

Origins: An Evolutionary Journey

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Origins: An Evolutionary Journey is a classroom learning tool designed to help students retain and recall core concepts from introductory biological anthropology courses in an active and engaging way.

While there is no one way to play **Origins: An Evolutionary Journey**, there are several possible mechanisms of play outlined in the following instructions, along with ideas for modifying the game for use in both small and large classrooms.

The game includes basic question cards and Forces of Evolution cards that can shake up game play. Depending on time constraints, instructors and/or students can decide whether or not to include these cards.

Note

If you have received a free copy of this deck, we have determined that there was a printing error in the set you received:

In the Green section, the Big Bang card for “Skin color” features “Microevolution” on its flip side; likewise, the Missing Link card discussing small changes in allele frequency features “Melanin / UV radiation / Melanocyte” on its flip side.

Please discard or edit these cards.

If you purchased a copy of this deck, your set may also have this error. Please contact us at saquilina@wwnorton.com for additional assistance.

Question Card Subjects

Each **Origins: An Evolutionary Journey** question card is color-coded for a particular subject. These colors can be used to easily find particular groups of cards in advance of game play.

Fundamentals (Pink)
Genetics (Blue)
Evolution and Variation (Green)
Primates (Orange)
Origins and Transitions (Red)
Being Human (Purple)

Question Card Types

Each **Origins: An Evolutionary Journey** deck includes nine different types of question cards. Each card states what kind of card it is and its instructions for play.

- **ID** cards have an image to identify.
- **Label-it** cards have a drawing to label.
- **Guess Who?** cards describe an important person, species, and such to identify.
- **IQ Test** cards have three statements with one incorrect statement to identify.
- **Fact or Fiction?** cards have a single statement to identify as fact or fiction.
- **Organizer** cards have content to organize by size, time, and so on.
- **Missing Link** cards have a statement to complete.
- **Big Bang** (ALL PLAY) cards have a word, and each team must state as many related words as they can. The team with the most related words wins.
- **ARTifact** (ALL PLAY) cards have a word to draw. One member from each team draws the word, and the rest of the team members guess. The team to first identify the drawing wins.

Note: ALL PLAY cards involve all teams and team members answering or working on the question at once. Answering ALL PLAY cards can get rowdy, so make sure to pay close attention to ensure that answers are correct and counted.

Forces of Evolution Cards

There are four types of Forces of Evolution cards. Each card states its type and instructions for play. Prior to answering a question card, all teams can choose to play one of their Forces cards. For most mechanisms of play, teams start with at least one of each type of Forces card. *For more fun, add extra Forces cards to the draw deck, but be careful not to add too many (you can judge based on how large the draw deck is).*

- **Bottle Neck** cards make an ALL PLAY card a card played by one team only. The team playing the Bottle Neck card chooses the team to answer the question. For a Big Bang card, the answering team must state five related words to win. For an ARTifact card, only the answering team draws and guesses. *We recommend setting a time limit or limit to the number of guesses before you start.*
- **Founder Effect** cards allow a team to decide to answer the card themselves instead of reading it to the opposing team.
- **Extinction** cards allow a team to reject a card that an opposing team reads to them, forcing the team doing the reading to draw another card for them to answer. The rejected card is placed back in the draw deck, and the deck of cards is then shuffled.
- **Natural Selection** cards allow a team to steal a player from another team. The stolen player must stay on his or her new team for the duration of the game. Each individual can be stolen only once.

Note: After a Forces card is played and the action carried out, game play continues normally.

Mechanisms of Play

Try the following suggested game play mechanisms or make up your own!

Hardy-Weinberg Equilibrium: For any class size with limited playing time

Particularly useful when you would like to play at the end of a class session to reinforce core concepts covered.

Setup

Prior to class, the instructor selects which cards to use. The instructor acts as the reader of the cards, and all students act as individuals rather than as part of a team. No Forces cards are added to the deck.

Game Play

The instructor reads the question cards aloud to the class. Depending on class size, each student who answers a question correctly is given the card. *For ALL PLAY cards, everyone wins by participating, and no cards are distributed to the individual students.*

Scoring

The student with the most cards is crowned "the fittest."

Phyletic Gradualism: For medium/large classes or for longer playing time

Setup

Prior to class, the instructor selects which cards to use. The class is divided into at least two teams. *When teams are large, the instructor may want to appoint one captain for each team; the captains act as the card readers and make decisions for their teams. The instructor may also choose to be the only reader.*

Each team is given at least one of each of the Forces cards. If the instructor likes, extra Forces cards can be added to the deck. The remaining cards are shuffled and placed as one deck (where all teams can reach them) or divided evenly so that each team has its own small deck.

Game Play

A team is chosen to draw the first card. For most cards, the reader (*either the instructor or a member of the opposing team*) reads the question aloud. *If the reader feels uncomfortable you may want to have him or her wear a hat of authority to indicate he or she is in charge.* Prior to answering, all teams have the opportunity to play one of their Forces cards. Subsequently, the team answering the question chooses an individual to carry out the card action.

If the answering team gives the correct answer, they keep the card(s), and play moves to the opposing team. If the answering team answers the question incorrectly, the opposing team can steal the card. Any player who has already seen the answer (i.e., the reader) may not answer. *If more than two teams are playing, the instructor should pick the order in*

which opposing teams can steal the card. Regardless of whether stolen card(s) are successfully answered by another team, game play passes from the team who first tried to answer the question as it would during a normal round.

Scoring

When a team answers the question correctly, they keep the card, for 1 point. If a Forces card was played, the team keeps both cards, for 2 points. The team with the most cards is crowned "the fittest" and enjoys the satisfaction of being the only extant member of their lineage.

Note: Should the rules of play be in doubt or answers to the questions be debated, the instructor declares a winner.

Punctuated Equilibrium: For medium/large classes with limited playing time

Setup

The setup is the same as that for Phyletic Gradualism.

Game Play

Instead of allowing the game to progress at its own pace, use a timer to increase the pace (e.g., 1 min per question). Extra Forces cards can be added to the card deck or handed out at the start of the game to encourage hijinks and higher scoring games. The rest of game play is the same as that for Phyletic Gradualism.

Scoring

When a team answers the question correctly, they keep the card, for 1 point. If a Forces card was played, the team keeps both cards, for 2 points. The team with the most cards is crowned "the fittest" and enjoys the satisfaction of being the only extant member of their lineage.

Note: Should the rules of play be in doubt or answers to the questions be debated, the instructor declares a winner.

Co-evolution: For large classes and longer playing time

Setup

Divide students into an even number of teams and have pairs of teams play their own game of **Origins: An Evolutionary Journey**. The rest of the setup is the same as that for Phyletic Gradualism. *Make sure you have enough cards for all the groups prior to game play; one full deck of Origins: An Evolutionary Journey will not be enough.*

Game Play

Halfway through the session, have the teams switch opponents. *When a Natural Selection card is used or drawn, the team can also choose to change their opponents rather than picking a new team member. Choose wisely.* The rest of game play is the same as that for Phyletic Gradualism.

Scoring

When a team answers the question correctly, they keep the card, for 1 point. If a Forces card was played, they keep both cards, for 2 points. The team with the most cards is crowned the “fittest” and enjoys the satisfaction of being the only extant member of their lineage.

Note: Should the rules of play be in doubt or answers to the questions be debated, the instructor declares a winner.

Survival of the Fittest: For small classes or limited playing time

Setup

Prior to class, the instructor selects which cards to use. The instructor acts as the reader, and all students act as individuals rather than as part of a team. Players begin with one of the Forces cards. *The instructor may wish to add enough Forces cards so that each player can have one of each card type. Alternatively, use no Forces cards and have an even more cutthroat game of elimination.*

Game Play

Play starts with one arbitrarily selected student. If this student answers the question correctly, he or she survives and continues to play (*no need to keep the card*). Play then moves to the next arbitrarily selected student. If the student is incorrect, he or she goes extinct and is out of the game. Play moves to the next student who may be better adapted to this environment. *For a Big Bang card, the answering student must state five related words to survive. For an ARTifact card, either the instructor or a chosen student should draw.*

If playing with Forces cards, an extinct student may use any remaining Bottle Neck or Natural Selection cards he or she has to reenter the game by stealing an opponent’s question. If this extinct student answers the question correctly, he or she is back in the game. If this student answers incorrectly, he or she remains extinct. Players may use the Extinction card or the Founder Effect cards to skip a difficult question during play.

Scoring

Play continues until there is only one student left. May the survivor, looking upon his or her fallen comrades, find solace in being dubbed “the fittest.”
