

Tectonic Plate Boundaries Foldable

North Carolina Geological Survey

www.deq.nc.gov/geoscience-education



Overview: Foldables are a fun, interactive way for students to process, organize, and review information learned during lessons.

Target Grade Level: 6th grade

2023 Science Standard(s): **ESS.6.2** – Understand the lithosphere and how interactions of constructive and destructive forces have resulted in changes in the surface of the earth over time
ESS.6.2.2 – Construct an explanation to illustrate how the movement of lithospheric plates can create geologic landforms and cause major geologic events such as earthquakes and volcanic eruptions

Objectives: For use as a final wrap up of your plate tectonics lessons by having students decide which properties apply to convergent, divergent, and transform tectonic plate boundaries.

Estimated Time: 40 minutes

Teacher Prep & Instructions:

1. Download the example foldable with instructions that are attached to this packet.
2. You can have students use this foldable or just use it as an instruction template and have them create their own version.
3. Print the page with the plate boundary characteristics and have students cut them out individually along the dotted lines.
***Note for the characteristics:** A few of the characteristics could fall under the “More than One” category. When placing a characteristic square beneath that particular flap of the foldable, have students write which specific boundary type it is so it’s specific, rather than general.
4. Have students work individually to organize the characteristics beneath the appropriate sections on the foldable.
5. Discuss the answers as a class and once you’re certain that all students have the correct characteristics placed in the appropriate section, they can glue or tape them onto the foldable.

Table of plate boundary characteristics. Cut along the dotted lines. Glue or paste each characteristic beneath the appropriate plate boundary on the foldable.

Creates volcanic mountain ranges on land	Creates new oceans	An example is the Mid-Atlantic Ridge	Produces large magnitude earthquakes	Creates non-volcanic mountain ranges on land
Produces many small magnitude earthquakes	Capable of dividing continents	Capable of producing new continental crust	Parts of plates are moved in opposite directions	Creates new ocean crust
Plate motion is mostly horizontal	Creates continental basins	Creates underwater mountain ranges	Causes one plate to subduct beneath another	Creates island arc volcanoes
Causes rocks to crumple, fold, and buckle up	Causes rocks to melt into magma	Earth crust is neither created nor destroyed	An example is the San Andreas Fault	Creates deep ocean trenches

Answer Key

Creates volcanic mountain ranges on land	Creates new oceans	An example is the Mid-Atlantic Ridge	Produces large magnitude earthquakes	Creates non-volcanic mountain ranges on land
Produces many small magnitude earthquakes	Capable of dividing continents	Capable of producing new continental crust	Parts of plates are moved in opposite directions	Creates new ocean crust
Plate motion is mostly horizontal	Creates continental basins	Creates underwater mountain ranges	Causes one plate to subduct beneath another	Creates island arc volcanoes
Causes rocks to crumple, fold, and buckle up	Causes rocks to melt into magma	Earth crust is neither created nor destroyed	An example is the San Andreas Fault	Creates deep ocean trenches

Convergent	Divergent	Divergent	Convergent	Convergent
More than one (divergent, transform)	More than one (divergent, transform)	Divergent	More than one (divergent, transform)	Divergent
Transform	More than one (convergent, divergent)	Divergent	Convergent	Convergent
Convergent	Convergent	Transform	Transform	Convergent

This is an 8.5" x 11" sheet of paper

Fold the paper in half lengthwise (aka hot dog-style) along the dark center line as shown and make a sharp crease with your fingernail. The words should be on the top half of the foldable

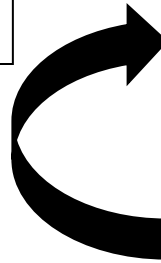
Cut along the dashed lines. Only cut the top sheet – DO NOT cut through the bottom sheet. You should be able to open the four sections like opening a book

CONVERGENT

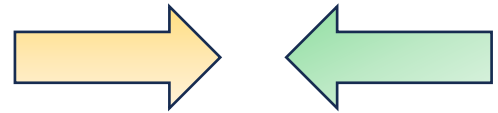
DIVERGENT

TRANSFORM

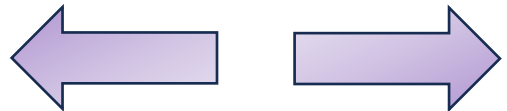
MORE THAN
ONE



CONVERGENT



DIVERGENT



TRANSFORM



MORE THAN
ONE

This side will be underneath the right side (word side) after folding and will become the area where students paste their boundary characteristics.

Allow students to be creative with their foldable – draw, paint, color, attach pictures. It's their study guide so they should decorate it for their individual style.

CONVERGENT

Creates new ocean crust

Capable of producing new continental crust

Creates underwater mountain ranges

An example is the Mid-Atlantic Ridge

Creates new oceans

TRANSFORM

Capable of dividing continents

Divergent Transform

Creates continental basins

Convergent Divergent

Parts of plates are moved in opposite directions

Divergent Transform

Produces many small magnitude earthquakes

Divergent Transform