

# Quizgame Instructions

These are rules for a classroom review game, where students compete in teams. It is recommended that no more than 5 or 6 teams are created, to allow all teams to have many turns in one class period. Teams should be allowed to consult notes and be given a set amount of time (one minute) to come up with the answer. Optionally, as the game gets moving, the moderator may decide they can no longer consult notes, or that other teams may 'steal' a card if a team fails to earn their card.

Teams are each given (3) Continental Lithosphere cards and (3) Ocean Lithosphere cards as a starting hand. The Boundary type, Stress type and Wild cards are shuffled together, placed facedown in a pile called the "Combo Card Deck". The quickpoints are shuffled together, placed facedown and called the Quickpoint deck. The Multiplier cards are shuffled together, placed facedown and called the Multiplier deck. On a team's turn, they first choose what card they will try to earn (choose one of the three decks). The moderator draws the top card of that deck and reads the black text (usually a definition) on the card, and the team must answer the vocabulary word (at the top/bottom of the card) to 'earn' the card and place it in their hand. If they answer incorrectly, the card is discarded. NOTE: for multiplier cards, the moderator phrases the text at the top/bottom of the card into a question, and the team must answer an acceptable version of the black text - these are meant to be more challenging. For instance, if the multiplier card says "Earthquake and Volcano locations" the moderator may ask "Where are Earthquakes and Volcanos mostly located?" or "Describe the pattern of Earthquake and Volcano locations". If a wild card is drawn, the moderator reads "Pangea" and the team must enthusiastically call out "Supercontinent!" to earn the wild. It may be used in a combo or played immediately for 2 points (no multiplier may be used with it when it is played standalone for 2 points). Teams earn points by forming combos or quickpoints, but in this version, combos are worth (3) points (or 9 points when played with a multiplier card), and quickpoints are worth (1) point (or 3 with a multiplier). There is no hand limit. Used cards are discarded after being played for points. If a team runs out of Plate cards, they are simply given more from the discard pile. Game end is the end of class (each team having equal turns) or when one team reaches 15 points. A designated scorekeeper should track all team scores. Each team gets a scorecard to track their score and use as a 'guide' to plate boundary scenario card combinations.

# SUPERcontinents!

## Instructions

### Preparations

First, assemble the card deck from the card files. You will need:

- (5) platecard sheets
- (5) combocards sheets
- (3) quickpoints sheets
- (2) multipliers sheets
- (1) scorecards sheet per 4 players/teams

Print all the sheets, color printing on cardstock recommended. Next, cut out the cards using a paper cutter (or scissors). For easier shuffling and durability, place cards in plastic card sleeves (available at board game or hobby stores). Both the quickpoints sheet and the multipliers sheet includes one 'blank' card, which is to allow players to create their own quickpoint and multiplier cards if desired. Otherwise, the blank cards can be set aside, and not included in the deck. Scorecards can be printed on regular paper in black/white or color.

Goal: Score the most points, while trying to form at least one of each of the six plate boundary scenarios listed later in these instructions.

### Gameplay:

Shuffle all cards together and place facedown as a draw pile. Each player starts with 7 cards. On a turn, the player may play as many points as they can, and discard or keep remaining cards. All played cards go to the discard pile at the end of their turn. Points should be marked on a scorecard each turn. Draw back up to 7 cards at the end of turn. If the draw pile runs out of cards, shuffle the discard pile and place facedown as a new draw pile.

## Cards



Plate Cards. (20) Continental Lithosphere cards and (20) Ocean Lithosphere cards



Quickpoint Cards. (21) total cards - three copies of seven unique cards



Stress Type Cards: (5) Shear stress, (5) Tension, and (5) Compression



Multiplier Cards: (14) total cards - two copies of seven unique cards



Boundary Type Cards: (5) Transform, (5) Divergent and (5) Convergent



SUPERcontinent! wild cards: (10)

### Description of cards and scoring:

Players aim to collect a specific combination of cards describing a plate boundary scenario (all acceptable combinations are described below). Each "combo" is worth (5) points. Combos consist of 2 plate cards, 1 boundary type, and 1 stress type. Points are also earned through quickpoint cards, which are played standalone and worth (1) point each. A combo or a quickpoint can also be played together with a multiplier card - in this case, the points triple. The deck also includes "SUPERcontinent!" wild cards. These can be used as any plate, boundary, or stress card to complete a combo. Multiple SUPERcontinent cards can be used to create a combo, but only one multiplier may be used with any combo or quickpoint. A player may play several quickpoints or a combo and quickpoints all in one turn. Also, a player may decide to hold some cards instead of playing points (for instance, saving a multiplier to use at a different time).

**Game end:** The game ends when a player has created at least one of each scenario (combo). When one player has reached this point, all other players who have not yet had an equal number of turns as that player may have one more turn. All players who have at least one of each plate boundary scenario get a bonus of (10) points.

## Plate Boundary Scenarios ("Combos")

**Awesome Island Arc:** you've created a subduction zone somewhere out in the ocean, making a really deep trench and a chain of volcanic islands, plus lots of shaking.

Ocean Plate – Ocean Plate – Compression<sup>1</sup> – Convergent Boundary

**Surfside Subduction:** you've made a subduction zone along a continent, complete with volcanic mountains, an offshore trench, and plenty of earthquakes.

Continental Plate – Ocean Plate – Compression<sup>1</sup> – Convergent Boundary

**Mega Mountains:** you've created a continental collision, where two continents are crunching together to form some of the highest mountains on Earth

Continental Plate – Continental Plate – Compression – Convergent Boundary

**Mighty Mid-Ocean Ridge:** you've created a sea-floor spreading center where two ocean plates are pulling apart, allowing mantle magma to leak up and form brand new ocean lithosphere!

Ocean Plate – Ocean Plate – Tension – Divergent Boundary

**Raging Rift-Zone<sup>2</sup>:** you've managed to convince one continental plate to try and split into two.

Continental Plate – Continental Plate – Tension – Divergent Boundary

**Tricky Transform:** you've pulled and pushed plates past each other horizontally, causing once close neighbors on either side of the transform fault to enter a long-distance relationship.

Any Plate – Any Plate – Shear Stress – Transform Boundary

### Science Smallprint:

1. In this game, each plate boundary is paired with the dominant stress type associated with that boundary on Earth. However, all stresses can occur at all boundary types. Subduction zones especially have complicated stress regimes, with compression at the boundary, but tension in the plate and back-arc.

2. A continental rift zone is not a true plate boundary (yet!) but is a newly forming plate boundary - where ONE plate with continental lithosphere is splitting apart. For consistency we have two Continental Plate cards in this combo.