

The History of Mathematics

Hook

Greetings, time-travelers. Welcome to the fifth centennial time-tagging competition. This year's goal: determine the winner of the Cubic Equation Math duel in 1547. To advance to qualifiers, you must first win the Egypt lightning round by earning history points tagging famous mathematical relics throughout time and space. Manage your resources wisely – there is always less time than you think. Remember, no two time-travelers can be in exactly the same place at the same time. Good luck!

Theme

Players are time-traveling hooligans playing a game of “history tagging” where they try to be present (or slightly affect the outcome) of historical events, trying to get their names associated with famous mathematical innovations. We're first releasing ancient Egypt, but (as you can tell from the hook above) we have plans to release a series of eras up to and beyond the Renaissance.

Overview

- Player Count: 3-4
- Playtime: ~60 minutes (first-time players, includes rules explanations)
- Ages: 11+

The History of Math is a competitive, time-traveling-themed, math-centered game. During the game, Egypt is represented by a timer track. Players take actions to move through time along the track. Each action takes a certain amount of time that the Player commits to spending (which moves their marker along the track). When an era ends, Players add up their final History Points to determine the winner.

Components

- Egypt time track
- Study cards numbered 1-9, with 3 copies each
- 10 Egyptian Relic cards

In 4 different colors:

- Individual Player Mats with:
 - History Point Tracker
 - Study Card Holding Area
 - Innovation Goals
- Several identical markers per color.

Objective

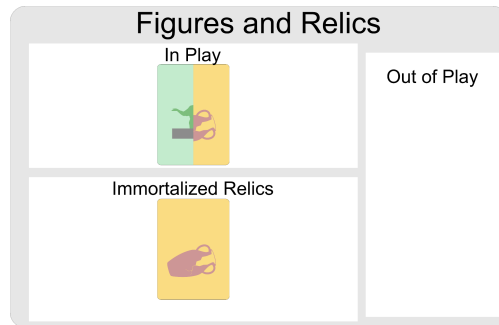
Players are attempting to achieve the most **History Points** by the end of the Egyptian era. They receive History Points by sponsoring relics, gaining political points, and advancing innovations.

Setup

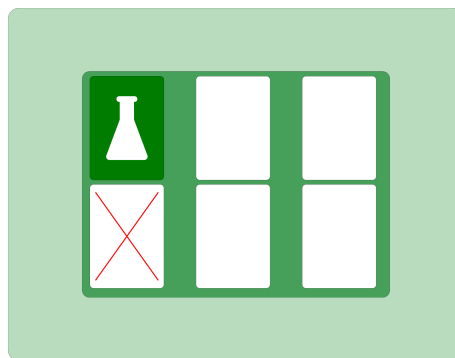
Use the Player markers to randomly decide who starts. Place the Player markers on the first few open spaces on the Egyptian timer track, with no Player occupying the same space. The Player who goes ‘first’ should be at the start of the track (space 1), behind the other Players. There are marks indicating “Relic events” on the the time track, with a different abbreviation for each Relic, as well as a reminder of what card(s) are needed to sponsor it (see Relics, below).



These marks indicate the time (roughly) that each Relic was created in history. Place each Egyptian Relic card along the outside edge of the time track near its own mark. The **Calendars** relic starts in play, so place that relic on the relic mat in the “In Play” area.



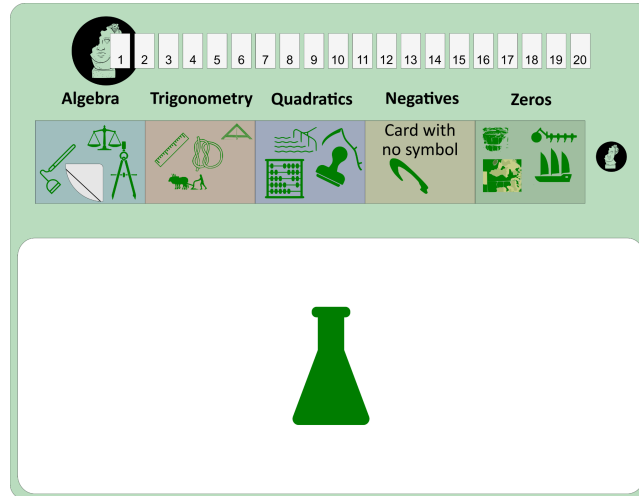
Shuffle the Study cards, and deal 3 to each Player. Then deal 4 cards, face-up, to the 'market'. Place the rest of the deck, face-down, on the Study Mat.



Place one of each Player token on the Wealth track at 1 and on the Politics track at 1.



Lastly, each player places one of their tokens on their Player mats at "0" on the History track.



It's time to start!

The Timer Tracks and Actions

The timer track represents the passage of time. The Egypt track has **Yellow Actions**, **Green Actions**, and **Red Actions**, with 60 time spaces in total. A Player can only take an action that matches the color of the track they are on when they **start** the action.

Egypt Math Timeline - 2010 to 1220 BCE

Yellow Action(s):

- Labor** (🕒) ⇒ 🕒
- Sponsor** (🕒 + 🕒) ⇒ sponsor a relic
- Salvage** (🕒) ⇒ If 0-1 🕒, draw a card from discard pile and discard 1 card

Green Action(s):

- Ponder** (🕒) ⇒ draw 1 study card
- Sift** (🕒) ⇒ draw 1 study card and discard 1

Red Action(s):

- Lobby** (🕒) ⇒ 🕒
- Sabotage** (🕒 + 🕒) ⇒ steal 1 card from opponent
- Immortalize** (🕒 + 🕒) ⇒ immortalize a relic

Timeline Details:

- Starts to play:** CAL (Calendars) 5, AKT (Akhet Tablet) 8, BP6 (Babylon Papyrus 6619) 9, RP (Resener Papyrus) 6
- Timeline Spaces:** 1 to 60. Spaces are color-coded: Yellow (1-15), Green (16-30), Red (31-45), Yellow (46-60).
- Relics:** LMP (Lahun Mathematical Papyrus) 7, MP (Moscow Papyrus) 7, KnC (Knotted Cord) 4, RhP (Rhind Papyrus) 2, PLS (Plumb Level of Sennedjem) 5, PA (Papyrus Anataxi) 3
- Player Actions:** 4 Egyptian (🕒) ⇒ 🕒, 3 Egyptian (🕒) ⇒ 🕒

Players receive additional, unique action options by sponsoring Relics. All base color-linked actions and costs are printed on every era's time tracker, and unique actions are described on the Relic, Figure, and Innovation cards.

Play Tip: *Focus on the action immediately available, based on the color of the hourglass at the start of the action. As the game continues, the rhythm of actions will become clear.*

To take an action:

1. The Player on the space with the lowest value number on the track always takes the next action, and must take an action that matches the color they are on. Every action has a time cost, and might also have a resource cost (like wealth, political points, etc.), or require specific study card discards.

Example 1: In Egypt, the Labor action costs 4 time, which looks like this:



2. The Player pays the cost for their chosen action by moving their marker ahead the noted number of spaces on the track, skipping every space that has an opponent's piece - even if they wouldn't land on the opponent.

The consequence of skipping is that even if a Player spends 4 time, they may move forward 5-7 spaces on the track, depending on the number of opponent spaces they skip.

3. All study cards have a time symbol on it valued 1-3. After moving, a player may discard exactly one (1) study card to increase or decrease the time they spend based on the time number on the card. If a study card discard would make a time cost go to zero, instead set the time cost to 1.
4. The Player then pays the rest of the resources for the action (wealth, politics, cards, etc.). If the Player cannot pay the resource cost in full, they move their marker back and must take a different action.

5. The Player then follows the text on the right side of the \Rightarrow . The Player does as much of that action as possible, and does not have to cancel the action if they can't take it in full.

Example 1a: In Egypt, after taking the Labor action, the Player receives 1 wealth ().

It is possible that a player takes an action and is still the furthest behind on the time track. In that case, the Player keeps taking actions until they pass an opponent.

Events: Some margins between track spaces have events (most notably, relics entering play). When the **last** Player in sequence passes an event space, the event automatically triggers after the Player completes their action.

Resources and Actions



History Points: Make your mark on history! The Player with the most history points at the end of the game wins. Players mostly receive history points by immortalizing a Relic, advancing Innovations at the end of an era, or investing in Wealth and Politics.



Wealth: Progress requires capital. Wealth represents a Player's financial sway over the current civilization, and is usually linked to **yellow actions**.



Political Points: Sometimes a Player needs the people in power on their side. Political points represent a Player's ability to influence the power-brokers of the civilization, and are usually attributed to **red actions**.

Common Yellow Actions: Usually have to do with wealth, relic, or figures.

- **Labor** - Allows a Player to gain wealth

- **Sponsor** - Allows a Player to sponsor a Relic
- **Salvage** - Allows a Player to draw a Study card from the discard pile, discarding one of their own cards in return

Common Green Actions: Usually have to do with gathering study cards or advancing innovations

- **Ponder** - Allows a Player to draw a Study card from the market
- **Sift** - Allows a Player to discard 1 card to draw 1 Study card from the market or the top of the draw deck

Common Red Actions: Usually have to do with hindering your opponent(s) in some way, and represents political actions

- **Lobby** - Allows a Player to gain political points
- **Sabotage** - Allows a Player to steal study cards
- **Immortalize** - Allows a Player to immortalize a Relic

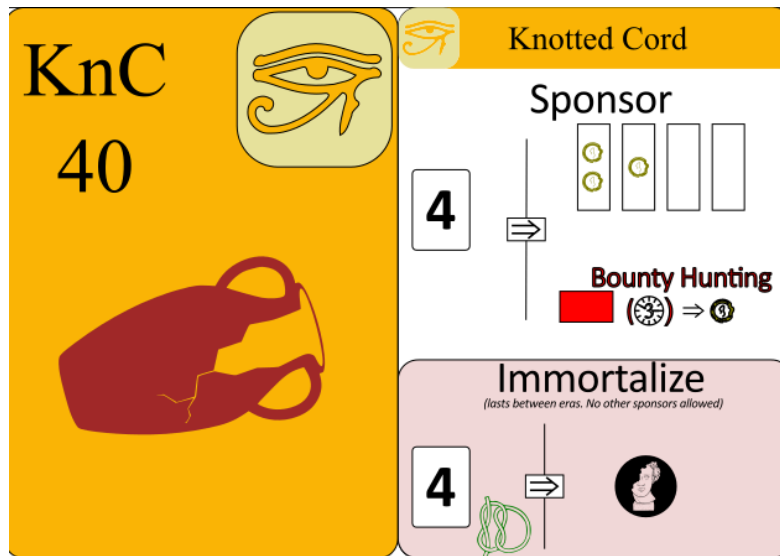
Study Cards and Resources

This section explains Relics and Innovations. Interacting with Relics and Innovations requires resources (Wealth points, Political points) and Study cards. Study cards are usually gained through the green Ponder or Sift actions, the yellow Salvage action, or the red Sabotage action.

Each Study card includes a number and a word related to a unique mathematical application, usually a tool or structure (such as the number 3 and a scythe) as well as a timer track cost modifier valued between 1 and 3.

Taking actions related to a Relic usually requires spending one or more Study cards. These costs are explained on the study cards themselves.

Relics



Relics are great artifacts of the past. Players can **sponsor** them to be involved with their development, and once sponsored, they can **immortalize** them to ensure that they last beyond their initial age.

Sponsor: Any number of Players can sponsor a Relic at the same time. Sponsoring usually grants an alternate action the Players can take at any time during the game.

Immortalize: Any Player that is currently sponsoring a Relic can immortalize it. Once immortalized, no other Player can sponsor it, and any sponsoring Player remains a sponsor. For the Egypt-Only version of the game, this is a way to gain history points, but has more implications in the full game.

Innovations

Innovations are extra endgame victory points. At the end of the Egyptian era, players can discard one (1) card that matches any of the symbols on the Innovation track to advance that innovation. Advancing an innovation in Egypt grants 1 History point. There are more things that innovation points do in the full game.

Game End

After the last player leaves the timer track, the game ends! All players convert their current wealth and politics points to History Points and discard symbols to advance their Innovations for

more History Points. Whoever has the most History Points wins! In the event of a tie, the winner is the last player to have taken an action.