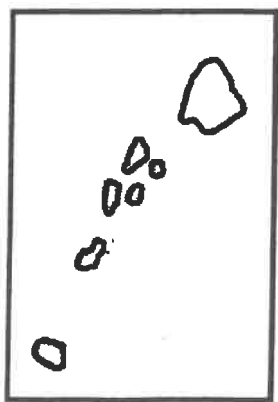


Social Studies

Weeks 1-5

Please label 10 states  
and capitals per  
week.

Label the States  
and Capitals!



# 4th Grade Distance Learning

## Week 1

(March 30th- April 3rd)

Name:

Teacher:

















# Multiplication Tables

×	1	2	3	4	5	6	7	8	9	10	11	12
1	1	2	3	4	5	6	7	8	9	10	11	12
2	2	4	6	8	10	12	14	16	18	20	22	24
3	3	6	9	12	15	18	21	24	27	30	33	36
4	4	8	12	16	20	24	28	32	36	40	44	48
5	5	10	15	20	25	30	35	40	45	50	55	60
6	6	12	18	24	30	36	42	48	54	60	66	72
7	7	14	21	28	35	42	49	56	63	70	77	84
8	8	16	24	32	40	48	56	64	72	80	88	96
9	9	18	27	36	45	54	63	72	81	90	99	108
10	10	20	30	40	50	60	70	80	90	100	110	120
11	11	22	33	44	55	66	77	88	99	110	121	132
12	12	24	36	48	60	72	84	96	108	120	132	144

×	1	2	3	4	5	6	7	8	9	10	11	12
1	1	2	3	4	5	6	7	8	9	10	11	12
2	2	4	6	8	10	12	14	16	18	20	22	24
3	3	6	9	12	15	18	21	24	27	30	33	36
4	4	8	12	16	20	24	28	32	36	40	44	48
5	5	10	15	20	25	30	35	40	45	50	55	60
6	6	12	18	24	30	36	42	48	54	60	66	72
7	7	14	21	28	35	42	49	56	63	70	77	84
8	8	16	24	32	40	48	56	64	72	80	88	96
9	9	18	27	36	45	54	63	72	81	90	99	108
10	10	20	30	40	50	60	70	80	90	100	110	120
11	11	22	33	44	55	66	77	88	99	110	121	132
12	12	24	36	48	60	72	84	96	108	120	132	144

×	1	2	3	4	5	6	7	8	9	10	11	12
1	1	2	3	4	5	6	7	8	9	10	11	12
2	2	4	6	8	10	12	14	16	18	20	22	24
3	3	6	9	12	15	18	21	24	27	30	33	36
4	4	8	12	16	20	24	28	32	36	40	44	48
5	5	10	15	20	25	30	35	40	45	50	55	60
6	6	12	18	24	30	36	42	48	54	60	66	72
7	7	14	21	28	35	42	49	56	63	70	77	84
8	8	16	24	32	40	48	56	64	72	80	88	96
9	9	18	27	36	45	54	63	72	81	90	99	108
10	10	20	30	40	50	60	70	80	90	100	110	120
11	11	22	33	44	55	66	77	88	99	110	121	132
12	12	24	36	48	60	72	84	96	108	120	132	144

×	1	2	3	4	5	6	7	8	9	10	11	12
1	1	2	3	4	5	6	7	8	9	10	11	12
2	2	4	6	8	10	12	14	16	18	20	22	24
3	3	6	9	12	15	18	21	24	27	30	33	36
4	4	8	12	16	20	24	28	32	36	40	44	48
5	5	10	15	20	25	30	35	40	45	50	55	60
6	6	12	18	24	30	36	42	48	54	60	66	72
7	7	14	21	28	35	42	49	56	63	70	77	84
8	8	16	24	32	40	48	56	64	72	80	88	96
9	9	18	27	36	45	54	63	72	81	90	99	108
10	10	20	30	40	50	60	70	80	90	100	110	120
11	11	22	33	44	55	66	77	88	99	110	121	132
12	12	24	36	48	60	72	84	96	108	120	132	144

## Place Value Day 1 Video Transcript

Hi, I'm Rob. Welcome to Math Antics.

In this lesson, we're going to learn how our basic number system works and we're going to learn about an important concept called Place Value. The number system that we use in math is called 'base 10', because it uses ten different symbols for counting.

Math could use other systems that are based on a different number (like 'base 2' or 'base 8'), but I'll give you ten guesses as to why the number ten is such a popular choice. The ten symbols that we use are called 'digits' and they look like this: zero, one, two, three, four, five, six, seven, eight and nine.

At first glance, you might think that's only nine digits, but remember, the zero counts as one of the digits also. To see how our number system uses these digits to represent amounts, let's pretend that we have an apple orchard full of apple trees, and each of these trees is loaded with big, juicy, red apples that we need to pick and then count for our records. [crunch]

We're going to use something called a 'number place' to count. The best way to understand a number place is to imagine that it's like a small box that's only big enough to hold one digit at a time. As we count, we'll change the digit that's in the number place to match how many apples we've picked. For example, if we start with no apples at all, we put the digit '0' in the number place because zero means 'none'. But then, as the apples start coming in from the orchard, we begin to count...one, two, three, four, five, six, seven, eight and nine.

Okay, now we've got nine apples, but we've also got a problem. We've already run out of digits to count with. The highest digit we have is a '9', but there are a LOT more apples left to count. What will we do?

The solution is to use groups to help us count. If we pick just one more apple, we'll have ten, right? So let's combine those ten apples into a single group.

So... how many apples do we have? Ten!

BUT... how many GROUPS of ten apples do we have? Ah... just ONE! Does that help us with our lack of digits problem? It sure does, IF we use another number place! Instead of using this new number place to count up individual apples one at a time like we did with the first number place. We're going to use it to count apples TEN at a time. In other words, we'll use it to keep track of how many groups of ten apples that we've picked. For example, if we've picked only one group of ten, then we'll put the digit '1' in that number place. If we've picked two groups of

ten, then we'll put the digit '2' in that number place, and if we've picked three groups of ten, then we'll put the digit '3' in that number place. And so on.

Do you see what's happening?

Because the new number place is being used to count GROUPS of ten, it's allowing us to re-use our original ten digits, but this time they are able to count (or represent) bigger amounts. Since this new number place is for counting groups of ten, we're going to name it 'the tens place'. And we'll name our original number place, 'the ones place' because we used it to count things one at a time. And here's the really important thing... we're not going to use the new number place instead of the old one... we're going to use it along side of the old one so that we have one number place for counting by ones and another number place for counting by tens.

Using these two number places together lets us represent amounts that are in-between the groups of ten. For example, if we've already picked thirty apples, then there will be a '3' in the tens place because we have three groups of ten. But there will be a '0' in the ones place, because there are no individual apples left over.

But... if we have picked thirty-two apples, then there will be a '3' in the tens place and a '2' in the ones place to represent the two individual apples that are not in the groups of ten. In fact, using only our ten digits and these two number places, we can count all the way from zero up to ninety-nine. At ninety-nine, both of our number places are maxed out with the highest digits and we won't be able to count any higher,

UNLESS... we get another number place! If we've picked ninety-nine apples and then we pick just one more, we'll have exactly one-hundred apples. And if we make a group from those one-hundred apples, we can use this new number place to count how many groups of one-hundred we've picked.

That means that we can re-use the same ten digits AGAIN in this new number place to count how many groups of one-hundred we have. And you guessed it... it's called 'the hundreds place' because we use it to count groups of a hundred. Are you starting to see how our 'base 10' number system works?

It uses different number places to represent the different sized groups that we use to count. And the digits in those number places tell us how many of each group we have. The digit in the ones place tells us how many ones we have. The digit in the tens place tells us how many groups of ten we have. And the digit in the hundreds place tells us how many groups of one-hundred we have. And have you noticed that each time we got a new number place to count larger groups,

we placed it to the LEFT of the previous number place. That's important because number places are always arranged in the exact same order.

Starting with the ones place, as you move to the left, the number places represent larger and larger amounts. And did you also noticed that each new number place represents groups that are exactly ten times bigger than the previous number place? Ten is ten times bigger than one and one-hundred is ten times bigger than ten. That's really important because it helps us see the pattern for bigger number places. It helps us to see that the next number place will count groups of ten times one-hundred, which is one-thousand. That's why it's called 'the thousands place'.

And the next number place will count groups ten times bigger than that! It's the ten-thousands place! And the number places keep on going like that. Next is the hundred-thousands place. Then... the millions place. Then... ten-millions. Then... one-hundred-millions. Then... billions! And so on...

Oh, and you may notice that when we get a lot of number places next to each other like this, it's a little hard to quickly recognize which place is which. That's why many countries use some kind of separator every three places to make them easier to keep track of.

For example, in the U.S. we use a comma every three number places to make it easier to identify things like the thousands place, or the millions place. Seeing all these number places together helps you understand what we mean by 'place value'. In a multi-digit number, the number PLACE that a digit is in, determines it's VALUE. Even though we only have ten digits, each digit can stand for different amounts depending on the place that it occupies.

If the digit '5' is in the ones place, it just means five. But, if a '5' is in the tens place, then it means fifty, and if a '5' is in the hundreds place, it means five-hundred. And it's the same for bigger number places. A '5' in the hundred-thousands place means five-hundred-thousand, and a '5' in the billions place means five-billion! See how a digit's place effects its value?

Of course, when we work with numbers in math, most of the time the number places are invisible. But the underlying pattern is always the same. Oh, and because the number places are invisible, in certain cases you'll need to use zeros to make it clear what number you're talking about. To see what I mean, imagine that this '5' is in the hundreds place to represent five-hundred, but if you make the number places invisible, then it just looks like five and not five-hundred.

So... to make sure people know you mean FIVE-HUNDRED, you need a '5' in the hundreds place, a '0' in the tens place, and a '0' in the ones place. Now you can tell that the '5' is in the hundreds place and it means five-hundred. Okay... now a great way to see place value in

action with some actual numbers is to expand them to show that they're really combinations of different groups.

When we do this, it's called writing a number in 'Expanded Form'. For example, we can expand 324 to be 300, 20 and 4, because the '3' is in the hundreds place and means three-hundred, the '2' is in the tens place and means twenty, and the '4' is in the ones place so it just means four. So 324 in expanded form is the combination of those amounts: three-hundred plus twenty plus four.

Let's try writing another number in expanded form: 6,715. We can expand this into six-thousand, (because the '6' is in the thousands place) plus seven-hundred, (because the '7' is in the hundreds place) plus ten, (because the '1' is in the tens place) and five, (because the '5' is in the ones place)

So the expanded form is six-thousand plus seven-hundred plus ten plus five. Alright... so do you see how our 'base 10' number system works? Number places are used to count different sized groups. Each group is ten times bigger than the next, and the digits in the number places tell us how many of each group we have. The tricky part is that the number places are invisible, so you have to know how they work behind the scenes in order to make sense of multi-digit numbers.

How do you like them apples? The exercises for this section will help you practice so that you get used to how place value works, which is super important if you want to be successful in math. As always, thanks for watching Math Antics and I'll see ya next time.[Clank!]

That gives me an idea...!...I could make pies out of these!!

Learn more at [www.mathantics.com](http://www.mathantics.com)

# Place Value Day 1

Your email address ([scott\\_peterson@isd31.net](mailto:scott_peterson@isd31.net)) will be recorded when you submit this form.  
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\* Required

## Place Value

### Math Antics - Place Value



What is the place value of the digit 4 in the number 24,180? \*

1 point

- thousands
- 4
- 4,000
- monkey



What is the place value of the digit 7 in the number 675,431?

1 point

- Mr. Peterson
- 70,000
- 7
- 10,000

What is the place value of the digit 1 in the number 81,955,320 \*?

1 point

- 1,000,000
- one
- 10,000
- Dr. Pepper

Which digit is in the ten-thousands place in the number 3,107,933? \*

1 point

- 7
- 6
- 9
- 0





What digit is in the ones place in the number 992,841? \*

1 point

snowbank

1

2

9

What digit is in the hundreds place in the number 8,184,326? \*

1 point

3

1

cat

7

Send me a copy of my responses.

Submit

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## Place Value Day 2 Video Transcript

hello fourth-graders here's the number one it's pretty cool right I mean it is the first number so that has to count for something the only thing is it's kind of small and today we're going to go big like really big that's right hope you're ready for a long journey because today we're going to count to 1 million and we're starting all the way back here 166 367 this is my friend Kevin and he's already started counting how long have you been counting so far oh about 360 seconds divided by 60 and ah no I've lost count one okay well Kevin's going to be counting for a long time it would take two weeks to count to 1 million that sounds pretty boring and it would take way too long for this video so I want to show you a cool trick about numbers that we can use to speed this up everyone likes the shortcut right first we'll need a place value chart OOP so here we are with one's tens hundreds and thousands we'll start by placing one in the ones column now let's begin counting up 1 2 3 4 5 6 7 8 9 stop okay here's 9 in the place value chart but what happens when we add one more disk when we add another disk we get 10 and when we have 10 disks we can bundle and move them on so now we have one disk in the tens place but look at this this one disk in the tens column really represents 10 ones ah so so a disc in this column is worth

ten disks in this column we can say that  
disc in this column is ten times as many  
as one in the column to the right ten  
times as many is a way of writing times  
10 now what if we count up ten tens we  
bundle now we have one disc in the  
hundreds ah so so when we multiply by  
ten we're just shifting everything one  
column to the left it's like we're  
taking this zero and adding it to the  
end of the number so what would 100  
times 10 be 100 times 10 is 1,000 we pop  
this zero in and move one column to the  
left now what if we had this place value  
chart 964 and we multiplied it by 10  
what is 964 times 10  
when we multiply by 10 everything moves  
one column to the left so these nine  
hundreds move to nine thousands the six  
tens moved to six hundreds and the four  
ones moved to four tens then the zero  
squeezes in at the end 9640 awesome  
we went from 964 to 9640 in one step we  
have got to show this to Kevin  
ninety-eight ninety-nine one hundred  
whoa keV take it easy you just hit 100  
oh yeah  
how can we quickly get Kevin from one  
hundred to one thousand  
Kevin check this out we're going to  
multiply by ten that moves us to the  
thousands column Wow well hang on here  
here we go again let's multiply by ten  
oh wow okay well look at this we made it  
to the next column but we've never been  
here before this one has no sign so  
we've got good news and bad news the  
good news we get to name it  
the bad news we have to name it properly

what do you think this next column after thousands should be called

Wow Kevin nice try Kevin this next column after thousands where we have ten thousands is called the ten thousands column make sense right to jump to the next column let's multiply by ten hang on Kevin that moved us one column to the left and added a zero at the end but now where are we this peak isn't labeled either we've had once been tens then hundreds then thousands and ten thousands what do you think comes next after ten thousands come hundred thousands right now we're at 100,000 s and we can see 1 million is one column away before we jump up there can you choose the number sentence that represents the death-defying leap Kevin is about to make we made it all the way from 1 to 1 million in 1 2 3 4 5 6 steps but oh now we're stuck here how are we going to get back 999,999 well let's not just count our way down we multiplied by 10 to move left in the place value chart so what would the opposite be how can we move right

the opposite of multiplication is division and the opposite of left is right so to go to the right we divide by ten so what is 1 million divided by 10 we know in multiplying we moved one column and add it a zero so now we lose a zero and move one column to the right 1 million divided by 10 is 100,000 keep going Kevin this works for all numbers when we divide by 10 what would 9640 divided by 10 be

1,000 divided by 10 is 100 100 divided  
by 10 is 10 10 divided by 10 is 1 that's  
it all the way to 1 million and back  
what do you think Kevin multiplying and  
dividing by 10 is a quick way to move up  
and down the place value chart that's  
right  
multiplying by 10 moves us to the left  
and adds a zero dividing by 10 moves us  
to the right and slices off a zero now I  
go to 1 billion Wow I better go catch  
him in the mean time use what you know  
to solve these problems I'll see you at  
the top  
great thinking

# Place Value-Day 2

Your email address ([scott\\_peterson@isd31.net](mailto:scott_peterson@isd31.net)) will be recorded when you submit this form.  
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\* Required

Grade 4 Module 1 Lesson 2: ...



A "disk" in the tens column is \_\_\_\_\_ times as many as one in the column to the right. \* 1 point

Your answer

10 times as many means to: \*

1 point

- add by 10
- subtract by 10
- multiply by 10
- divide by 10



$964 \times 10 = *$

1 point

Your answer

$1,000 \times 10 = *$

1 point

Your answer

You \_\_\_\_\_ by ten to move left on the place value chart. \*

1 point

- multiply
- divide
- add
- subtract

You \_\_\_\_ by ten to move right on the place value chart. \*

1 point

- multiply
- divide
- add
- subtract

$9,640 \div 10 = *$

1 point

Your answer



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**4<sup>th</sup> grade**

**Language  
Arts**

**Week 1**

**(March 30<sup>th</sup>-April 3<sup>rd</sup>)**

**Name:**

**Teacher:**



Instructions

Student work

# Week 1 Language Arts Instructions



**Trisha Richardson** 8:46 AM (Edited 2:40 PM)

Our recommendation for assignment completion is to have students finish 2 assignments per day, Monday through Thursday and the progress check up (quiz) on Friday. Students are also expected to be independently reading for 30 minutes each day. Students will complete a daily writing assignment as well. Although we are recommending this schedule, students are allowed to complete assignments at their own pace as long as assignments are completed in order and all are submitted by Saturday at 8 pm on the week they are assigned.

## Class comments



Add class comment...



## DESERTS AND FORESTS

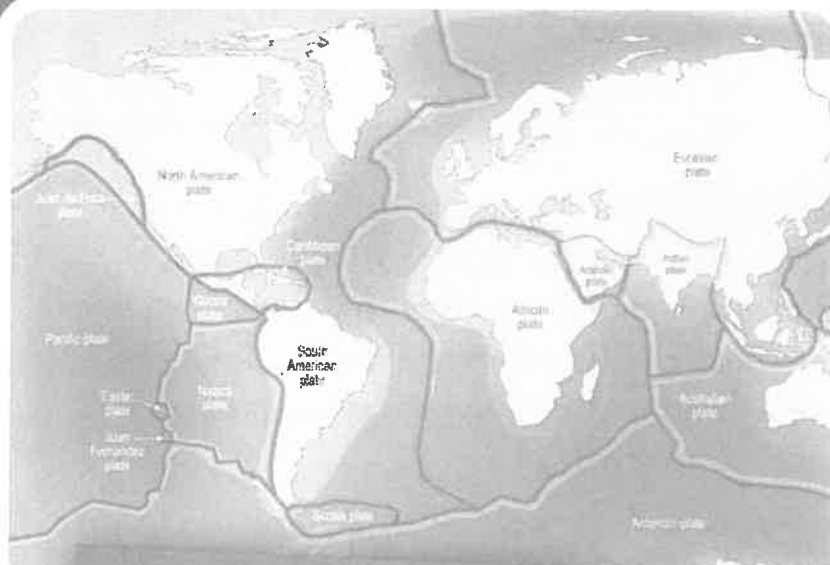
Deserts, very dry areas with little rainfall, cover about 33% of Earth's landmass. Forests account for some 31% of Earth's land surface. Rain forests cover 6% of the planet's surface. Yet more than half of all plant and animal species are found there—approximately 30 million species.

WEEK  
1

## Weekly Question

**What do we know about Earth's features and processes?**

**Quick Write** How does learning about Earth's features and processes help you to understand our planet?



**EARTH'S CRUST** Earth's crust is made up of individual sections called **tectonic plates**. When tectonic plates slowly shift, there is continental drift, or the gradual movement of continents.

**CONTINENTAL SHELF** There are seven continents on our planet. Each has a **continental shelf**, which is the edge of the continent that is under the ocean.

**Learning Goal**

I can learn more about informational text by analyzing text features.

**Spotlight on Genre**



**Informational Text**

**Informational texts** explain topics using facts and details. In addition, authors often use visual cues, such as formatting and text features, to organize and support their explanations.

- Information is grouped into **sections**.
- **Headings** orient the reader and organize information.
- Relationships between ideas and details are explained in the text or visually through graphic text features.

How do authors help readers understand facts and important ideas?



**TURN and TALK** Recall an informational text that you read with your class or independently. Use the anchor chart to tell a partner how text features helped you understand a topic. Take notes comparing and contrasting the text features you and your partner noticed.

**My NOTES**

# INFORMATIONAL TEXT ANCHOR CHART

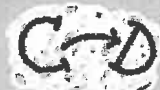
## Types of Text Features

### Headings and Subheadings

- \* Use type **SIZE** and **color** as clues to text organization



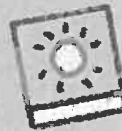
### Diagrams



- \* Present information visually
- \* Can explain or add to details from the text



### Photographs



- \* Support text by showing visual examples



### Maps



- \* Show relationships between locations
- \* Put places into context



### Tables and Charts



- \* Make numerical data easier to understand
- \* Show trends

## Meet *the* Author

**Christine Taylor-Butler** has written children's books in a variety of genres. She enjoys learning new facts by doing research to write informational texts. She encourages young people to become writers themselves. She knows that writers are "ordinary people with extraordinary passion."

# from Planet Earth

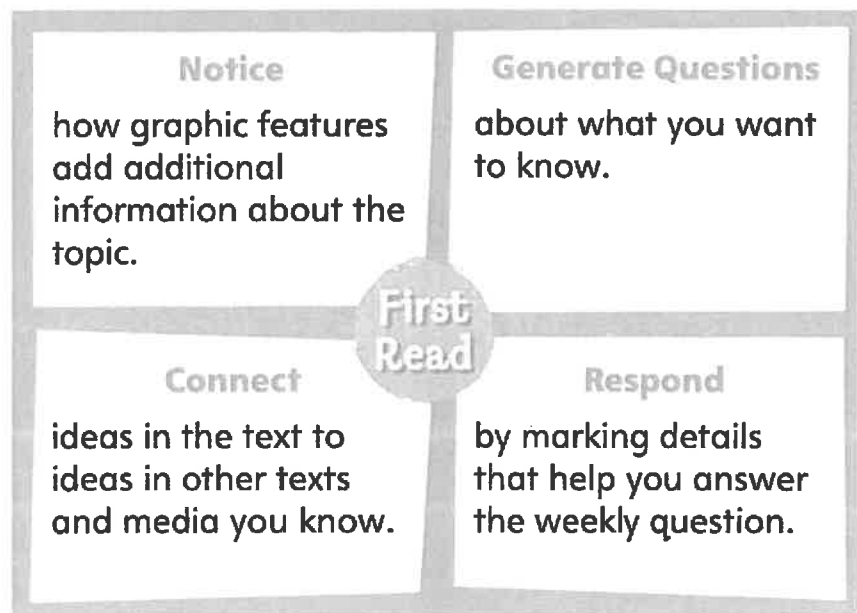
## Preview Vocabulary

As you read *Planet Earth*, pay attention to these vocabulary words. Notice how they help you understand ideas about Earth revealed in the text.

<b>mantle</b>	<b>circulates</b>
<b>adopted</b>	<b>abundant</b> <b>molten</b>

## Read

This **informational text** explains how our planet is structured. Ask yourself what you already know about Earth's features. Preview the text by scanning the text features. Make predictions about what you might learn.





from

# Planet Earth

by Christine Taylor-Butler



AUDIO



ANNOTATE

## BACKGROUND

How do scientists find out about Earth's structure and surface? The study of Earth is known as *geology*. In this excerpt, you will read about the composition of our planet and the methods scientists use to study it.

## Analyze Text Features

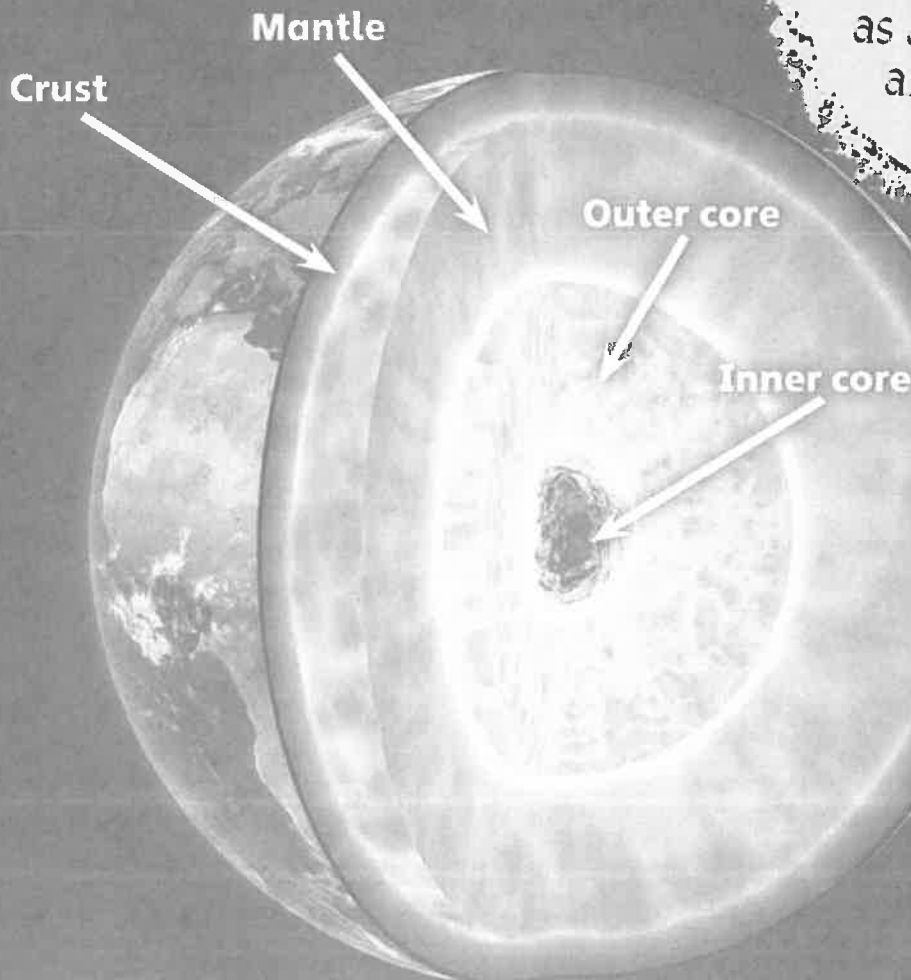
Underline details in the text that are clarified by text features.

**mantle** the layer of Earth between the crust and the core

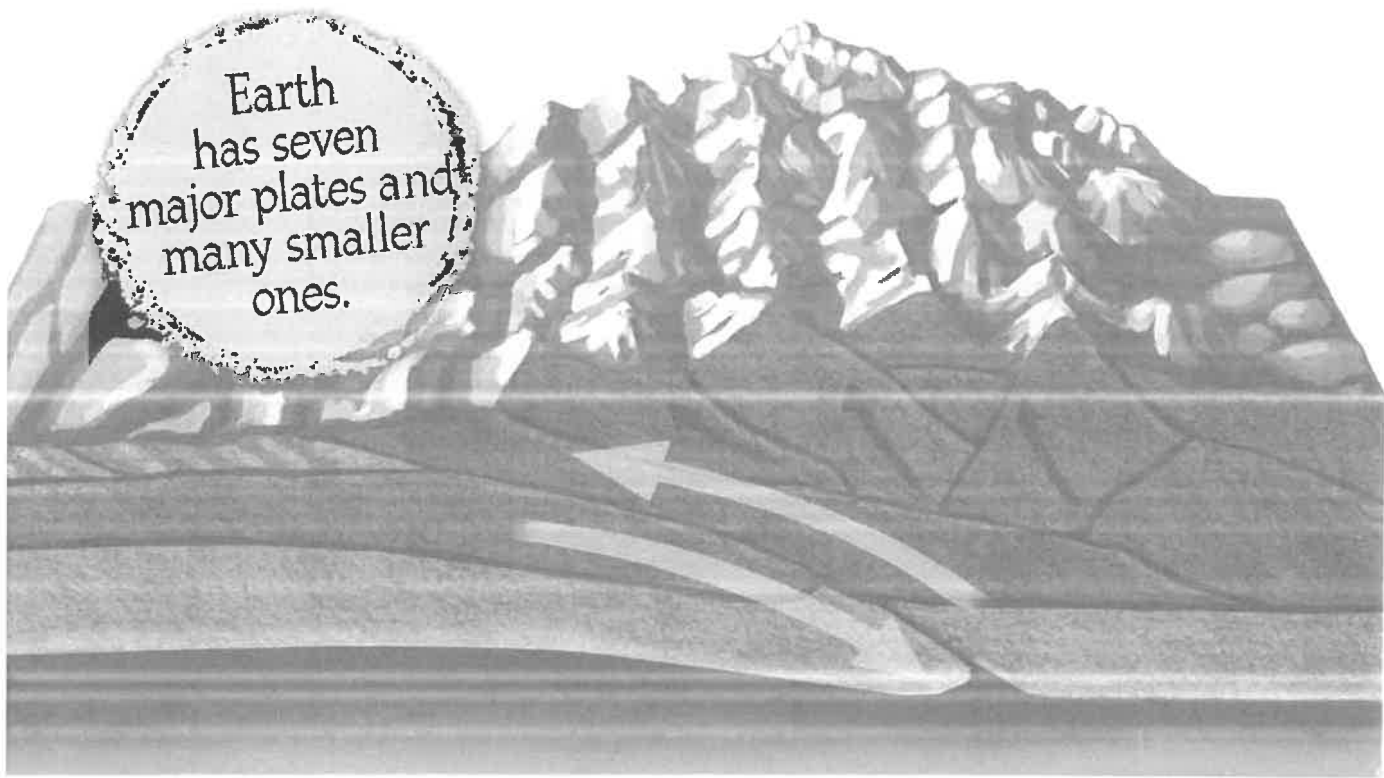
# Above and Below

- Below us, our planet is composed of four main layers. The outer surface is called the crust. Beneath that are the mantle, outer core, and inner core. Circling overhead is a layer of gases that forms our atmosphere. Each layer plays an important part in Earth's ability to sustain life. For example, plants and animals depend on liquid water on Earth's surface to drink. As a gas, water can travel on winds to fall on places around the world as rain, snow, or hail.

Earth is the only planet in our solar system where water exists as a solid, liquid, and gas at its surface.







Tectonic plates sliding against each other can cause mountains to rise along Earth's surface.

## The Crust

- 2 Earth's outermost layer includes the continental crust and oceanic crust. The crust and the uppermost layer of the mantle are broken into sections called tectonic plates. The plates rest on top of a more fluid layer of mantle and are constantly moving. Scientists believe Earth's continents were once joined as a single landmass called Pangaea. Over millions of years, the tectonic plates shifted. This caused Pangaea to break into sections. The sections drifted apart and formed the continents we know today.
- 3 When tectonic plates slide over or past each other, an earthquake can occur. Sometimes the pressure causes shifts in the oceans. If the ocean earthquake is strong enough, waves can develop into a deadly tsunami.
- 4 The collision or constant pressure of tectonic plates can create mountain ranges. For example, the Himalayan mountains in Asia grow taller each year.

### CLOSE READ

#### Make Inferences

Look at the diagram. Highlight evidence in both the caption and the text that supports an inference about one result of sliding tectonic plates.



The movement of water is shown in blue arrows in this diagram.

## CLOSE READ

### Analyze Text Features

Underline text details in paragraph 5 that are illustrated by the diagram.

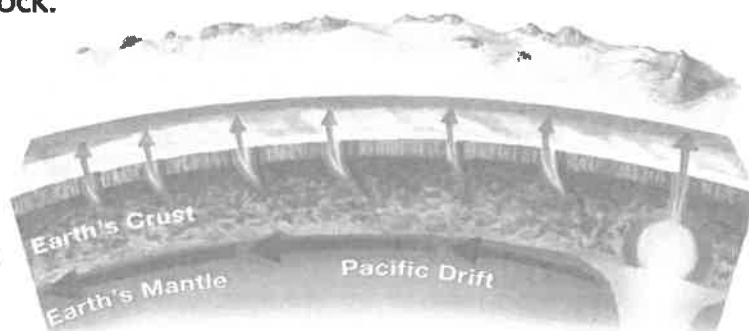
**circulates** moves through a system

- 5 Water on Earth circulates constantly through the water, or hydrologic, cycle. Liquid water on the planet's surface is heated by the sun and turns into a gas. This gas, called water vapor, rises into the atmosphere. It gathers into clouds and falls back to the ground as precipitation, such as rain or snow. It collects in bodies of water or soaks into the soil. Then it starts the process over again.

## The Mantle

- 6 Earth's mantle is a semisolid and movable layer of rock. It is composed of silicon, oxygen, iron, magnesium, and aluminum. Sometimes this substance rises through the crust above. It surfaces as a volcanic eruption of molten rock.

Islands such as the Hawaiian Islands were created as molten rock rose up from the mantle through the crust beneath the ocean.



- 7 Scientists believe the mantle is about 1,860 miles (2,993 km) deep. This calculation is an estimate. No one has ever drilled deeper than 1.4 miles (2.3 km) beneath the ocean or 8 miles (13 km) on land.

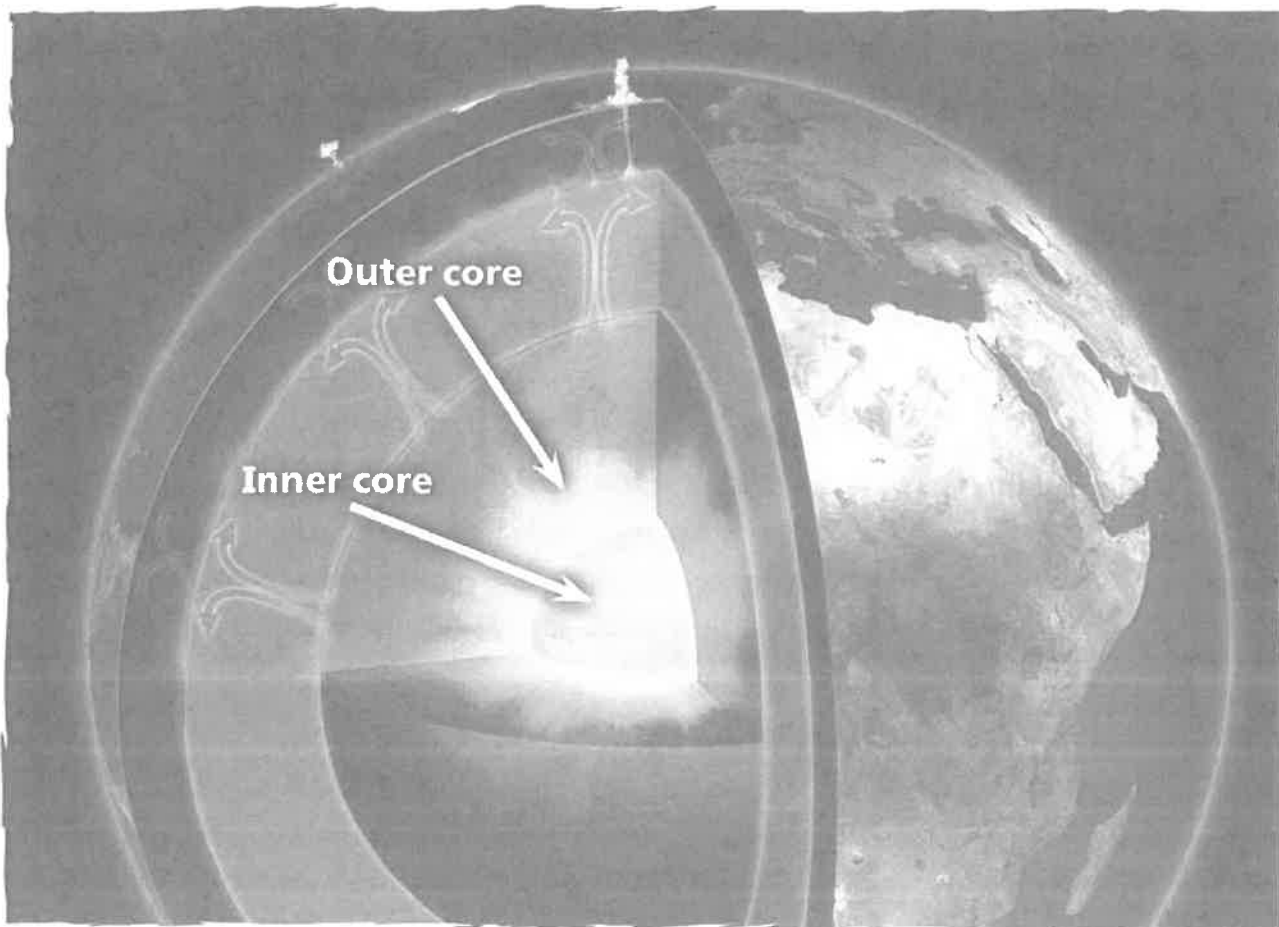
## The Core

- 8 Earth's core has two layers. The liquid outer core is composed mostly of iron and nickel, and is about 1,400 miles (2,250 km) thick. It is constantly flowing. Its movement around the inner core creates Earth's magnetic field. Enormous pressure and radiation keep this layer hot. The inner core is solid iron. It may spin faster than Earth's other layers. The whole core is estimated to be 11,000 degrees Fahrenheit (6,000 degrees Celsius).

### Make Inferences

Highlight a sentence that you can combine with the caption to make an inference about the sun.

Earth's core may be as hot as the surface of the sun.

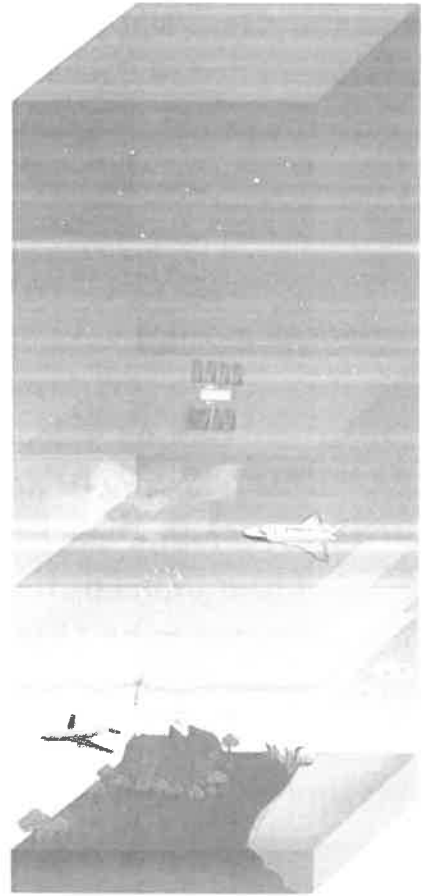


## Analyze Text Features

Look at the heading and the images on this page and at the top of the next page. What topic do the text features help you understand? Underline a sentence about that topic.

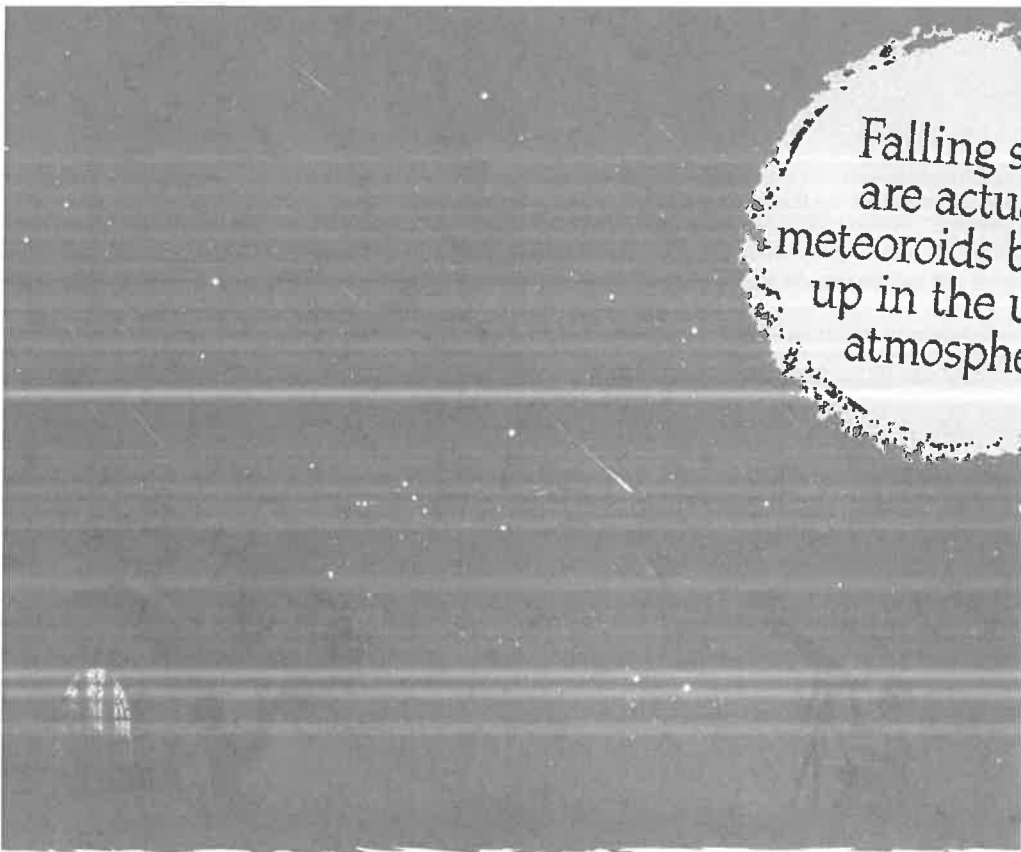
# A Layer of Protection

- 9 Earth's atmosphere wraps the planet like a blanket of insulation. Its two lowest layers are the troposphere and the stratosphere. More layers of thinner and thinner air are above the stratosphere. The troposphere is about 7 miles (11 km) high. It contains the air we breathe. It is 78 percent nitrogen, 21 percent oxygen, and 1 percent other gases. Nearly all of the weather we experience on Earth occurs in the troposphere.



This illustration shows the five layers of Earth's atmosphere.

- 10 The stratosphere is about 30 miles (48 km) high. It contains less water and more ozone than the troposphere. Ozone blocks harmful rays from the sun. The stratosphere and the layers above it also help protect us from objects in space, such as meteoroids. These objects sometimes threaten to crash into Earth. However, a meteoroid creates friction as it moves rapidly through the atmosphere. This usually causes the object to burn up.

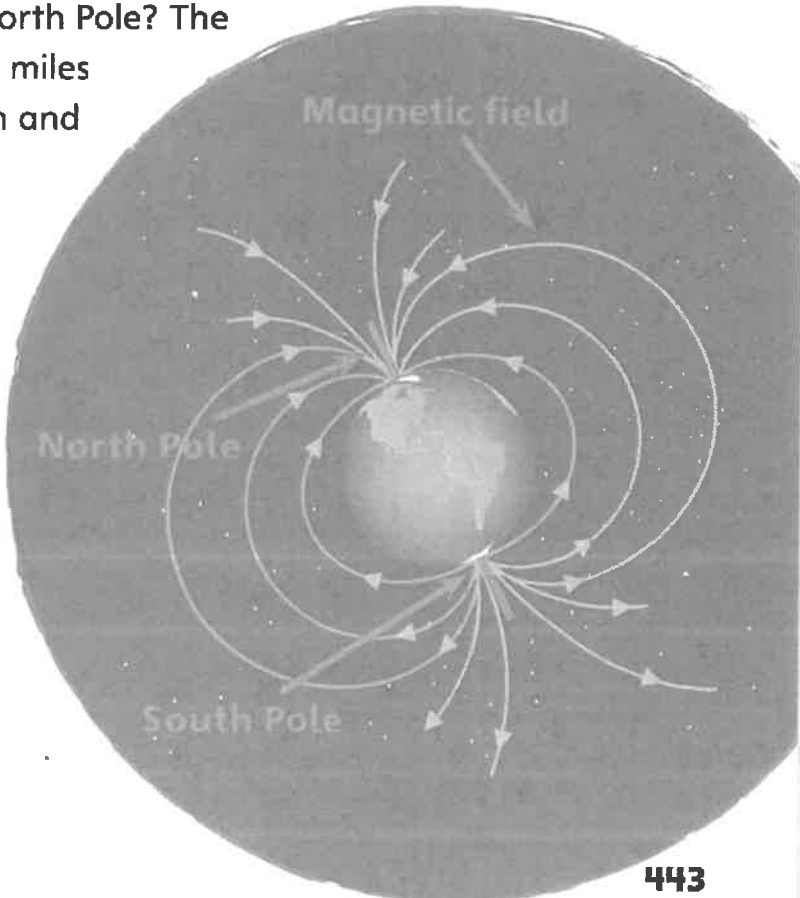


Falling stars are actually meteoroids burning up in the upper atmosphere.

Meteoroids rarely make it to Earth's surface. If they do, the chance of them causing harm is very low.

## Which Way Is North?

11 A compass needle points to Earth's magnetic north pole. But did you know that the magnetic north pole is not located at the geographic North Pole? The magnetic pole drifts about 6 to 25 miles (10 to 40 km) each year. The north and south magnetic poles sometimes switch places. When this happens, Earth's magnetic field temporarily becomes twisted and scrambled. But this has only happened 170 times in the last 80 million years. After the next switch, a compass needle that would have pointed north will point south.



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# THE BIG TRUTH!

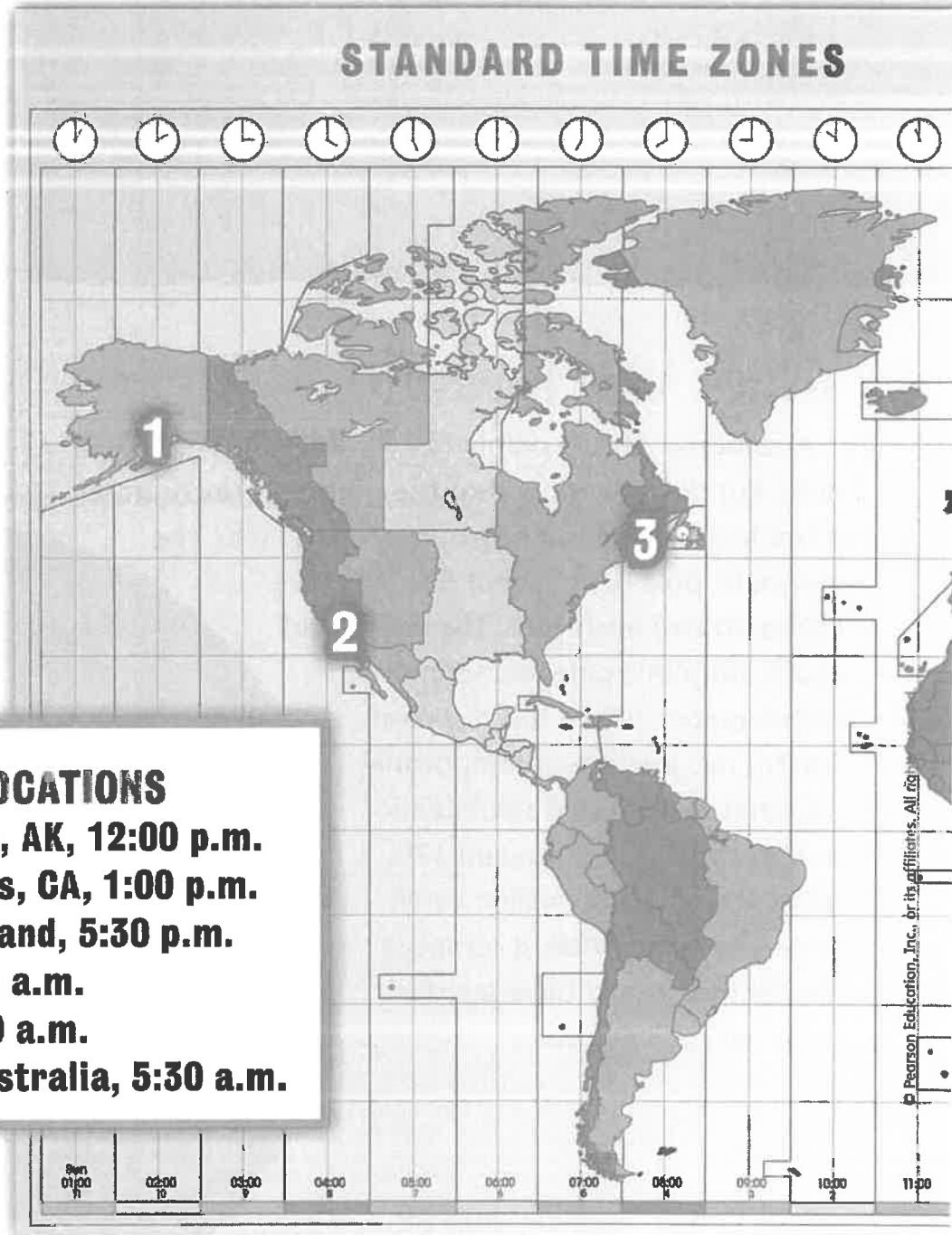
## Dividing Time

### CLOSE READ

### Make Inferences

Use the map and the list of map locations to make an inference about who sets time zones. Highlight details in the text that you include in your inference.

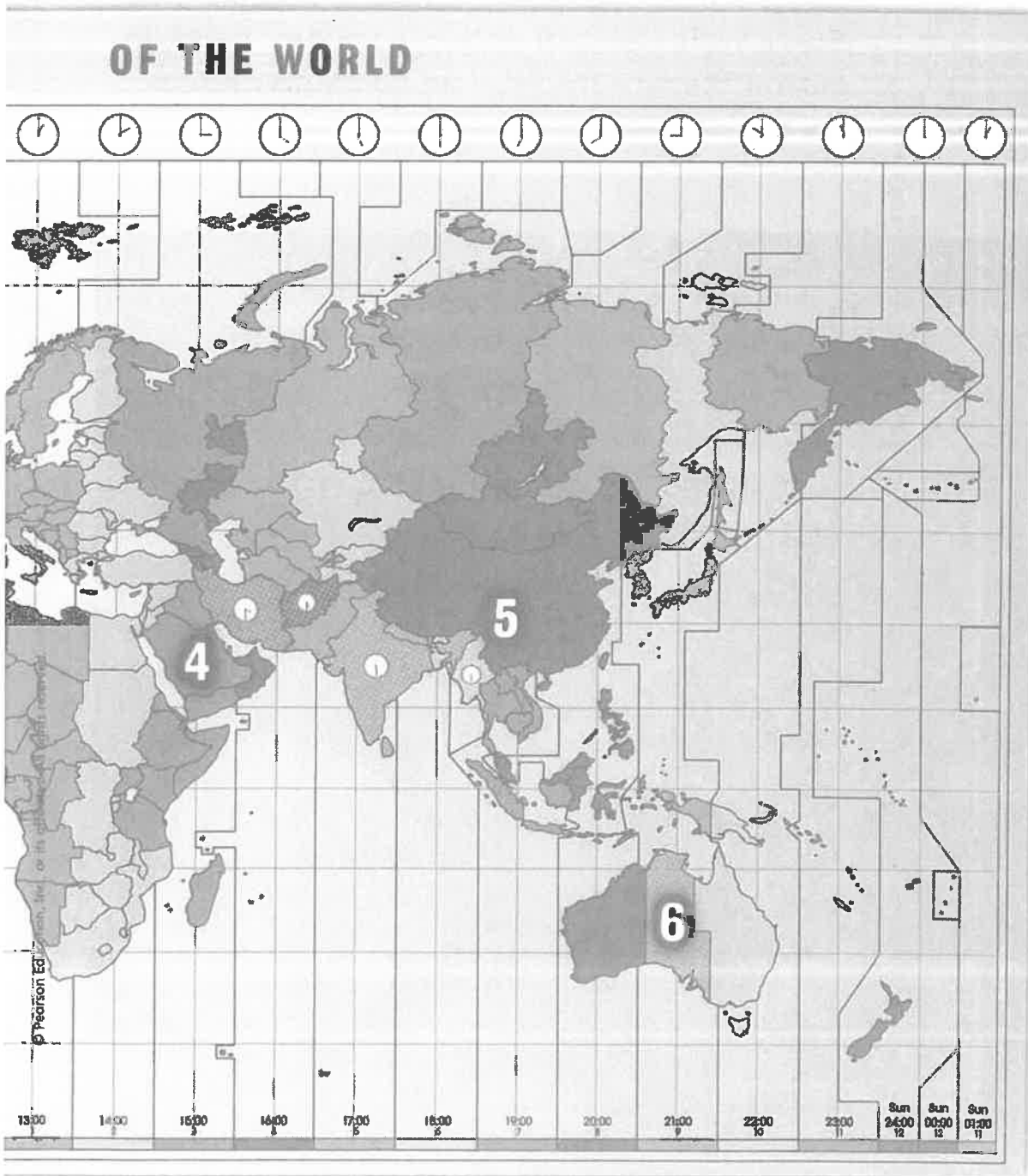
- 12 Earth is divided into 24 standard time zones. Each time zone is one hour ahead of the zone to the west of it. For example, say it is 12 p.m. in Anchorage, Alaska. At that same moment, it is 1 p.m. in Los Angeles, California.



13 Most areas have adopted these standard time zones. But there are some exceptions. China crosses three standard time zones. But the country decided to have only one time zone. Some regions divide time zones by half hours. Iran, Newfoundland in Canada, and parts of Australia are examples.

CLOSE READ

**adopted** started to use a selected idea or method



# Mission Earth

## Vocabulary in Context

**Context clues** are words and sentences around an unfamiliar word that help readers understand the word.

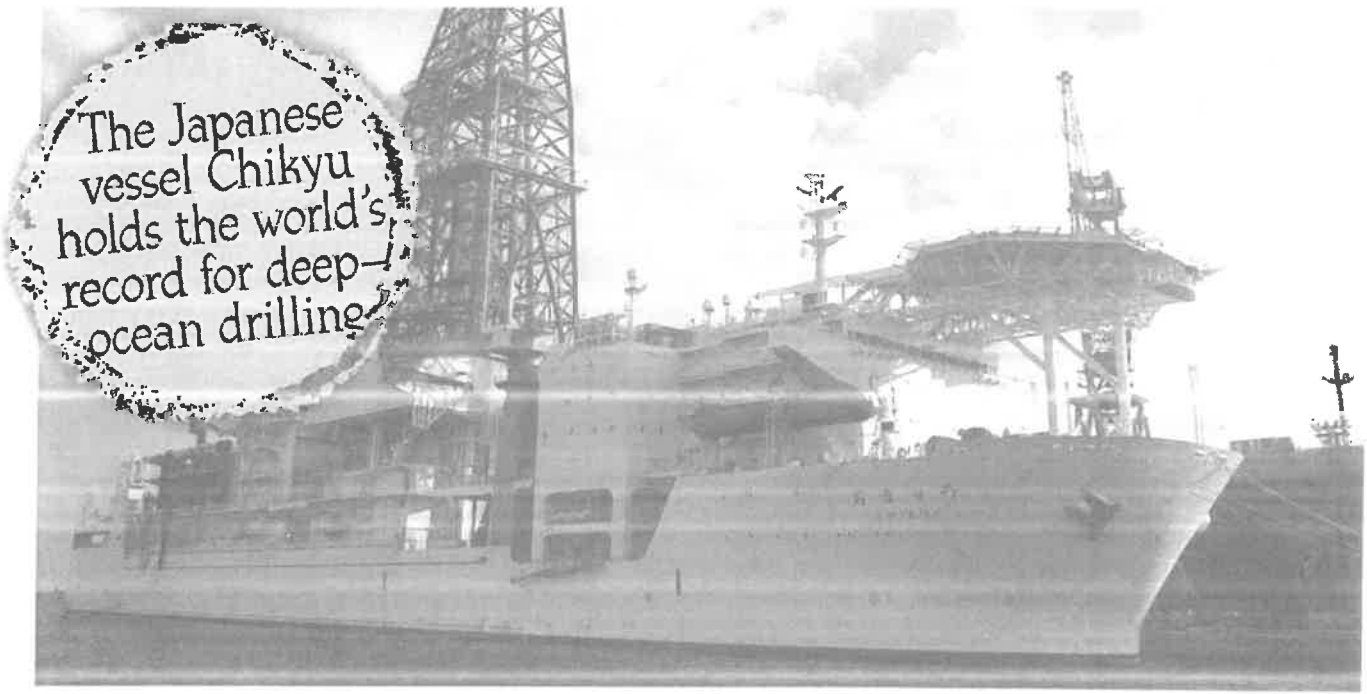
Use context clues to determine the meaning of *devastation*.

Underline the context clues that support your definition.

- 14 Technology has come a long way since the days of ancient astronomy. Satellites create detailed images of Earth from space. Probes deep inside the earth and in the ocean monitor the health of the planet. Global Positioning System (GPS) satellites allow us to navigate the planet without having to study the stars. Now scientists can spot problems and react quickly to natural disasters. This helps reduce the devastation the events could cause.







The Japanese vessel Chikyu holds the world's record for deep-ocean drilling.

## The Undiscovered Deep

CLOSE READ

- 15 Oceans are one of Earth's most abundant resources. But only 5 percent of the ocean floor has been explored. That is changing. The National Oceanic and Atmospheric Administration is studying deepwater canyons off the coast of Virginia. There, they use remote operated vehicles (ROVs) and sonar. Woods Hole Oceanographic Institution uses a human-occupied vehicle and other underwater machines to explore and map even deeper waters. These missions help explain Earth's geologic processes.

### Analyze Text Features

How does special equipment help us learn about Earth's mantle? Underline details in the text that clarify information in the photo.

**abundant** plentiful; commonly occurring

## To the Center of the Earth

- 16 The exact nature of Earth's mantle is still unknown. To solve this mystery, scientists are hoping to drill directly into the mantle and take samples. Geologists plan to drill through a section of the Pacific Ocean floor estimated to be less than 4 miles (6.4 km) thick. Special drills are being designed to handle the stress of boring through the hard oceanic crust. This \$1 billion project is planned to start drilling in 2020.



Mount Erebus is so popular it has its own Facebook page.

A scientist uses specialized equipment to study the crater at Mount Erebus.

## CLOSE READ

### Analyze Text Features

Underline details in the text feature that help you understand how scientists study Earth.

**molten** melted; hot enough to be in liquid form

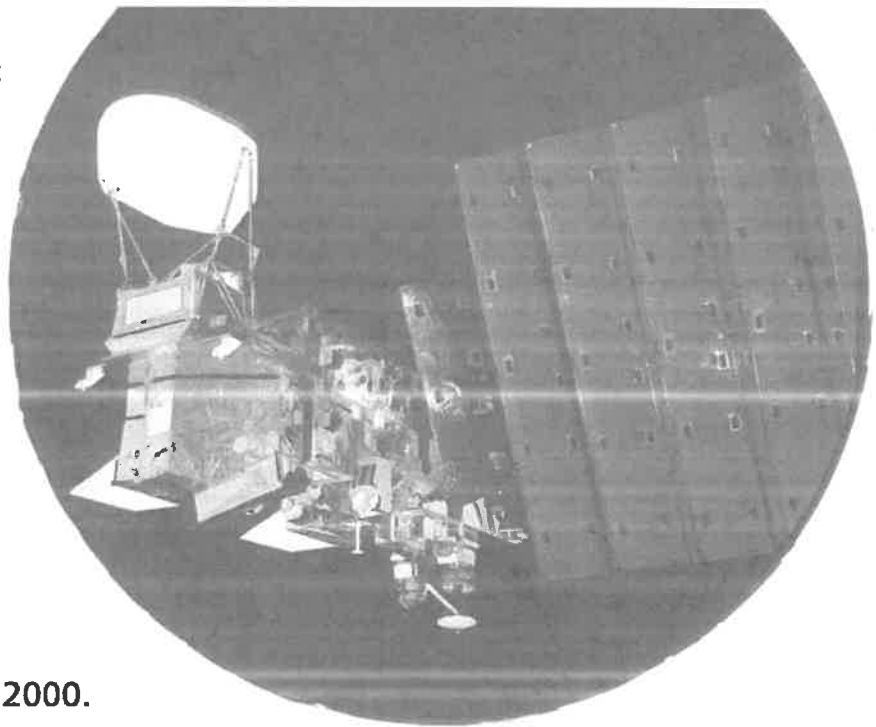
## Exploring Earth's Mantle Through Volcanoes

- 17 Antarctica's Mount Erebus is one of Earth's most unusual volcanoes. It is largely covered in ice. But it contains a lake of molten hot lava deep inside its crater. Scientists at the McMurdo Station research facility analyze the gas and lava produced by Mount Erebus. The data helps explain how and why volcanoes erupt. It can also tell us a lot about the mantle's chemical composition.

## Destination Space

- 18 Human-made satellites also help us study Earth. The *Aqua* satellite was launched in 2002. *Aqua* uses microwave technology to see through clouds and monitor Earth's water cycle. For example, water and ice from melting polar caps could shift ocean currents. Weather would change, and Earth's temperatures could plunge. Other satellites look for activity signaling earthquakes, tsunamis, or other natural disasters. Satellites can track storms or changes in Earth's climate.

The *Aqua* satellite is a joint project between the U.S. National Aeronautics and Space Administration and Japan's National Space Development Agency.



19 To learn how things work in a weightless environment, world scientists designed the International Space Station (ISS). ISS welcomed its first astronauts on November 2, 2000. Since then, more than 200 scientists and engineers have visited the station. They have conducted more than 400 experiments. As of 2013, ISS completed more than 57,000 orbits around Earth.

20 Exploration continues to expand. People once thought Earth was the center of the universe. What will we discover next?



#### CLOSE READ

#### Make Inferences

Highlight details in the text that you can combine with facts from paragraph 14 to make an inference about navigation.

## Where on Earth Are You?

21 Do you use GPS to navigate? If so, you're receiving information from the 29 GPS satellites orbiting Earth. The U.S. Air Force maintains these satellites. Twenty-four satellites are active. The other five are backups. The satellites transmit radio signals to a GPS receiver in your phone or car. Signals from four or more satellites are needed to accurately determine your position. Digital maps are built into the receiver. They use the satellites' information to help you navigate.

## Develop Vocabulary

Words develop new meanings as authors use them in different contexts. The original meaning of the word is the same, but a new meaning may become more familiar. For example, the original meaning of *mantle* is “cloak” or “outer covering.” When scientists needed a name for the layer of Earth between the core and the crust, they began using *mantle*. Today, when people hear the word *mantle*, many of them think of Earth’s crust instead of thinking of a piece of clothing.

**My TURN** Define each word as it is used in the text. Then complete the sentence to use the word in a different context.

Word	Text Definition	Sentence
<b>mantle</b>	layer of Earth between the crust and the core	The troposphere <b>covers the planet like</b> a mantle.
<b>circulates</b>		The air circulates
<b>adopted</b>		Deng adopted the cook’s procedure for
<b>abundant</b>		Orson collected abundant
<b>molten</b>		Greta into the molten cheese.

## Check for Understanding

**My TURN** Look back at the text to answer the questions.

1. What clues tell you that *Planet Earth* is an informational text?
2. Scientists use tools, such as ROVs, drills, and satellites, that are specially designed for studying the planet. Choose one area of the planet that scientists study, and explain the tool or tools that scientists use there.
3. Why do people want to know about the structure of Earth? How is this knowledge helpful? Use a quotation from the text to support your answer.
4. How does heat affect natural systems on Earth? Write a short paragraph about the role that heat plays in the water cycle and inside Earth. Support your paragraph with evidence from the text.

## Analyze Text Features

A text's **graphic features** include photographs and diagrams. **Print features**, such as captions and labels, clearly identify what to note in graphic features.

1. **My TURN** Go to the Close Read notes in *Planet Earth* and underline links between text details and information in graphic features.
2. **Text Evidence** Use the parts you underlined to complete the chart. Tell whether the purpose of each feature is to explain a *structure* or a *process* on Earth. Then answer the question.

Graphic Feature	My Annotations	Purpose of Feature
Diagram of Earth near paragraph 1	"crust," "mantle, outer core, and inner core"	to explain a structure
Diagram of Water Movement near paragraph 5		to explain a
Photograph of <i>Chikyu</i> near paragraph 15		to explain a

Choose one graphic feature from the chart to analyze. How does the graphic feature help achieve the author's purpose?

# Make Inferences

To make an inference, combine text evidence with what you already know to reach a new understanding about a topic.

- My TURN** Go back to the Close Read notes and highlight evidence in diagrams, captions, and the text that will help you make inferences.
- Text Evidence** Record your evidence in this chart. Then use what you already know to make an inference about information in *Planet Earth*.

Text Evidence	What I Already Know About This Topic	My Inference
<p>"Tectonic plates sliding against each other can cause mountains to rise along Earth's surface."</p>	<p>I know that mountains can change over time.</p>	<p>Tectonic plates are the reason mountains such as the Himalayas get taller.</p>

## Reflect and Share

**Talk About It** What interests or concerns you most about planet Earth? What more do you want to know about it? Based on what you've read this week, which kind of scientist would be able to give you that information? Discuss with a partner. Use examples from the texts to support your ideas.



**Listen Actively and Ask Questions** During your discussion with a partner, remember that how you listen is as important as what you say.

- ① Listen quietly while your partner speaks. Don't interrupt.
- ② Focus on what your partner is saying so that you can ask questions about what is being said.
- ③ Briefly paraphrase, or restate, what your partner said before you ask for clarification or examples.

Use questions like these to ask for clarification and examples.

Would you tell me more about what that kind of scientist does?

You said \_\_\_\_\_. Could you give me an example of what you mean?

### Weekly Question

**What do we know about Earth's features and processes?**



# Academic Vocabulary

## Learning Goal

I can develop knowledge about language to make connections between reading and writing.

**Related words** share roots and have similar meanings. Adding prefixes and suffixes to a base word creates related words. For example, the base word *preserve* is related to the words *preservative*, *preserving*, and *preservation*. Related words function as different parts of speech.

**My TURN** For each pair of related words,

1. **Identify** each word's part of speech.
2. **Tell** what both words are about.
3. **Write** the related word that best completes the sentence.

Related Words	Parts of Speech	Both Words Are About . . .	Sentence Completion
mislabeled labeling	verb verb	naming something	Because she was in a hurry, she <u>mislabeled</u> the hot sauce.
amaze amazement			We looked at the miniature horse in _____.
borderless bordered			He walked to the fence that _____ the pasture.
consequently inconsequential			_____, they returned home without any souvenirs.

## Latin Roots

The Latin roots *gener*, *port*, *dur*, and *ject* form many English base words. The meaning of each root influences the meaning of the word in which it appears.

Root	Latin Meaning	Sample Base Word	Sample Related Words
<i>gener</i>	to produce	generate	generation regenerate
<i>port</i>	to carry	port	import report
<i>dur</i>	to harden	endure	enduring during
<i>ject</i>	to throw	project	projected projecting

**My TURN** Complete the sentences to explain how each bold word is related to the meaning of its Latin root. Refer to print or digital resources for ideas.

1. If I am **generating** ideas, it means I am **in the process of producing ideas**.
2. A **porter** is
3. A stone's **durability** usually relates to how \_\_\_\_\_ the stone is.
4. When I **reject** an idea, I
5. The regeneration of the garden meant that it was

# Week 1, Assignment 1- Informational Text Quiz

Your email address ([trisha\\_richardson@isd31.net](mailto:trisha_richardson@isd31.net)) will be recorded when you submit this form. Not you? [Switch account](#)

Please read pages 434-435 in your textbook and select two features of an informational text. Hint: Use your anchor chart on page 435!! 2 points

- Text features such as headings, charts, and photographs
- Science fiction characters and settings
- May contain diagrams to present information visually
- Includes a talking snowman, such as Olaf
- Characters personify forces of nature

Send me a copy of my response.

Submit

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**Week 1, Assignment 2-Vocabulary Preview**

Please guess the meaning of each word. Then, use your book (pages 438-449) or a dictionary to write the correct definition in a complete sentence.

<b>Word</b>	<b>My Guess</b>	<b>Correct Definition</b>
<b>Mantle (page 438)</b>		
<b>Circulates (page 440)</b>		
<b>Adopted (page 445)</b>		
<b>Abundant (page 447)</b>		
<b>Molten (page 448)</b>		

### Week 1. Assignment 3- Latin Roots Intro

Please use textbook page 456 to complete the table.

Root	Latin Meaning	Sample Base Word	Sample Related Words
gener		generate	
	To carry		Import, report
		endure	Enduring, during
ject	To throw		

Complete the following sentences:

1. If a stone is durable, it means that the stone is...

2. When I reject an idea, I...

## Week 1, Assignment 4 Making Inferences

Combine your prior knowledge and the evidence in the passage to make an inference. Support your inference with details from the passage.

**Example:** The room was a mess! Pots and pans were piled in the sink. Drawers and cabinets were flung open. Chocolate chips dotted the floor and empty cartons were on a sticky counter, but the smell was delicious.

**Inference:** Why was the room a mess?

They were making chocolate chip cookies.

**Evidence:**

Chocolate chips dotted the floor, the counter was sticky, and the smell was delicious.

**Story One:** The girl saved all her money. It was exactly what she wanted. She imagined gliding down the road pedaling effortlessly. She finally had enough money to make her dream come true.

**Inference:** What was her dream?

**Evidence:**

**Story Two:** The bear ate lots of nuts and fish. Her fur got thick. She prepared her den. The leaves fell from the trees and the days turned colder.

**Inference:** What was the bear getting ready to do?

**Evidence:**



Instructions

Student work

# Week 1 Assignment 5 Planet Earth Weekly Story



**Trisha Richardson** Mar 18 (Edited 2:47 PM)

Read the story "Planet Earth" on pages 437-449 in your MyView textbook.

## Class comments



Add class comment...



# Week 1 Assignment 6 Vocab Match

\* Required

Match the vocabulary word to the correct definition. \*

	plentiful; commonly occurring	moves through a system	melted; hot enough to be in liquid form	the layer of Earth between the crust and the core	started to use a selected idea or method
Mantle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Circulates	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Adopted	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Abundant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Molten	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Submit

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## Week 1, Assignment 7- Latin Roots

### Word Study

#### Latin Roots *gener*, *port*, *dur*, and *ject*

Many English base words come from Latin roots.

- *gener* means "to produce"
- *port* means "to carry"
- *dur* means "to harden" or "to last"
- *ject* means "to throw"

**My Turn** Write a simple definition for each word below based on its Latin root. Confirm your definitions using a print or online dictionary.

Word	Simple Definition
1. generator	
2. generation	
3. export	
4. support	
5. portfolio	
6. durable	
7. duress	
8. reject	

**Week 1, Assignment 8 Text Features**

Use "Planet Earth" on pages 437-449 of your textbook to identify 3 text features and their purpose. Hint: Use the anchor chart on page 435 for help!

<b>Page Number</b>	<b>Text Feature</b>	<b>How it helps me to understand the text</b>




Instructions

Student work

# Week 1 Assignment 9 Progress Check Up



 **Trisha Richardson** 8:52 AM (Edited 2:52 PM)

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Pearson Progress Check Up

## Class comments



Add class comment...



## Vocabulary

**Directions: Choose the word or word group that has about the same meaning as the underlined word.**

- 1 The volcano erupted, spouting magma from the mantle of the Earth.
  - A layer above the atmosphere
  - B layer between the crust and the outer core
  - C layer between the atmosphere and the crust
  - D layer between the outer core and the inner core
  
- 2 Water on Earth circulates constantly through the water cycle.
  - F is formed
  - G is used by plants
  - H flows in a system
  - J becomes absorbed
  
- 3 Most areas have adopted one of the standard time zones.
  - A used
  - B rejected
  - C objected to
  - D understood
  
- 4 The acorns were abundant under the oak tree.
  - F plentiful
  - G collected
  - H loose
  - J scarce

**Directions: Read the question. Then choose the best answer.**

- 5 Which word is a synonym for molten in the sentence below?  
*The molten lava destroyed trees in its path.*
  - A rocky
  - B melted
  - C solid
  - D crystal

## Word Study

**Directions: Choose the definition that best describes the underlined word in each sentence.**

- 6 We created a general letter to send to all the homes in the neighborhood.
- F one with many words
  - G one that is produced for anyone
  - H one that is meant to be sent by mail
  - J one that is meant to be read aloud by others
- 7 Trucks are one type of transportation found on streets and roads.
- A vehicle that cannot travel quickly
  - B vehicle that is used every few days
  - C vehicle that is on the side of the road
  - D vehicle meant to carry people or items
- 8 The marble statue is so durable it has stood for three hundred years.
- F hard to make
  - G hard and strong
  - H younger than most things
  - J often visited by other people
- 9 The basketball player rejected the opponent's shot at the hoop.
- A tried hard
  - B threw back
  - C passed quickly
  - D looked away from

**Directions: Read the question. Then choose the best answer.**

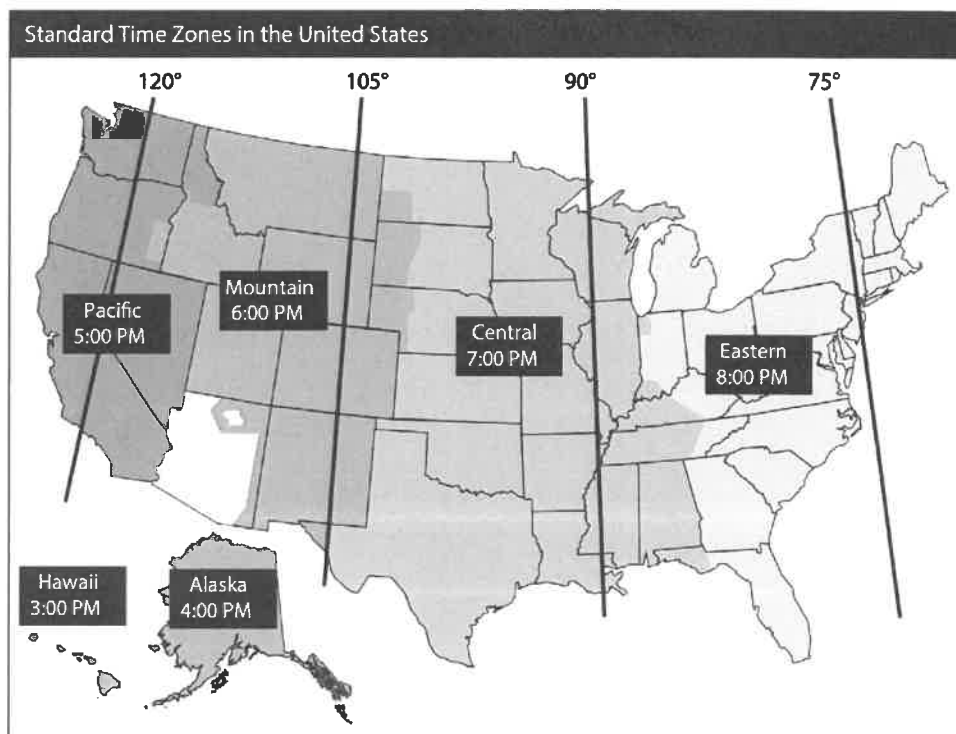
- 10 The root *ject* helps the reader know that one meaning of the word project is —
- F to throw something
  - G to last for a long time
  - H to carry something far
  - J something that hardens quickly

# Reading Comprehension

Directions: Read the selection. Then answer each question.

## Time Zones

- 1 On Earth, each day has twenty-four hours. That's how much time it takes the Earth to spin, or rotate, on its axis. As Earth turns, different parts of the planet face the sun, while other parts turn away from it.
- 2 If the entire planet had only one time zone, a child going to school at 8:00 A.M. in one place might be going to school in the middle of the night! That's why countries have time zones. With different time zones, the time we see on the clock is related to our location's position with the sun.
- 3 Time zone lines are based on longitude lines. Longitude lines run from north to south on a globe. That is why we use maps to help us understand where time zones have been created.
- 4 There are six time zones in the continental United States, Alaska, and Hawaii: Eastern, Central, Mountain, Pacific, Alaskan, and Hawaiian. A girl might play soccer at 4:00 P.M. in the Eastern Time Zone. At the same time, a boy in the Alaskan Time Zone might eat his lunch at 12:00 P.M.!



- 11 How does the diagram help support the selection?
- A It contains a definition of time zones.
  - B It shows the different time zones in the United States.
  - C It shows how time zone lines are easy to see from outer space.
  - D It helps show that there are many time zones throughout the world.
- 12 Which sentence from the selection is supported by looking at the diagram?
- F *As Earth turns, different parts of the planet are face the sun, while other parts turn away from it.*
  - G *If the entire planet had only one time zone, a child going to school at 8:00 A.M. in one place might be going there in the middle of the night!*
  - H *Longitude lines runs from north to south on a globe.*
  - J *There are six time zones in the continental United States, Alaska, and Hawaii: Eastern, Central, Mountain, Pacific, Alaskan, and Hawaiian.*
- 13 The diagram of the time zones helps the reader understand that —
- A Central Time and Mountain Time are the same
  - B Pacific Time is one hour later than Hawaiian Time
  - C Eastern Time is two hours later than Mountain Time
  - D Eastern Time is one hour earlier than Mountain Time
- 14 Which two paragraphs from the text are supported by the information in the diagram? Explain how those paragraphs relate to the diagram. Write your response on a separate sheet of paper.

---

## Writing – Poetry

Keeping track of time is an important part of staying organized. Think about a time when being late might cause a problem for a person. On a separate sheet of paper, write a short poem about that problem. Remember the characteristics of poetry as you write.

# WEEK 1: WRITING

**March 30-April 3**

## DAY 1:

**Write a minimum of 5 complete sentences.**

What did you do over the last 8 days and how are you feeling about distance learning?



## DAY 2:

**Write a minimum of 5 complete sentences.**

What questions do you have about the world right now, including distance learning and navigating google classroom?

## DAY 3:

**Write a minimum of 5 complete sentences.**

Tell me about a time when you were brave.

## DAY 4:

**Write a minimum of 5 complete sentences.**

Tell me about the book you are reading right now.

## DAY 5:

**Write a minimum of 5 complete sentences.**

Tell me about the funniest thing you've ever seen.