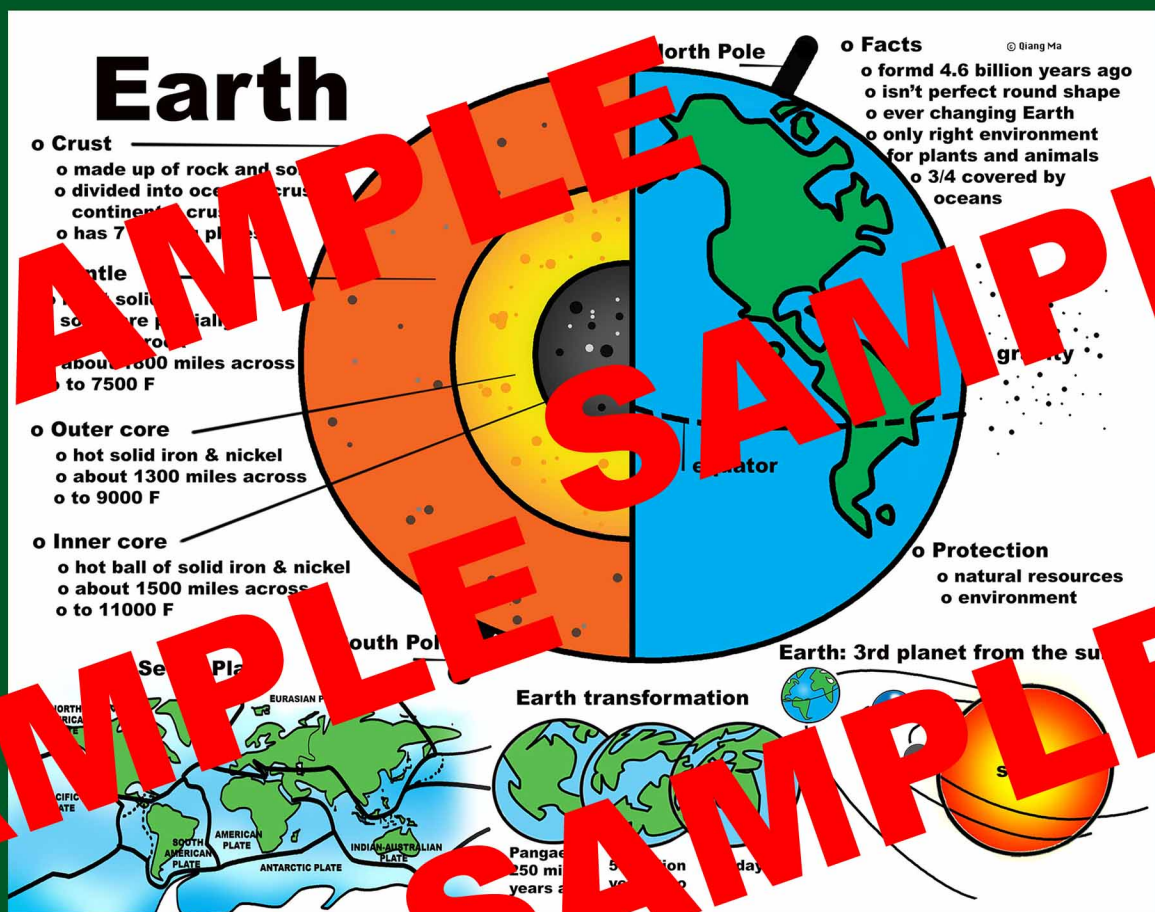


Close Reading

Plus Writing Activities

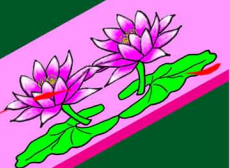
Planet Earth/Inside Out

By Gail Gibbons



Teaching Astronomy Science through
Reading, Comprehension, Vocabulary,
Posters, and Reflection

Qiang Ma



Earth

- o Crust
 - o made up of rock and soil
 - o divided into oceanic crust & continental crust
 - o has 7 moving plates
- o Mantle
 - o most solid
 - o partially molten
 - o about 1800 miles across
 - o to 7500 F
- o Outer core
 - o hot solid iron & nickel
 - o about 1300 miles across
 - o to 9000 F
- o Inner core
 - o hot ball of solid iron & nickel
 - o about 1500 miles across
 - o to 11000 F

- o Facts
 - o formed 4.6 billion years ago
 - o isn't perfect round shape
 - o ever changing Earth
 - o only right environment for plants and animals
 - o 3/4 covered by oceans

- o Protection
 - o natural resources
 - o environment

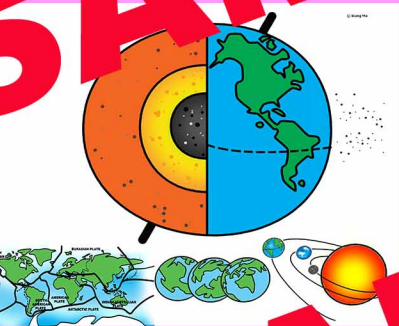
Earth transformation

Pangaea: 250 million years ago
50 million years ago
today

Seven Plates



Earth: 3rd planet from the sun



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Seven Plates



Earth transformation

Pangaea: 250 million years ago
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today

Earth: 3rd planet from the sun



Planet Earth/Inside Out Close Reading Or

Title: _____

Things to remember

- Colors to mark
- Highlight the title in yellow.
 - Underline the topic sentence in green.
 - Circle the important words about Earth in red.
 - Use close reading symbols throughout text.
- CLOSE reading symbols:
- Check Mark (✓) – understands story
 - Star (*) – something is important
 - Exclamation mark (!) – something new, something that is surprising
 - Question mark (?) – unsure, don't understand it

The main idea of these passages is to _____

What have you learned about Earth? _____

Planet Earth/Inside Out Close Reading Organization

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The main idea of these passages is to introduce the basic information about planet Earth.What have you learned about Earth? that it is the third planet from the sun and has four layers: inner core, outer core, mantle, and crust.

Earth (1)

Earth, the third planet from the sun, is the only planet we know of just the right environment for plants and animals to live in. It has been lived on Earth for millions of years. When the Earth was first formed, it was embedded in mud. Over millions of years the mud turned into stone, forming fossils. Fossils are the remains of plants and animals that lived on Earth for millions of years. When they die, their remains are sometimes embedded in mud. Over many years the mud and remains turn into stone, forming fossils. Fossils are studied to help us understand how life on Earth has changed. When people began living on Earth, they bettered their lives by learning to use natural resources from the planet's crust. Today we depend on these resources more than ever.

Earth is covered with land and oceans. At first Earth was very hot. As it cooled down it became hard on the outside. Steam rose from the surface and fell back as rain. Over a long period of time most of the surface of the oceans. The surface that remained above water. So when the first time on Earth there was a single of land called Pangaea. These scientists believe that about 250 million years ago Pangaea slowly split apart into seven smaller land masses and the oceans created their own shapes.

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TOO #2 Scientists believe planet Earth was formed about 4.6 billion years ago. They think this happened when a cloud of gases and dust was pulled together by a force called gravity. As the cloud spun around, small particles began sticking together. Slowly planet Earth became denser and bigger. The heaviest materials, like iron and nickel, sank to the center.

TOO #4 Earth's surface is covered with land and oceans. At first Earth was very hot. As it cooled down it became hard on the outside. Steam rose from the planet's surface and fell back as rain. Over a long period of time most of the surface of the oceans. The surface that remained above water became covered with the oceans. The surface that remained above water became land. Some scientists think that at one time there was a single land mass called Pangaea, which the scientists believe that about 250 million years ago Pangaea slowly split apart into seven smaller land masses and the oceans created their own shapes.

Text Dependent Questions

Specify that Earth is how many planets away from the sun.

When did Earth form?

What is the role of gravity during Earth formation?

Explain Pangaea.

Text Dependent Questions (1)

Specify that Earth is how many planets away from the sun.

When did Earth form?

What is the role of gravity during Earth formation?

Explain Pangaea.

Earth is the third planet from the sun.

Earth was formed about 4.6 billion years ago.

During Earth formation, gravity pulled a cloud of gases and dust together and caused small particles sticking together. Thus slowly planet Earth became denser and bigger. The heaviest materials, like iron and nickel, sank to the center.

About 250 million years ago Pangaea slowly split apart into seven smaller land masses and the oceans created their own shapes.

Earth (3)

Scientists divide the Earth's crust into two parts, the continental crust and the oceanic crust. The continental crust is made of lighter rock and is higher above sea level. The oceanic crust is made of heavier rock and is lower below sea level. The crust is made of pieces called plates. Some oceanic crust is beneath the continental crust. The plates are moving. They are always moving. When the plates move together, overlap, and slide against one another, the surface of Earth is changed. The plates move about one to seven inches each year. This is one reason why we call it the living planet.

Throughout Earth's crust there are many cracks, called faults. When two plates press against each other, they can get stuck. When the strain becomes too great, the ground moves and an earthquake happens. Vibrations move through the ground and sometimes cause tsunamis. Volcanoes usually form near where the edges of plates collide up below the surface, causing cracks or holes to appear in the crust called magma, and gases push up from deep inside the Earth. This is called a volcanic eruption.

Planet Earth appears different on the outside. Viewed from Space, Earth looks blue. Sunlight shining on the water that covers much of the planet gives Earth its blue color. Also, it looks perfectly round – but it isn't! Instead it is slightly flat at its North and South Poles and bulges a little at its middle, which is called the equator. The equator measures 24,912 miles around. It would take 25 million people holding hands to circle it. Earth is very big! Almost three-fourths of Earth's surface is covered by four oceans. The seven land masses are called continents.

Planet Earth looks different on the inside. It has four layers. The distance to its center from planet's surface is about 4,000 miles.

TOO #1 At the center is the inner core. Scientists believe the inner core is a hot ball of solid iron and nickel, about 3,500 miles across, with temperatures reaching 11,000°F. That's about fifty times as hot as boiling water! It is thought that the inner core is solid because of the huge weight of the rest of Earth pressing all around it.

TOO #2 Outside the inner core is the outer core. The outer core is about 1,300 miles thick. That's about how far it is from New York City to Miami, Florida. Scientists believe that the outer core is made up of very hot liquid iron and nickel. At its center it can get to about 9,000°F. The outer core moves very slowly. It is very hot and has a lot of electricity that creates the Earth's magnetic field.

TOO #3 Outside the outer core is the mantle. The mantle is about 1,800 miles thick. It is made of very hot molten rock that moves slowly. It is very hot and has a lot of electricity that creates the Earth's magnetic field. The mantle is about 1,800 miles thick. It is made of very hot molten rock that moves slowly. It is very hot and has a lot of electricity that creates the Earth's magnetic field.

Text Dependent Question

Explain the inner core.

Explain the outer core.

Explain the mantle.

Explain the crust.

Text Dependent Questions (2)

Explain the inner core.

Explain the outer core.

Explain the mantle.

Explain the crust.

The inner core is a hot ball of solid iron and nickel. It is about 3,500 miles across with temperatures reaching 11,000°F.

Outer core is outside the inner core. It is made up of very hot liquid iron and nickel. It is about 1,300 miles thick with temperatures reaching 9,000°F.

Mantle is around the outer core. Most of the mantle is solid, but some of the outer mantle is made up of partially molten rock that moves slowly. It is about 1,800 miles thick with temperatures reaching 7,500°F.

Crust is outside the mantle. It is made up of solid rock. It is the thinnest layer of Earth.

Vocabulary

equator

crust

plate

fault

continent

ocean

Vocabulary

equator

crust

plate

fault

continent

ocean

A line that divides Earth into two equal parts: the Northern Hemisphere and the Southern Hemisphere.

Earth's outermost layer.

A single moving landmass made of solid rock.

The cracks in Earth's crust.

A large solid area of land. Earth has seven continents, from largest to smallest: Asia, Africa, North America, South America, Antarctica, Europe, and Australia.

A body of salt water.

Getting Started: Earth Close Reading

1. It is suggested to get the following ready:

Items needed	Teacher	Student
The Book Planet Earth/Inside Out by Gail Gibbons		
Lesson Plan		
Vocab Poster	*	
Info Organizer		
Blank Paper for drawing on Day 1	V	V
3 Reading Passages	V	V
3 Text Dependent Questions Sets	V	V
Vocabulary		
1 Earth Color and White Drawing	V	
1 Earth Color and White Drawing with labels		
1 Earth Color Drawing	*	
1 Earth Color Drawing with labels	Teacher can use the original black and white sample in a poster and color it.	Students may create the poster in groups by using teacher's sample. It makes a great open house project.
Teacher Finished Sample Package:	*	
<ul style="list-style-type: none"> • Earth Color Drawing with labels • Vocab Poster with Post-it notes • Info Organizer completed • 3 Reading Passages with main ideas • 3 Text Dependent Questions Sets with answers • Vocab Sheet with answers • 1 Teacher Sample Writing • 1 Student Individual Sample Writings 	It is as much as possible for you to model for your students.	
Crayon/Markers	V	V
Post-It		

V: must, *: optional

- Read the lesson plan.
- Look at the finished sample works included.
- Make a copy of the package (1 Empty page for drawing, 1 Info Organizer, 3 Reading Passages, 3 Text Dependent Questions Sets, and 1 Vocab Sheet for students). Give a text set for the teacher to use.
- The lesson is designed as cross curriculum using Science/Astronomy, and Fine Arts using close reading and GLAD strategies.

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Credits

I draw all the clipart myself for all the products in my store.

Thank you so much and I hope you enjoy this lesson.

