PRINCIPIA: Master of Science

Playing Manual

INTRODUCTION

PRINCIPIA: Master of Science is a simulation game with the theme of European science in 17th century. Choose one of 12 real scientists from the era of Isaac Newton and proceed with your research to unravel the secret behind the "Final topics".

About the game

Goal of the game

The ultimate goal of this game is to unravel the secret behind the "final topic" and to become the "master of science".

To start the research of "final topic", you need to become an authority of several other "topics" by publishing various papers.

Other than the ultimate goal, what you need to aim for is to publish papers as many as you can since you can become an authority of the topic by submitting many papers, and your "fame" will rise by your papers being accepted.

Starting the game

The starting point of the game is the year of 1667, April, 12 scientists including you are visible.

Each scientists can perform one command per months. (Some commands like "Trade" can be executed multiple times)

Order of scientist's turn is chosen randomly each months.

Ending the game

The game ends when the player solves the "final topic".

Also when the player chooses to retire, or dies of old age, resulting in game over.

How to Start

In the title screen, below commands can be used. You can start the game by choosing "New Game". Also, "Demo mode" which you can just observe all the scientists without actually playing the game is available.
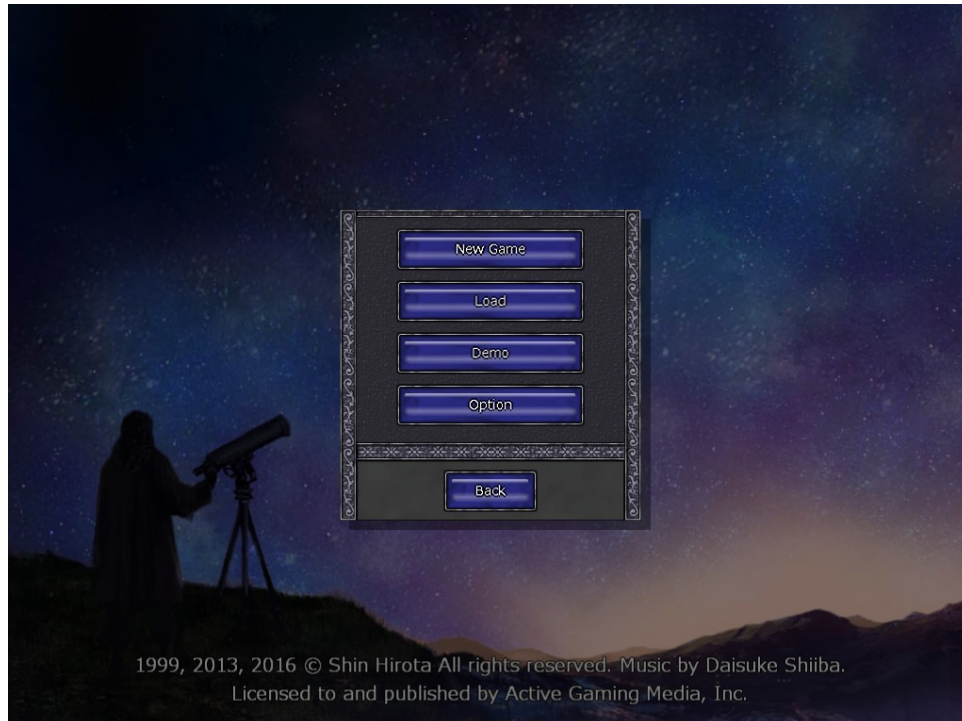

Fig 1 Title menu

New Game

Start the new game and choose one scientist as a player.

Load

Load the save data to continue the game.

Demo

This will start the new "Demo" game but you won't choose any scientists. (→p.21　Demo Mode)

Option

"Language", "Message Speed", etc. can be customized. (→p.23 Option)

Game Screen

You can switch the screen by choosing one destination from the "screen switching window" in the top-right.

There are four screens "Map", "Laboratory", "Topic list", "System" and each screen has its corresponding commands.

Fig 2 Screen switching window

Map

The map of Europe is shown in this screen. Mainly the commands not related to the research can be performed.

Fig 3 Map screen

The stars below the scientist's icon represents the fame, and paper icon represents the number of papers published.

[Example: Scientist with "Fame 300, Papers 2"]

Star : 100 Fame each
Papers : Published

(→p.7 Available commands on Map)

Laboratory

Your laboratory is shown in this screen. Mainly the commands related to the research can be performed.

Fig 4 Laboratory screen

(→p.14 Available commands in Laboratory)

Topics List

The screen where you can view the list of topics which you can choose to research. Some topics need to be unlocked to view their details.

The scientist's icon next to the topic represents the authority.

Fig 5 Topics list screen

To become an authority of the topic, you need to publish the highest number of papers for each topics.

The topic in the center is "final topic" which can be unlocked by becoming an authority in multiple topics.

System Screen

This is the screen where you can save, load, change message speed, etc.

(→p.18 Available Commands for System)

Command

Available commands on Map

Fig 6 Commands on Map

Move

[City icon]→[Move]

[⇄ Change button]→[Move]

Move to the different city. Requires enough fund depends on the distance of moving.

Lectures

[University icon] → [Lectures]

[⌗ Study button] → [Lectures]

Fig 7 Lectures

Increase the knowledge of particular field. You need to be located in the city with a university, also requires 30 funds to perform.

The increase rate of knowledge is larger than that of "Reading".

Reading

[⌗ Study button] → [Reading]

Increase the knowledge of particular field.

The increase rate of knowledge is smaller than that of "Lectures".

Practise

[⌗ Study button] → [Practise]

Increase the skill of each area, machining, and sketch.

Compose (edit) Papers

[Paper button]→[Compose]

Laboratory : [Discoveries]→[Compose Paper]

Compose the paper based on your discoveries.

If the discovery type is "Theory" or "Existence", this can be performed instantly.

In case of "Invention", you need to invent the prototype before performing.

In case of "Sketch", you need to complete the sketch before performing.

You can choose this command for completed papers if it is not submitted, in this case the command name becomes "Edit Paper".

Submit Paper

[Paper button]→[Submit]

Laboratory : [Discoveries]→[Submit Paper]

Submit your paper.

Halt Publication

[Paper button]→[Halt Publication]

Laboratory : [Discoveries]→[Halt Publication]

Halt the publication of your paper which is once submitted and published. This is required when you want to edit the paper after submission.

Criticize Paper

[Paper button]→[Criticize]

Criticize the paper with its type as "Theory".

Since those papers are already published, it is not an easy task to pass judgment, however if the member of the society is different from the day the paper is accepted, your criticism might pass.

Once this command succeeds, the paper will be halted its publication.

Correspond

[Person icon]→[Correspond]
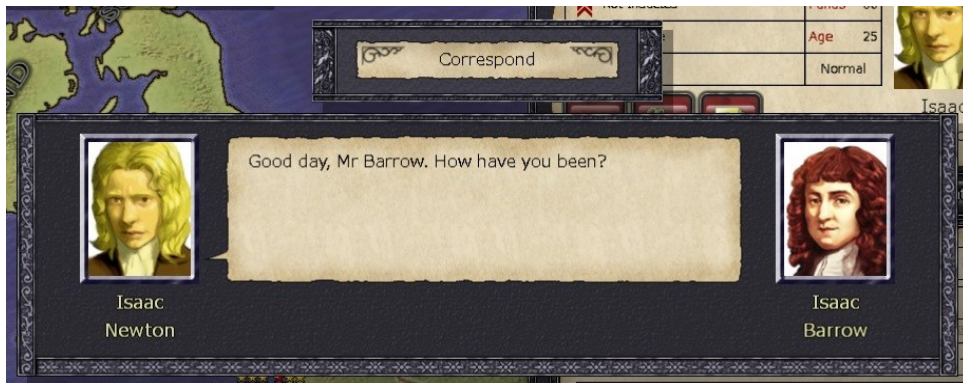
[Change button]→[Correspond]

Fig 8 Correspond

Correspond with the other scientists in the same city. If your fame is much lower than the other or amity with him is too low, this command might fail. If it succeeds, the amity increases.

Financial Aid

[Person icon]→[Letter]→[Financial Aid]
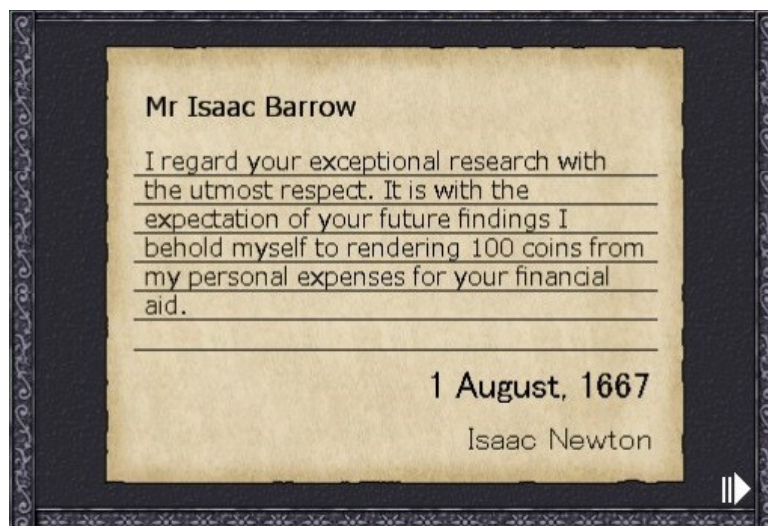
[Letter button]→[Financial Aid]

Fig 9 Financial aid

Send a letter to the other scientists to aid them with 100 funds. If it is accepted, the amity increases and your funds decreased by 100. If it is rejected, you won't lose any funds.

Defame

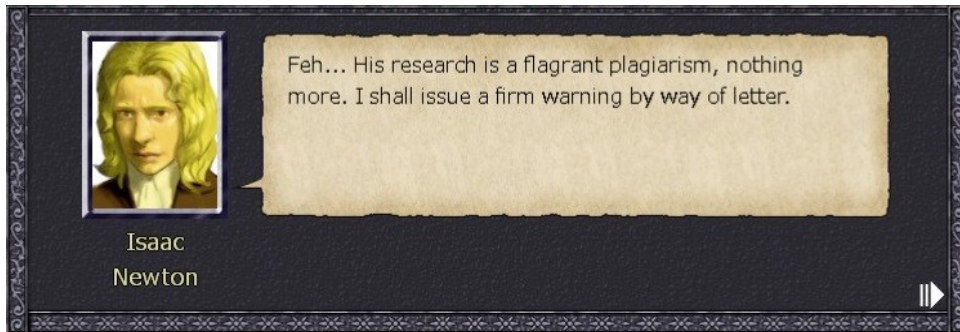[Person icon] → [Letter] → [Defame]

[Letter] → [Defame]

Fig 10 Defame

Defame the other scientists. Amity between him will decrease, and sometimes your fame is decreased. Also the opponent's status might turns into "Lethargic".

Purchase

[Trade button] → [Purchase]

You can purchase the items (only invented ones).

Each item requires certain amount of funds.

Trade command can be performed multiple times in the same turn.

Sell

[Trade button] → [Sell]

You can sell the items from your inventory.

The price will be the half of its original price.

Trade command can be performed multiple times in the same turn.

Apply for the Society

[Society icon]→[Apply]

[✉️ Letter button]→[Apply]

Fig 11 Apply the society

Apply for the society (Academy of Science). Your fame and amity with the existing members will be counted for its success rate.

You need to be located in the city with the society to perform this command.

This command cannot be performed if you are already the member of the society.

Resign from the Society

[Society icon]→[Resign]

[✉️ Letter button]→[Resign]

Resign from the society. If you are not the member of the society, this command cannot be performed.

Change Profession

[Change button]→[Change Profession]

Change your job using this command.

Each jobs are linked with a particular location, so sometimes you need to move to the location before changing. Each profession requires certain amount of a fame. There are special professions for specific scientists.

Rest

[Change button]→[Rest]

Does nothing.

Retire

[Change button]→[Retire]

By performing this command, you will retire from the research. The game ends upon the execution of this command, and you'll see the result screen.

Information

[Info button]

You can view the information of person, discovery, etc..

This command can be performed multiple times in the same turn.

Available commands in Laboratory

図12 研究室画面のコマンド

Select Topics

[Topic menu] → [Select]

Select the new topic to research.

This command can be performed only when there is no topic chosen at this point.

Available topics varies with scientist's knowledge and the area. "Final topic" can be chosen only after fulfilling certain requirements.

This command can be performed multiple times in the same turn.

Choose Item

[Item button]

Choose the items for the research. Up to two can be equipped.

For example, "Prism" or "Lens" can be selected to have a research of "Optics".

The command "Experiment" can be chosen after equipping at least one item.

Fig 13 Choose item

Experiment*(Observation/Examination/Calculation)

[Topic menu]→[Experiment]*

* The command menu changes depends on the topic (Astronomy: Observation, Biology: Observation, Mathematics: Calculation)

Perform an experiment for your topic. The progress can be affected by the scientist's skill or equipped items.

Progress can be improved if you perform it in the city with observatories (Only applies to Astrology)

Fig 14 Experiment

Reasoning

[Topic menu]→[Reasoning]

Perform a reasoning about the topic. The progress of reasoning is affected by the scientist's knowledge or overall research histories (cf. Experiments).

Suspend Experiment

[Topic menu]→[Suspend]

Suspend the experiment about the topic.

When you suspend the experiment, you can keep the discoveries but the progress of experiment or reasoning will be lost.

This command can be performed multiple times in the same turn.

Discovery

The table 1 shows the status of discovery buttons.

Table 1 Status of discovery button

Type of Discovery	Status	Available Commands	Appearance of icon
Undiscovered	Undiscovered	(Nothing)	
Theory	Discovered	Prove Theory Compose Paper	
Existence	Discovered	Compose Paper	
Sketch	Discovered / Not created	Sketch	
	Discovered / Created	Compose Paper	
Invention	Discovered / Not created	Create Prototype	
	Discovered / Created	Compose Paper	
Common	Papers created	Edit Paper / Submit Paper	
	Papers submitted	Halt publication	

Prove Theory

[Discovery button]→[Prove Theory]

This command can be performed for the discovered theory.

Completion rate of the theory increases by performing this command, but since each theory has specific completion, it does not go beyond that value.

It is recommended to "Prove Theory" a few times before composing the paper and increase the completion rather than start the paper right after the discovery. The theory with higher completion will have higher success rate of the paper being accepted.

Prototyping

[Discovery button]→[Prototyping]

This command can be performed for the discovered invention.

 "Invention" can be made into the paper only after the prototyping is complete.

The success rate of prototyping depends on the difficulty of the invention, and scientist's skills.

Sketch

[Discovery button]→[Sketch]

This command can be performed for the discovered sketches.

 "Sketch" can be made into the paper only after the sketch is complete.

The success rate of sketch depends on the difficulty of the figure, and scientist's skills.

Compose Papers

(→P.9 Compose (edit) Papers)

Available Commands on Topics screen

Each scientist's status of researching topics can be viewed in this list.

These commands can be performed multiple times in the same turn.

Available Commands for System

Encyclopedia

You can access to each encyclopedias from here. (→ p. 21 Demo Mode)

Save

Save the current data. Up to five save slots are available.

Load

Load the other save file or auto-save. Current progress will be lost.

Start Demo from here

Start the Demo mode by changing the current scientist into auto-mode.

End Game

End the game and go back to title screen.

Parameter

Person

Table 2 Parameter of the person

Parameter		Description
Fame		Required for "Change Profession", "Correspondence", "Apply Academy", or being chosen as a member of Academies in the yearly meeting on January.
Funds		Required for "Move, "Lectures", "Purchase", "Financial Aid".
Age		The scientist dies if he reaches certain age.
Status		This can be one from "Normal", "Lethargic", "Discouraged" Normal : Normal state. Lethargic : Sometimes the scientist becomes lethargic by being defamed. Research command cannot be performed in this state. Discouraged : Sometimes the scientist becomes discouraged if the paper is rejected. Research command cannot be performed in this state.
Academies		Academy in which the scientist is affiliated.
Title		The title in the academy.
Location		Need to have the same location in case of "Correspondence", "Apply Academy", "Lectures". The city with observatories improves the progress of observation.
Knighthood		Conferment can occur under a certain circumstance.
Profession		Current profession.
Income		Income of each profession. You get funds every months by this amount.
Machining	Aptit.	Aptitude is related to the increase rate of skills (Max: S, Min: E)
	Skill	Skill is related to the success rate of prototyping.
Drawing	Aptit.	Aptitude is related to the increase rate of skills (Max: S, Min: E)
	Skill	Skill is related to the success rate of sketches.
Astrology (or else)	Aptit.	Aptitude is related to the increase rate of skills and knowledge (Max: S, Min: E)
	Know.	Higher the knowledge value, more available topics. This also affects the progress of reasoning.
	Skill	This affects the progress of experiments (observation/examination/calculation).

Academies

Table 3 Parameter of acadamy

Parameter	Description
Location	Same location is required if the scientist wants to apply.
Authority	This parameter increases when a new scientist joins the academy or publish a new paper. This will affect the increase rate of scientist's fame.

Observatories

Table 4 Parameter of observatory

Parameter	Description
Location	The progress of observation will be improved if the scientist is located in the same location.
Equipment	This will affect the progress of observation.

Universities

Table 5 Parameter of university

Parameter	Description
Location	The same location is required if the scientists want to perform "Lectures".
Academic	This will affect the increase rate of scientist's knowledge.

Papers

Table 6 Parameter of paper

Parameter	Description
Type	One of "Theory", "Existence", "Sketch", "Invention".
Completion	Higher the value, higher the acceptance rate.
Status	One of "Written" or "Published".
Academies	Academy which published this paper.
Rating	This will affect the increase rate of scientist's fame when the paper is published.

Demo Mode

This is the mode which the player just view the progress of the game with all the scientists set as AI mode.

AI's Turn

In the normal mode, the setting of AI's turn is only "show all" or "text only", but in this demo mode, it is possible to have "show selected".

With this, you can observe the particular scientist, so you might learn something from AI's movement.

Go to Manual Mode

When you want to go back to manual mode, press "System" button in the top-right. Then choose "Manual Mode".

Fig 15 Demo mode

Encyclopedia

 "Encyclopedia" can be viewed from the option menu in the title screen, or system menu during the game.

Items

All the unlocked items are shown in here.

Sketches

All the sketches drawn by the player can be viewed here.

Event Images

All the event images occurred during the player's turn can be viewed here.

Fig 16 Item encyclopedia

Option

Below settings can be modified from "Option" in the title screen.

Language

Japanese or English can be chosen.
The game language is selected based on the system language of your PC, but if not, please change from here.

Message Speed

Can be chosen from "Fast", "Normal", "Slow", "Pause".

Opening

To view the opening demo upon the start of the game.

Tutorial

To have a tutorial upon the start of the game.

AI's Turn

Can be chosen from "Show All" or "Text Only".

"Show Selected" is only available for the demo mode.

AI's Type

The difficulty of the AI can be chosen from "Lazy", "Normal" or "Strong".

Encyclopedia

Encyclopedias can be accessed from here.

Music Room

All the BGMs can be accessed from here.

Initialize the Data

Initialize the local data. Language setting, encyclopedia data will be also initialized.

Contact

Homepage: http://playism-games.com/
mail: support@playism.jp