

Plate Tectonics Student & Parent Briefing

Dear Student and Parent,

We live in a world of unimaginable forces that literally change the face of Earth; expanding oceans, erupting volcanoes and shifting earth.

For the next few weeks we will be investigating the geosphere (the "solid" portion of Earth).

I hope the information provided here will assist you in having meaningful discussions with your child about what they are learning.

Big Idea

Over geologic time, internal and external sources of energy have continuously altered the features of Earth by means of both constructive and destructive forces. All life, including human civilization, is dependent on Earth's internal and external energy and material resources.

Classroom Focus

1. Examine the evidence for continental drift
2. Track the locations of earthquakes
3. Explore the inside of Earth
4. Identify different types of plate boundaries
5. Determine how plate movements cause different surface features
6. Investigate the types of volcanoes and their eruptions

Vocabulary

- Earthquake
- Elastic rebound
- Focus
- Epicenter
- Primary waves
- Secondary waves
- Seismogram
- Crust
- Mantle
- Lithosphere

- Asthenosphere
- Core
- Continental Drift
- Plate Tectonics
- Subduction
- Divergent boundary
- Transform fault boundary
- Convergent boundary
- Convection
- Viscosity
- Shield volcano
- Cinder cone
- Composite volcano
- Tephra

Questions for discussion

Can we predict earthquakes and volcanic eruptions?

How have the theories describing Earth's surface changed over time?

How do we know what's inside the Earth when we've never been there?

Describe the motions of Earth's lithospheric plates and their related landforms.

ScienceSaurus Student Handbook

(available in class or
checkout for overnight use)

- Section 176-177
Structure of Earth
- Sections 181-187
Plate Tectonics and
Mountain Building

Prentice Hall Earth Science Textbook

Students have the textbook
at home, plus access to an
[online version](#).

User Id: windyridge
Password: Science

The chapters covered are:

- Chapter 8
Earthquakes and
Earth's Interior
- Chapter 9
Plate Tectonics
- Chapter 10
Volcanoes and Other
Igneous Activity
- Chapter 11
Mountain Building

BrainPop.com

User Id: 1windy
Password: ridge

Be sure to do more than
just watch the videos!

[Earthquakes](#)

[Volcanoes](#)

[Plate Tectonics](#)

MyScienceSpace and other Website Resources

[Windy Ridge Earthquake
Center](#)

[Plate Tectonics](#)

[Key Content Summary](#)

[Earthquakes for Kids](#)

[Volcanoes](#)

Practice tests

- [Tectonics Practice
Test](#)
- [Earthquakes
Practice Test](#)
- [Volcanoes Practice
Test](#)

Discussions on the [Home
Page](#)

Grade Improvement

Students have the
opportunity to improve
their test grades by
demonstrating they have
learned the material.
This requires students to
come in for extra help
and arrange to be
retested within 2 weeks
of the original test date.

Extra Help

Wednesday mornings are
open help sessions from 8
to 8:40am. Students can
also arrange to come in
during lunch periods.

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