intelligence & Power Source. +1 to Def. +1 Bot Population requires no food	Syth Shields Prereq: Artificial Intelligence, Magnostrat & Power Source. Uses 1 Mineral allowing +9 Comm's & +2 Defence	Cloning Prereq: Surgery, Scanners & Power. Uses 1 Mineral to double Population	Bio-Transport Prereq: Animal & Ecosys. Convert 1 Animal to 1 Land/Sea Trans. Move 1 Pop /Res any 3 Locations	Agkir Prereq: Syth, Phased Materials & Power Source Uses 1 Mineral. +3 Attack to any Location	
Ecosys Prereq: Bio-Integration & Genetics Allows +1 Forest +1 Population remove 1 Pollution per Forest	Quotronic Prereq: Lasers & Magnostratic. Uses 1 Mineral. Provides Power	Phased Materials Prereq: Quotronic & Computers. +2 to Defence in combat	Phero-Comms Prereq: Chemicals, Bio-Integration & Power. Uses 1 Mineral allowing +10 Communication	Regeneration Prereq: Bots, Chemicals, Genetics & Power Source. If attacked Pop /Military units are not killed	Magnostrat Prereq: Computers, Super Conductors & Power. Uses 1 Mineral makes 1 Land Trans. Move 1 Pop & 1 Res any 5 Locations	Biological SRN Prereq: Cloning & SRN. +3 Attack. A successfully attacked unit becomes yours	
Autotrophy Prereq: Ecosys & Solar. No Crops or Domesticated Animals required to feed Population units	Magnaflux Prereq: Phased Materials Uses 1 Mineral. Provides Power & 1 Mineral back!	Quo Materials Prereq: Phased Materials & Power Source. +3 to Defence in combat	Quo-Comm Prereq: Quo Materials, Syth & Power Source No limit to Communications	Stasis Prereq: Phased Materials, Syth, Computers & Power Uses 1 Mineral. No Population ever dies	DTM Prereq: Agkir, Quo Materials & Power Source. Move any 1 unit to any Land or Sea Location on the board	Quo-Strike Prereq: Radio, Quo Materials & Power Source Attack any Location no Defense possible	

<p>[Basic] Association Prereq: 1 Forest, Grassland or Wild Animal at Locations used. Allows 1 Forest or 1 Wild Animal to support 1 Population</p>	<p>[Basic] Herding Prereq: 1 Wild Animal & 1 Grassland. Convert Wild Animals to Domestic Animal. Feeds 1 Population. Forest -> Grassland -> Desert</p>	<p>[Basic] Farming Prereq: 1 Grassland Convert Grassland to Cropland which feeds 1 Population. Grassland -> Crops -> Desert</p>	<p>[Basic] Breeding Prereq: Herding Double Domestic Animals</p>
<p>[Basic] Herding Prereq: 1 Wild Animal & 1 Grassland. Convert Wild Animals to Domestic Animal. Feeds 1 Population. Forest -> Grassland -> Desert</p>	<p>[Basic] Herding Prereq: 1 Wild Animal & 1 Grassland. Convert Wild Animals to Domestic Animal. Feeds 1 Population. Forest -> Grassland -> Desert</p>	<p>[Basic] Farming Prereq: 1 Grassland Convert Grassland to Cropland which feeds 1 Population. Grassland -> Crops -> Desert</p>	<p>[Basic] Breeding Prereq: Herding Double Domestic Animals</p>
<p>[Basic] Farming Prereq: 1 Grassland Convert Grassland to Cropland which feeds 1 Population. Grassland -> Crops -> Desert</p>	<p>[Basic] Herding Prereq: 1 Wild Animal & 1 Grassland. Convert Wild Animals to Domestic Animal. Feeds 1 Population. Forest -> Grassland -> Desert</p>	<p>[Basic] Farming Prereq: 1 Grassland Convert Grassland to Cropland which feeds 1 Population. Grassland -> Crops -> Desert</p>	<p>[Basic] Breeding Prereq: Herding Double Domestic Animals</p>
<p>[Medium] Irrigation Prereq: Farming & Mechanisms. Allows Crops to be used twice before becoming Desert</p>	<p>[Medium] Fertiliser/ Pesticides Prereq: Chemicals & Mining. Double Crops. For every 2 Crops add 1 Pollution counter</p>	<p>[Medium] Forestry Prereq: Breeding Convert 1 Crops or Grassland to 1 Forest</p>	<p>[Medium] Eco- Engineering Prereq: Irrigation & Forestry. Convert 1 Desert or 1 Pollution to Forest. Once per turn</p>
<p>[Medium] Irrigation Prereq: Farming & Mechanisms Allows Crops to be used twice before becoming Desert</p>	<p>[Medium] Fertiliser/ Pesticides Prereq: Chemicals & Mining. Double Crops. For every 2 Crops add 1 Pollution counter</p>	<p>[Medium] Forestry Prereq: Breeding Convert 1 Crops or Grassland to 1 Forest</p>	<p>[Medium] Eco- Engineering Prereq: Irrigation & Forestry. Convert 1 Desert or 1 Pollution to Forest. Once per turn</p>
<p>[Advanced] Symbiosis Prereq: Association Allows for +1 Wild Animal +1 Population</p>	<p>[Advanced] Bio-Integration Prereq: Symbiosis & Phero-Comms. Converting Wild Animals or Forests not required for Advancements</p>	<p>[Advanced] Ecosys Prereq: Bio-Integration & Genetics Allows +1 Forest +1 Population remove 1 Pollution per Forest</p>	<p>[Advanced] Autotrophy Prereq: Ecosys & Solar No Crops or Domesticated Animals required to feed Population units</p>

<p>[Basic] Mechanisms Prereq: Wood or Metals Use 1 Forest or 1 Mineral to gain this advancement</p>	<p>[Basic] Wheel Prereq: Wood/Metal Uses 1 Mineral/Oil or 1 Forest to gain this advancement</p>	<p>[Basic] Furnace Prereq: Wood Uses 1 Forest and adds 1 Pollution to gain this advancement</p>	<p> [Basic] Turbine Prereq: Mechanisms & Wheels. Use 1 Mineral or Forest. Provides Power</p>
<p>[Basic] Mechanisms Prereq: Wood or Metals Uses 1 Forest or 1 Mineral to gain this advancement</p>	<p>[Basic] Wheel Prereq: Wood/Metal Uses 1 Mineral/Oil or 1 Forest to gain this advancement</p>	<p>[Basic] Furnace Prereq: Wood Uses 1 Forest and adds 1 Pollution to gain this advancement</p>	<p> [Basic] Turbine Prereq: Mechanisms & Wheels. Use 1 Mineral or Forest. Provides Power</p>
<p>[Basic] Mechanisms Prereq: Wood or Metals Uses 1 Forest or 1 Mineral to gain this advancement</p>	<p>[Basic] Wheel Prereq: Wood/Metal Uses 1 Mineral/Oil or 1 Forest to gain this advancement</p>	<p>[Basic] Furnace Prereq: Wood Uses 1 Forest and adds 1 Pollution to gain this advancement</p>	<p> [Basic] Turbine Prereq: Mechanisms & Wheels. Use 1 Mineral or Forest. Provides Power</p>
<p> [Medium] Steam Prereq: Turbine Uses 1 Forest or 1 Mineral. Provides Power at cost of 1 Forest or Mineral per use</p>	<p> [Medium] Batteries Prereq: Chemicals & Electronics Uses 1 Mineral/Oil. Provides Power</p>	<p> [Medium] Engine Prereq: Oils, Metal & Turbine. Uses 1 Mineral & +1 pollution. Provides Power at a cost of 1 Mineral per use</p>	<p> [Medium] Nuclear Prereq: Engines & Computers. Uses 1 Mineral. Provides Power</p>
<p> [Medium] Steam Prereq: Turbine Uses 1 Forest or 1 Mineral. Provides Power at cost of 1 Forest or Mineral per use</p>	<p> [Medium] Batteries Prereq: Chemicals & Electronics Uses 1 Mineral/Oil. Provides Power</p>	<p> [Medium] Engine Prereq: Oils, Metal & Turbine. Uses 1 Mineral & +1 pollution. Provides Power at a cost of 1 Mineral per use</p>	<p> [Medium] Nuclear Prereq: Engines & Computers. Uses 1 Mineral. Provides Power</p>
<p> [Advanced] Solar Prereq: Chemicals & Batteries. Uses 1 Mineral. Provides Power</p>	<p> [Advanced] Fusion Prereq: Lasers & Superconductors. Uses 1 Mineral. Provides Power</p>	<p> [Advanced] Quotronic Prereq: Lasers & Magnostatic. Uses 1 Mineral. Provides Power</p>	<p> [Advanced] Magnaflux Prereq: Phased Materials Uses 1 Mineral. Provides Power & 1 Mineral back!</p>

<p align="center">[Basic] Oils</p> <p>Prereq: 1 Mineral/Oil at that Location</p>	<p align="center">[Basic] Fibres</p> <p>Prereq: 1 Grassland at that Location</p>	<p align="center">[Basic] Wood</p> <p>Prereq: 1 Forest at that Location</p>	<p align="center">[Basic] Metal</p> <p>Prereq: 1 Mineral/Oil at that Location & Furnace</p>
<p align="center">[Basic] Oils</p> <p>Prereq: 1 Mineral/Oil at that Location</p>	<p align="center">[Basic] Fibres</p> <p>Prereq: 1 Grassland at that Location</p>	<p align="center">[Basic] Wood</p> <p>Prereq: 1 Forest at that Location</p>	<p align="center">[Basic] Metal</p> <p>Prereq: 1 Mineral/Oil at that Location & Furnace</p>
<p align="center">[Basic] Oils</p> <p>Prereq: 1 Mineral/Oil at that Location</p>	<p align="center">[Basic] Wood</p> <p>Prereq: 1 Forest at that Location</p>	<p align="center">[Basic] Wood</p> <p>Prereq: 1 Forest at that Location</p>	<p align="center">[Basic] Metal</p> <p>Prereq: 1 Mineral/Oil at that Location & Furnace</p>
<p align="center">[Medium] Glass/Crystal</p> <p>Prereq: 1 Mineral/Oil & Furnace</p>	<p align="center">[Medium] Chemicals</p> <p>Prereq: Oils & Glass</p>	<p align="center">[Medium] Electronics</p> <p>Prereq: Metals & Power source</p>	<p align="center">[Medium] Lasers</p> <p>Prereq: Glass & Electricity +1 to Defence in combat</p>
<p align="center">[Medium] Glass/Crystal</p> <p>Prereq: 1 Mineral/Oil & Furnace</p>	<p align="center">[Medium] Chemicals</p> <p>Prereq: Oils & Glass</p>	<p align="center">[Medium] Electronics</p> <p>Prereq: Metals & Power source</p>	<p align="center">[Medium] Lasers</p> <p>Prereq: Glass & Electricity +1 to Defence in combat</p>
<p align="center">[Advanced] Super- Conductors</p> <p>Prereq: Electronics & Nuclear Power</p>	<p align="center">[Advanced] Bots</p> <p>Prereq: Artificial Intelligence & Power Source. +1 to Defence. +1 Bot Population requires no food</p>	<p align="center">[Advanced] Phased Materials</p> <p>Prereq: Quotronic & Computers. +2 to Defence in combat</p>	<p align="center">[Advanced] Quo Materials</p> <p>Prereq: Phased Materials & Power Source. +3 to Defence in combat</p>

<p>[Basic] Messenger Prereq: Animal Transport Requires 1 Domestic Animal allowing +1 Communication on Land Locations only</p>	<p>[Basic] Paper Prereq: Oils & Wood Uses 1 Forest allowing +2 Communication</p>	<p>[Basic] Cable Prereq: Metal & Batteries Uses 1 Mineral allowing +3 Communication</p>	<p>[Basic] Telephone Prereq: Cable, Electricity & Power source Uses 1 Mineral allowing +4 Communication</p>
<p>[Basic] Messenger Prereq: Animal Transport Requires 1 Domestic Animal allowing +1 Communication on Land Locations only</p>	<p>[Basic] Paper Prereq: Oils & Wood Uses 1 Forest allowing +2 Communication</p>	<p>[Basic] Cable Prereq: Metal & Batteries Uses 1 Mineral allowing +3 Communication</p>	<p>[Basic] Telephone Prereq: Cable, Electricity & Power source Uses 1 Mineral allowing +4 Communication</p>
<p>[Basic] Messenger Prereq: Animal Transport Requires 1 Domestic Animal allowing +1 Communication on Land Locations only</p>	<p>[Basic] Paper Prereq: Oils & Wood Uses 1 Forest allowing +2 Communication</p>	<p>[Basic] Cable Prereq: Metal & Batteries Uses 1 Mineral allowing +3 Communication</p>	<p>[Basic] Telephone Prereq: Cable, Electricity & Power source Uses 1 Mineral allowing +4 Communication</p>
<p>[Medium] Radio Prereq: Glass/Crystal, Electricity & Power Source Uses 1 Mineral allowing +5 Communication</p>	<p>[Medium] Television Prereq: Radio, Chemicals & Power source Uses 1 Mineral allowing +6 Communication</p>	<p>[Medium] Computers Prereq: Television, Telephone & Power Uses 1 Mineral allowing +7 Communication</p>	<p>[Medium] Cyberware Prereq: Computers & Transplants Uses 1 Mineral allowing +8 Communication</p>
<p>[Medium] Radio Prereq: Glass/Crystal, Electricity & Power Source Uses 1 Mineral allowing +5 Communication</p>	<p>[Medium] Television Prereq: Radio, Chemicals & Power source Uses 1 Mineral allowing +6 Communication</p>	<p>[Medium] Computers Prereq: Television, Telephone & Power Uses 1 Mineral allowing +7 Communication</p>	<p>[Medium] Cyberware Prereq: Computers & Transplants Uses 1 Mineral allowing +8 Communication</p>
<p>[Advanced] Artificial Intelligence Prereq: Cyberware & Power Source. Uses 1 Mineral. Allows +8 Comm's & +1 Defence</p>	<p>[Advanced] Syth Shields Prereq: Artificial Intelligence, Magnostrat & Power Source. Uses 1 Mineral allowing +9 Comm's & +2 Defence</p>	<p>[Advanced] Phero-Comms Prereq: Chemicals, Bio- Integration & Power. Uses 1 Mineral allowing +10 Communication</p>	<p>[Advanced] Quo-Comm Prereq: Quo Materials, Syth & Power Source No limit to Communications</p>

<p>[Basic] Hygiene Allows for +1 Population</p>	<p>[Basic] Bandage Prereq: Fibres Uses 1 Crop allowing for +1 Population</p>	<p>[Basic] Herbal Remedies Prereq: must have 1 Forest or Grassland at Locations used Allows +1 Population</p>	<p>[Basic] Pills Prereq: Herbal Remedies Uses 1 Crop allowing for +1 Population</p>
<p>[Basic] Hygiene Allows for +1 Population</p>	<p>[Basic] Bandage Prereq: Fibres Uses 1 Crop allowing for +1 Population</p>	<p>[Basic] Herbal Remedies Prereq: must have 1 Forest or Grassland at Locations used Allows +1 Population</p>	<p>[Basic] Pills Prereq: Herbal Remedies Uses 1 Crop allowing for +1 Population</p>
<p>[Basic] Hygiene Allows for +1 Population</p>	<p>[Basic] Bandage Prereq: Fibres Uses 1 Crop allowing for +1 Population</p>	<p>[Basic] Herbal Remedies Prereq: must have 1 Forest or Grassland at Locations used Allows +1 Population</p>	<p>[Basic] Pills Prereq: Herbal Remedies Uses 1 Crop allowing for +1 Population</p>
<p>[Medium] Contraception Prereq: Chemicals & Pills Uses 1 Mineral allows choice to add Population during Population assessment phase</p>	<p>[Medium] Penicillin Prereq: Glass/Crystals & Pills Uses 1 Crop allowing for +1 Population</p>	<p>[Medium] Surgery Prereq: Hygiene, Penicillin & Blades Allows for +1 Population</p>	<p>[Medium] Genetics Prereq: Chemicals & Breeding Allows for +1 Population</p>
<p>[Medium] Contraception Prereq: Chemicals & Pills Uses 1 Mineral allows choice to add Population during Population assessment phase</p>	<p>[Medium] Penicillin Prereq: Glass/Crystals & Pills Uses 1 Crop allowing for +1 Population</p>	<p>[Medium] Surgery Prereq: Hygiene, Penicillin & Blades Allows for +1 Population</p>	<p>[Medium] Genetics Prereq: Chemicals & Breeding Allows for +1 Population</p>
<p>[Advanced] Scanners Prereq: Electricity, Glass/Crystals & Power Source Uses 1 Mineral allowing for +2 Population</p>	<p>[Advanced] Cloning Prereq: Surgery, Scanners & Power. Uses 1 Mineral to double Population</p>	<p>[Advanced] Regeneration Prereq: Bots, Chemicals, Genetics & Power Source. If attacked Pop /Military units are not killed</p>	<p>[Advanced] Stasis Prereq: Phased Materials, Syth, Computers & Power Uses 1 Mineral. No Population ever dies</p>

<p>[Basic] Animal Transport Prereq: 1 Domestic Animal. Convert 1 Animal to Land Transport. Allows 1 Population to move 1 Location</p>	<p>[Basic] Cart/Carriage Prereq: Animal & Wood. Uses 1 Forest & 1 Domestic Animal to create 1 Land Trans. Population or Resource to move 1</p>	<p>[Basic] Canoe Prereq: Wood. Uses 1 Forest to create 1 Sea Trans. Can use Wild Animal (fish) from adjacent Sea Locations</p>	<p>[Basic] Galley Prereq: Mechanisms & Wood or Metal. Uses 1 Forest/Mineral to create 1 Sea Trans. Allows 1 Population /Resource to be moved</p>
<p>[Basic] Animal Transport Prereq: 1 Domestic Animal. Convert 1 Animal to Land Transport. Allows 1 Population to move 1 Location</p>	<p>[Basic] Cart/Carriage Prereq: Animal & Wood. Uses 1 Forest & 1 Domestic Animal to create 1 Land Trans. Population or Resource to move 1</p>	<p>[Basic] Canoe Prereq: Wood. Uses 1 Forest to create 1 Sea Trans. Can use Wild Animal (fish) from adjacent Sea Locations</p>	<p>[Basic] Galley Prereq: Mechanisms & Wood or Metal. Uses 1 Forest/Mineral to create 1 Sea Trans. Allows 1 Population /Resource to be moved</p>
<p>[Basic] Animal Transport Prereq: 1 Domestic Animal. Convert 1 Animal to Land Transport. Allows 1 Population to move 1 Location</p>	<p>[Basic] Cart/Carriage Prereq: Animal & Wood. Uses 1 Forest & 1 Domestic Animal to create 1 Land Trans. Population or Resource to move 1</p>	<p>[Basic] Canoe Prereq: Wood. Uses 1 Forest to create 1 Sea Trans. Can use Wild Animal (fish) from adjacent Sea Locations</p>	<p>[Basic] Galley Prereq: Mechanisms & Wood or Metal. Uses 1 Forest/Mineral to create 1 Sea Trans. Allows 1 Population to be moved on Sea Locations</p>
<p>[Medium] Sailing Ship Prereq: Fibres & Wood / Metal. Uses 1 Forest /Mineral to create 1 Sea Trans. Moves 1 Population & 1 Resources</p>	<p>[Medium] Propeller Ship Prereq: Mechanisms, Metal & Power. Uses 1 Min & 1 Forest makes 1 Sea Trans. 1 Pop & 1 Res moves 2 Sea Locations</p>	<p>[Medium] Cars Prereq: Metal, Mechanisms & Power. Uses 1 Min & +1 Poll makes 1 Land Trans. Moves 1 Pop & 1 Res to up to 2 Land Locations</p>	<p>[Medium] Trains Prereq: Cables, Mechanisms & Power Uses 1 Mineral & +1 Pollution makes 1 Land Trans. Moves 1 Pop & 1 Res 3 LandLocations</p>
<p>[Medium] Sailing Ship Prereq: Fibres & Wood / Metal. Uses 1 Forest /Mineral to create 1 Sea Trans. Moves 1 Population & 1 Resources</p>	<p>[Medium] Propeller Ship Prereq: Mechanisms, Metal & Power. Uses 1 Min & 1 Forest makes 1 Sea Trans. 1 Pop & 1 Res moves 2 Sea Locations</p>	<p>[Medium] Cars Prereq: Metal, Mechanisms & Power. Uses 1 Min & +1 Poll makes 1 Land Trans. Moves 1 Pop & 1 Res to up to 2 Land Locations</p>	<p>[Medium] Trains Prereq: Cables, Mechanisms & Power Uses 1 Mineral & +1 Pollution makes 1 Land Trans. Moves 1 Pop & 1 Res 3 LandLocations</p>
<p>[Advanced] Planes Prereq: Mechanisms, Wood/Metal & Power. Uses 1 Forest /Mineral makes 1 Land /Sea Trans. Move 1 Pop /Res any 2 Land/SeaLoc.</p>	<p>[Advanced] Bio-Transport Prereq: Animal & Ecosys. Convert 1 Animal makes 1 Land /Sea Trans. Move 1 Pop /Res any 3 Locations</p>	<p>[Advanced] Magnostrat Prereq: Computers, Super Conductors & Power. Uses 1 Mineral makes 1 Land Trans. Move 1 Pop & 1 Res any 5 Locations</p>	<p>[Advanced] DTM Prereq: Agkir, Quo Materials & Power Source. Move any 1 unit to any Land or Sea Location On the board</p>

<p>[Basic] Spear Prereq: Wood or Animal Uses 1 Forest or Animal Adds +1 in Attacks</p>	<p>[Basic] Bow Prereq: Fibres, Mechanisms & Wood/Animal/Metal Uses 1 Forest /Animal /Mineral. +1 Attack</p>	<p>[Basic] Blade Prereq: Metal Uses 1 Mineral/Oil +1 Attack</p>	<p>[Basic] Rifle/Cannon Prereq: Chemicals & Metal Uses 1 Mineral Adds +2 in Attacks</p>
<p>[Basic] Spear Prereq: Wood or Animal Uses 1 Forest or Animal Adds +1 in Attacks</p>	<p>[Basic] Bow Prereq: Fibres, Mechanisms & Wood/Animal/Metal Uses 1 Forest /Animal /Mineral. +1 Attack</p>	<p>[Basic] Blade Prereq: Metal Uses 1 Mineral/Oil +1 Attack</p>	<p>[Basic] Rifle/Cannon Prereq: Chemicals & Metal Uses 1 Mineral Adds +2 in Attacks</p>
<p>[Basic] Spear Prereq: Wood or Animal Uses 1 Forest or Animal Adds +1 in Attacks</p>	<p>[Basic] Bow Prereq: Fibres, Mechanisms & Wood/Animal/Metal Uses 1 Forest /Animal /Mineral. +1 Attack</p>	<p>[Basic] Blade Prereq: Metal Uses 1 Mineral/Oil +1 Attack</p>	<p>[Basic] Bow Prereq: Fibres, Mechanisms & Wood/Animal/Metal Uses 1 Forest /Animal /Mineral. +1 Attack</p>
<p>[Medium] Machine Gun Prereq: Mechanisms, Rifle/Cannon & Cables Uses 1 Mineral. Adds +3 in Attacks</p>	<p>[Medium] Rocket Prereq: Chemicals & Metal. Uses 1 Mineral. +2 Attack at a range of 3 Locations</p>	<p>[Medium] Nuke Prereq: Rockets & Nuclear Power. Uses 1 Mineral. +6 Attack at a range of 3 Locations creates Desert at target</p>	<p>[Advanced] Plasma Prereq: Syth & Fusion Uses 1 Mineral +3 Attack at a range of 3 Locations</p>
<p>[Medium] Machine Gun Prereq: Mechanisms, Rifle/Cannon & Cables Uses 1 Mineral. Adds +3 in Attacks</p>	<p>[Medium] Rocket Prereq: Chemicals & Metal. Uses 1 Mineral. +2 Attack at a range of 3 Locations</p>	<p>[Medium] Nuke Prereq: Rockets & Nuclear Power. Uses 1 Mineral. +6 Attack at a range of 3 Locations creates Desert at target</p>	<p>[Medium] Rocket Prereq: Chemicals & Metal. Uses 1 Mineral. +2 Attack at a range of 3 Locations</p>
<p>[Medium] Self Replicating Nanobots (SRN) Prereq: Bots & Power Source. Uses 1 Mineral Adds +3 Attack</p>	<p>[Advanced] Agkir Prereq: Syth, Phased Materials & Power Source Uses 1 Mineral. +3 Attack to any Location</p>	<p>[Advanced] Biological SRN Prereq: Cloning & SRN +3 Attack. A successfully attacked unit becomes your unit</p>	<p>[Advanced] Quo-Strike Prereq: Radio, Quo Materials & Power Source Attack any Location no Defense possible</p>

<p>[Basic] Herding Prereq: 1 Wild Animal & 1 Grassland. Convert Wild Animals to Domestic Animal. Feeds 1 Population. Forest → Grassland → Desert</p>	<p>[Basic] Herding Prereq: 1 Wild Animal & 1 Grassland. Convert Wild Animals to Domestic Animal. Feeds 1 Population. Forest → Grassland → Desert</p>	<p>[Basic] Farming Prereq: 1 Grassland Convert Grassland to Cropland which feeds 1 Population. Grassland → Crops → Desert</p>	<p>[Basic] Wood Prereq: 1 Forest at that Location</p>
<p>[Basic] Mechanisms Prereq: Wood or Metals Use 1 Forest or 1 Mineral to gain this advancement</p>	<p>[Basic] Mechanisms Prereq: Wood or Metals Use 1 Forest or 1 Mineral to gain this advancement</p>	<p>[Basic] Furnace Prereq: Wood Uses 1 Forest and adds 1 Pollution to gain this advancement</p>	<p>[Basic] Wood Prereq: 1 Forest at that Location</p>
<p>[Medium] Glass/Crystal Prereq: 1 Mineral/Oil & Furnace</p>	<p>[Medium] Chemicals Prereq: Oils & Glass</p>	<p>[Medium] Electronics Prereq: Metals & Power source</p>	<p>[Basic] Metal Prereq: 1 Mineral/Oil at that Location & Furnace</p>
<p>[Basic] Herding Prereq: 1 Wild Animal & 1 Grassland. Convert Wild Animals to Domestic Animal. Feeds 1 Population. Forest → Grassland → Desert</p>	<p>[Basic] Herding Prereq: 1 Wild Animal & 1 Grassland. Convert Wild Animals to Domestic Animal. Feeds 1 Population. Forest → Grassland → Desert</p>	<p>[Basic] Farming Prereq: 1 Grassland Convert Grassland to Cropland which feeds 1 Population. Grassland → Crops → Desert</p>	<p>[Basic] Wood Prereq: 1 Forest at that Location</p>
<p>[Basic] Mechanisms Prereq: Wood or Metals Use 1 Forest or 1 Mineral to gain this advancement</p>	<p>[Basic] Mechanisms Prereq: Wood or Metals Use 1 Forest or 1 Mineral to gain this advancement</p>	<p>[Basic] Furnace Prereq: Wood Uses 1 Forest and adds 1 Pollution to gain this advancement</p>	<p>[Basic] Wood Prereq: 1 Forest at that Location</p>
<p>[Medium] Glass/Crystal Prereq: 1 Mineral/Oil & Furnace</p>	<p>[Medium] Chemicals Prereq: Oils & Glass</p>	<p>[Medium] Electronics Prereq: Metals & Power source</p>	<p>[Basic] Metal Prereq: 1 Mineral/Oil at that Location & Furnace</p>

Extra Cards to add for 5–8 players

