

My NASA Data - Mini Lesson/Activity

What are Tectonic Plates?

Tectonic Forces

There was once a time when you could take a stroll from North or South America to Africa no problem. There was because all of Earth's continents were stuck together in one massive supercontinent called Pangea.

But around 180 million years ago, a rift began to form, and since then, the Americas and Africa have been drifting apart. The Atlantic Ocean is in the process. That's because Earth's surface is constantly shifting and drifting—thanks to something called tectonic forces.



Student Directions

[Video: Tectonic Forces](#)

Video

Tectonic Forces | <https://www.youtube.com/watch?v=nGIvw-QZtNU> | Source: NASA Space Place

1. Watch the NASA Space Place video [Tectonic Forces](#) and answer the questions. Check with your instructor on how to submit answers.

1. What is the name of the supercontinent that began to break up about 180 million years ago?
2. What happened when the Americas and Africa drifted apart?
3. What causes Earth's tectonic plates to move?
4. What happens when tectonic plates move apart at the bottom of the ocean?
5. Where does the creation of new oceanic crust occur?
6. Where is old ocean floor destroyed or recycled?
7. What happens when the seafloor is created and destroyed?

Teachers, these mini lessons/student activities are perfect "warm up" tasks that can be used as a hook, bell ringer, exit slip, etc. They take less than a class period to complete. Learn more on the "[My NASA Data What are Mini Lessons?](#)" page.

Teachers who are interested in receiving the answer key, please complete the [Teacher Key Request and Verification Form](#). We verify that requestors are teachers prior to sending access to the answer keys as we've had many students try to pass as teachers to gain access.

My NASA Data Visualization Tool

- [Earth System Data Explorer](#)