2022-2023

6th Grade Summer Project

Due to your HR teacher by 9/6/22

Dandy Decimals

Write sixty seven and eighty two hundredths in standard form

Now write that number in expanded form

What is the value of the 7?

Write 3,009.1 in base ten form

Now write that number in word form

What is the value of the 3?

Write 7,000 + 800 + 40 + 6 + 0.005 in word form.

Now write that number in standard form

What is the value of the 5?

Write 12.592 in word form

Now write that number in expanded form

What is the value of the 9?

Dandy Decimals

Color the squares that represent the same number the same color.

(5 x 1) + (8 x 0.01) + (1 x 0.001)	Forty nine and seven hundred forty five thousandths	80,000 + 5,000 + 300 + 60 + 2 + 0.9 + 0.06 + 0.008	0.248	One hundred one and nine hundredths
(4 x 10) + (9 x 1) + (7 x 0.1) (4 x 0.01) + (5 x 0.001)	5 + 0.08 + 0.001	(9 x 1,000) + (8 x 10) + (8 x 1) + (7 x 0.1) + (6 x 0.01)	75,730.28	(2 x 1,000) + (5 x 100) + (2 x 0.1) + (8 x 0.01)
Eighty five thousand, three hundred sixty two and nine hundred sixty eight	Two thousand five hundred and twenty eight hundredths	(1 x 100) + (1 x 1) + (9 x 0.001)	5.081	(2 x 0.1) + (4 x 0.01) + (8 x 0.001)
100 + 1 + 0.09	49.745	Zero and two hundred forty eight thousandths	2,500.28	9,088.76
9,000 + 80 + 8 + 0.7 + 0.06	Seventy five thousand seven hundred thirty and twenty eight hundredths	85,362.968	40 + 9 + 0.7 + 0.04 + 0.005	0.2 + 0.04 + 0.008)

Casually Comparing Decimals

In Fifth Grade, we learned to look at place value to compare and order decimals.

Summer

Put the numbers below into the table from greatest to least.

| 5,780.06 | 7,581.64 | 4,329.85 |
| 5,781.06 | 4,329.85 | 5,781.6 |

Thousands	Hundreds	Tens	Ones	Decimal	Tenths	Hundredths	Thousandths

Casually Comparing Decimals

Put the numbers below into the table from least to greatest..

490.8	4,900.137	490.75
216.018	206.011	4,900

Thousands	Hundreds	Tens	Ones	Decimal	Tenths	Hundredths	Thousandths

Ethan loves to eat ice cream! His mother bought a carton of mocha almond fudge, his favorite flavor. She scooped out two bowls, one that weighed 16.07 ounces and one that weighed 16.70 ounces. If Ethan wants the most ice cream, which should he choose?

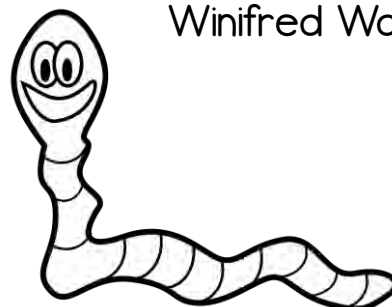Name _____

Wild and Wacky Worms

Amy has collected four earthworms for her new science project. She is recording their length, width, and how far they have dug themselves into soil in a one minute period. Her results are below:
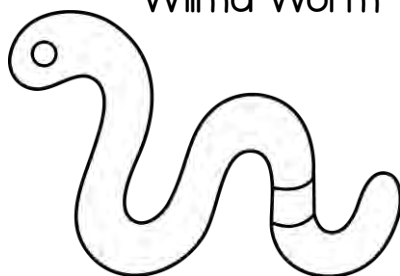
Wilbur Worm
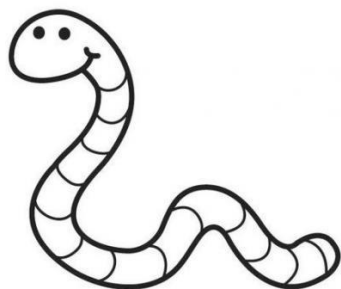
Length	1.08 inches
Width	0.086 inches
Depth Dug	1.92 inches

Winifred Worm

Length	1.914 inches
Width	0.212 inches
Depth Dug	0.8 inches

Wilma Worm

Length	1.904 inches
Width	0.029 inches
Depth Dug	1.07 inches

Winston Worm

Length	0.894 inches
Width	0.057 inches
Depth Dug	1.20 inches
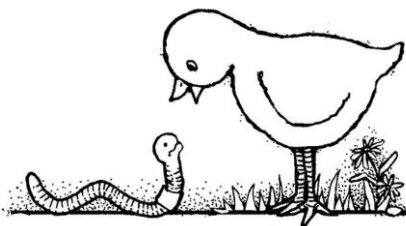
Wild and Wacky Worms

Amy wants to color code her results on the previous page.

Use the following to color code her results:

Length
Color the longest worm purple.
Color the 2nd longest worm yellow.
Color the 3rd longest worm blue.
Color the shortest worm green.

Width
Draw a yellow rectangle around the widest worm
Draw a red rectangle around the 2nd widest worm.
Draw a blue rectangle around the 3rd widest worm.
Draw a purple rectangle around the thinnest worm.

Depth Dug
Circle the name of the deepest digger in purple.
Circle the name of the 2nd deepest digger in red.
Circle the name of the 3rd deepest digger in green.
Circle the name of the shallowest digger in blue.

Name _____

High Fahrenheit Fractions
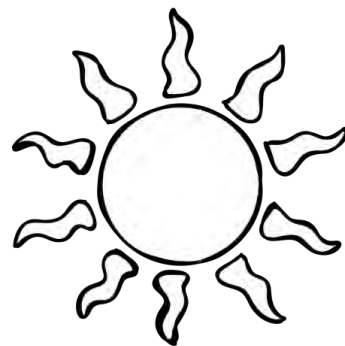
1.) Brittany found 81 sand dollars on the shore. Of those $\frac{2}{3}$ were broken. How many were broken?

2.) Mrs. Bowers brought a 256 ounce cooler of juice to the beach for her children. She wants to share it equally among her 6 children. How many ounces will each child get?

3. Francisco built a sandcastle that is $4\frac{1}{8}$ feet high. Alejandro built one that was $4\frac{1}{16}$ feet high. Whose sandcastle was the tallest?

4.) This weekend, $\frac{2}{5}$ of the lifeguards at Shell Bay Beach ore on duty. Of those lifeguards, $\frac{1}{3}$ of them ae teaching beach safety classes. What fraction of all the lifeguards are teaching classes?

5.) If Shell Bay Beach has 60 total lifeguards, how many were teaching safety classes that weekend?
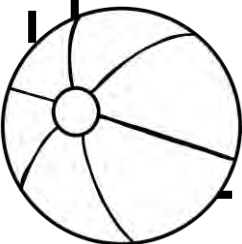
High Fahrenheit Fractions
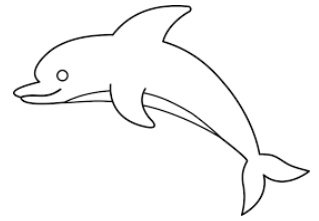
6.) The fifth grade class at Pioneer Elementary will be going to the beach on a field trip. They have 128 students going. Each bus will hold 42 people. How many busses should they order?

8.) John is cutting wood for the beach bonfire. He has a log that is 12 feet long. If he cuts it into pieces that are $\frac{3}{4}$ feet long, how many pieces will he have?

7.) On beach clean up day, $\frac{9}{10}$ of the trash picked up was plastic. If they picked up 240 pounds of trash, how many pounds were not plastic?

9.) At the Marine Life Aquarium there are 16 dolphins. Of those dolphins $\frac{5}{8}$ of them are bottle nosed dolphins. How many dolphins are not bottle nosed?

High Fahrenheit Fractions

10.) Mr. Reyes wants to set aside an are at the beach for a family reunion. He wants to have at least 150 square feet. He finds a rectangular space that measures $9\frac{3}{4}$ feet by $14\frac{2}{3}$ feet. Will this large enough?

12..) Kaylie is hosting a beach party. She is having 8 friends come. She bought 4 pizzas and wants to share them equally between herself and her friends. How much of all the pieces will each person get?
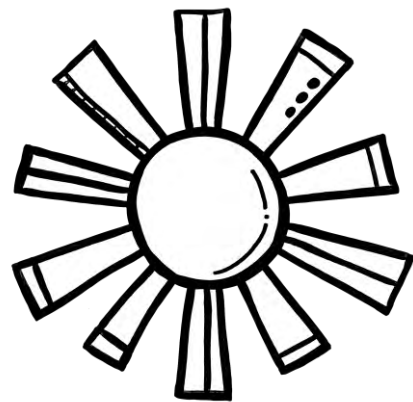
Draw a diagram and explain your reasoning.

11.) The Holder family only have one Boogie Board. The 4 Holder children will need to split their time using it equally. How many minutes will each child get to use the board if they are at the beach for 3 hours.
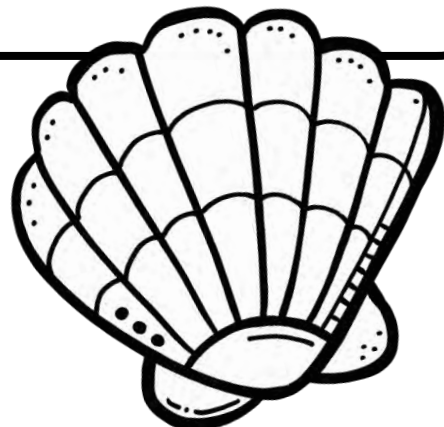
Dehydrating Decimals!

1.) Meyer is heading to the beach. When he leaves his house it is 64.7 degrees Fahrenheit. At 2:00 it is 81.9 degrees Fahrenheit. What was the change in temperature that day?

2.) Zeke's surfboard is 4.25 feet long. His cousin, Able's surfboard is 1.2 times as long. How long is Able's surfboard?

3. Danny's surfboard is 0.82 times the size of Able's. How long is Danny's board?

4.) Jennifer collected 6.8 pounds of mussels. Her sister Alondra collected 0.7 times the amount of Jennifer. Chloe collected 2.5 times the amount that Alondra did. How many pounds of mussels did each sister collect?

5.) How many more pounds of mussels did Chloe collect over Alondra?

Dehydrating Decimals!

6.) The Beach Bus charges $5.65 per person to ride the bus to the beach. If 200 people rode the bus this week, how much money did they collect?

8.) The swimming pool at the beach club covers 182.75 square meters. It has a width of 8.5 meters. How long is the pool?

7.) It costs the Beach Bus $2.87 per person to operate the bus. How much profit did they make in the above week?

9.) If the pool has 4 lanes running lengthwise, how wide is each lane?

Dehydrating Decimals!

10.) Padma is ordering lunch from the beach snack bar. She orders a hot dog for $6.89, French fries for $3.98, a soda for $2.75, and some candy for $3.35. She hands the clerk a $20.00 bill. How much change should she receive?

12.) Ji Hoon is a lifeguard at the beach. He works 22.5 hours per week life guarding and 14.85 hours teaching swim lessons. If he earns $24.00 an hour lifeguarding and $17.00 an hour teaching swimming, how much will he make over three weeks?

11.) Natasha is ordering drinks for her friends. She orders 3 sodas for $1.95 each, 5 ice coffees for $3.60 each, and a muffin for $2.65. How much did she spend?

13..) Sabia wants to ride her bike to the beach. Her house is 5.72 km from the beach. If she rides to and from the beach 14 times this summer, how many kms will she ride all together?

River City Science Academy Intracoastal
<u>Required</u> Summer Reading Assignment 2022 for
Incoming 6th Graders
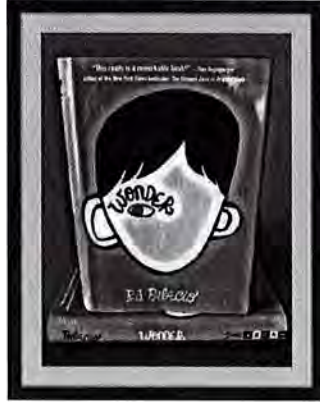
<u>Wonder by R.J. Palacio - Lexile 790</u>

"August Pullman is not an ordinary ten-year-old kid. Sure, he's a huge Star Wars fan, he loves his dog, and he's got a pretty good sense of humor. But August was born with a craniofacial abnormality, a genetic defect that caused his facial features to be severely deformed. His life has never been "normal." Despite his differences, August and his parents decide to transition him from home-school to private school now that he's entering fifth grade. It's the start of middle school, they reason, so everyone will be new. But August has to deal with so much more than just being new. Will he make friends? Will he decide to stay at the school? And can the people around him learn to see past his appearance? This brilliant, sensitive story, narrated not only by August, but also by his older sister, his classmates, and other kids in his life, takes an insightful look at how one person's differences can affect the lives of so many others." (Scholastic)

• EVERY student entering the 6th grade is required to read the novel, Wonder by R.J. Palacio, prior to returning to school in August.

• In addition to reading the novel, a mandatory summer reading assignment must be completed. This assignment will be collected on the first day of school.

• Students will also be required to take a written assessment on the book upon returning to school. This assessment will count as a quiz grade. The assessment grade will be entered as an English Language Arts grade.

Required Summer Reading Assignment 2022 - Incoming 6th Graders Due the First Day of School!

Directions: Complete the following plot analysis questions. Be sure to include all of the necessary parts in your response. Submit the answers to your teacher on the first day of school.

1. What is the setting (the when and where)?

2. Who is/are the main character(s)?

3. Write a short description (6-8 sentences) of the main character(s) or subject(s) of the book. Use at least three character traits to describe this/these person(s). For example, character traits are brave, courageous and intelligent.

4. Describe the central conflict of the novel in a short paragraph. What is the main problem?

5. Summarize the rising action and climax of the plot.

6. What is the resolution (outcome) of the novel?

7. What is the point of view of the novel? Who is the narrator?

8. What do you think the theme (message) of the book is? What is the author trying to tell you?

Student Resource - _Elements of Narrative: Plot Analysis_

Plot (definition)

Plot is the organized pattern or sequence of events that make up a story. Every plot is made up of a series of incidents that are related to one another.

5 Elements of Plot:

1. Exposition

This usually occurs at the beginning of a short story. Here the characters are introduced. We also learn about the setting of the story. Most importantly, we are introduced to the main conflict (main problem).

2. Rising Action

This part of the story begins to develop the conflict(s). A building of interest or suspense occurs.

3. Climax

This is the turning point of the story. Usually the main character comes face to face with a conflict. The main character will change in some way.

4. Falling Action

All loose ends of the plot are tied up. The conflict(s) and climax are taken care of.

5. Resolution

The story comes to a reasonable ending.

Keywords for Plot Analysis

Foreshadowing: _The use of hints or clues to suggest what will happen later in the story._

Inciting Force: _The event or character that triggers the conflict._

Conflict: _The essence of fiction. It creates a plot. The conflicts we encounter can usually be identified as one of four types. (Man versus...Man, Nature, Society, or Self)_

Suspense: _That quality of a literary work that makes the reader or audience uncertain or tense about the outcome of events. Suspense makes the reader ask "What will happen next?"_

Suspense is greatest when it focuses attention on a sympathetic character. Thus, the most familiar kind of suspense involves a character hanging from the ledge of a tall building, or tied to railroad tracks as a train approaches.

Symbolism: *Any object, person, place, or action that has a meaning in itself and that also stands for something larger than it does, such as a quality, an attitude, a belief, or a value. For instance, a rose is often a symbol of love and beauty while a skull is often a symbol of death.*

POINT OF VIEW

First Person
The narrator is a character in the story who can reveal only personal thoughts and feelings and what he or she sees and is told by other characters. He cannot tell us thoughts of other characters.

Third-Person Objective
The narrator is an outsider who can report only what he or she sees and hears. This narrator can tell us what is happening, but he cannot tell us the thoughts of the characters.

Third-Person Limited
The narrator is an outsider who sees into the mind of one of the characters.

Omniscient
The narrator is an all-knowing outsider who can enter the minds of more than one of the characters.

Summer of WONDER

Purchase your Summer Reading book today at your local Barnes and Noble.

"*Wonder* is one of those rare books that makes you want to hug everyone in it so tightly that they'll have no doubt about how much you love them...and beyond that, it also makes you want to reach out and hug the whole world. It's an upbeat, humorous, life-affirming story that deserves to be read—and it's one that may just change its readers, too."

"I've read this book twice now, and it will definitely always have a special place in my heart. This is a book that makes me laugh, makes me cry, and gives me endless amounts of hope. I love this book, and will probably be giving out copies to my friends and family this Christmas."

Don't judge a book by its cover

ALWAYS BE ON THE LOOKOUT FOR THE PRESENCE OF WONDER.

6th Grade World History Summer Packet - Summer 2022
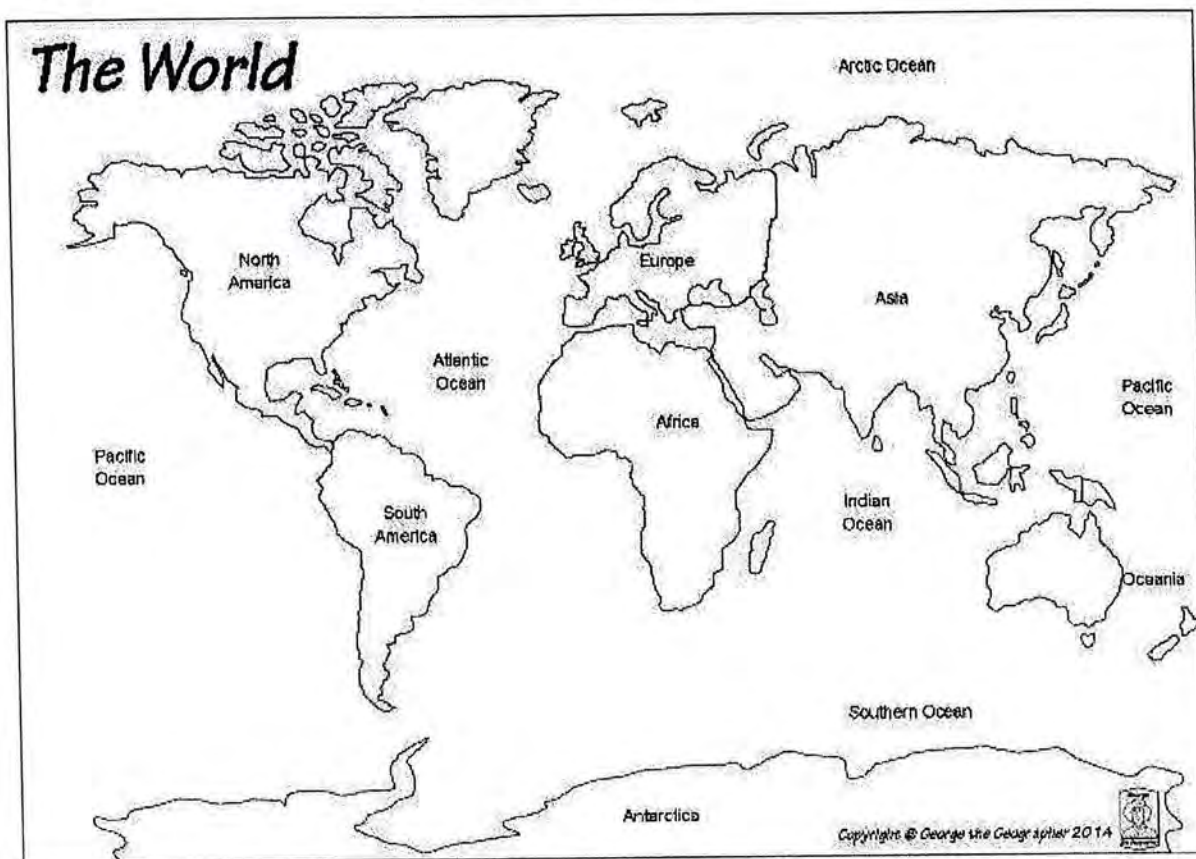
Hello Parents/Guardians and Students!!

Attached you will find the Summer Reading Packet for incoming sixth graders to River City Science Academy. Please read, learn, and study the information contained within the packet so that you are prepared to begin World History once school begins in August. The packet also contains several links to games and videos that will assist you in learning, and practicing, the material. The only written work that needs to be completed and turned in during the first week of school is the Continents and Oceans worksheet. This packet is for informational purposes and to ensure that you are prepared for the content that will be delivered during the first week of school. We welcome you to River City Science Academy, we look forward to meeting you in the fall.

Sincerely,

River City Science Academy 6th Grade Social Studies

6ᵗʰ Grade World History

There are seven **continents** and five major oceans on earth today. The continents are shown below and include North America, South America, Europe, Asia, Africa, Antarctica, and Australia (Oceania). The major oceans are the Atlantic Ocean, Pacific Ocean, Indian Ocean, Arctic Ocean, and Southern Ocean.

The World

Arctic Ocean

North America

Europe

Asia

Atlantic Ocean

Pacific Ocean

Africa

Pacific Ocean

South America

Indian Ocean

Oceania

Southern Ocean

Antarctica

Copyright © George the Geographer 2014

People who make maps are called **cartographers**. Maps use imaginary lines called latitude and longitude lines to locate places. Where these lines intersect are **coordinate** points. **Longitude** lines run from north to south, however they divide the earth into the eastern and western hemispheres. **Latitude** lines run from east to west and divide the earth into the northern and southern hemispheres.

Coordinate

• The latitude and longitude address of a place on a map.
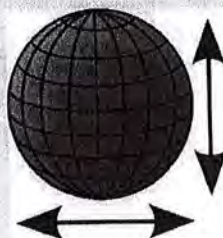
A **hemisphere** is half of the earth. The earth can be divided into an eastern and western hemisphere and a northern and southern hemisphere. The Prime Meridian divides the earth into an eastern and western hemisphere. The Equator divides the earth into a northern and southern hemisphere. The **Prime Meridian** is located at 0° longitude and the **Equator** is located at 0° latitude.
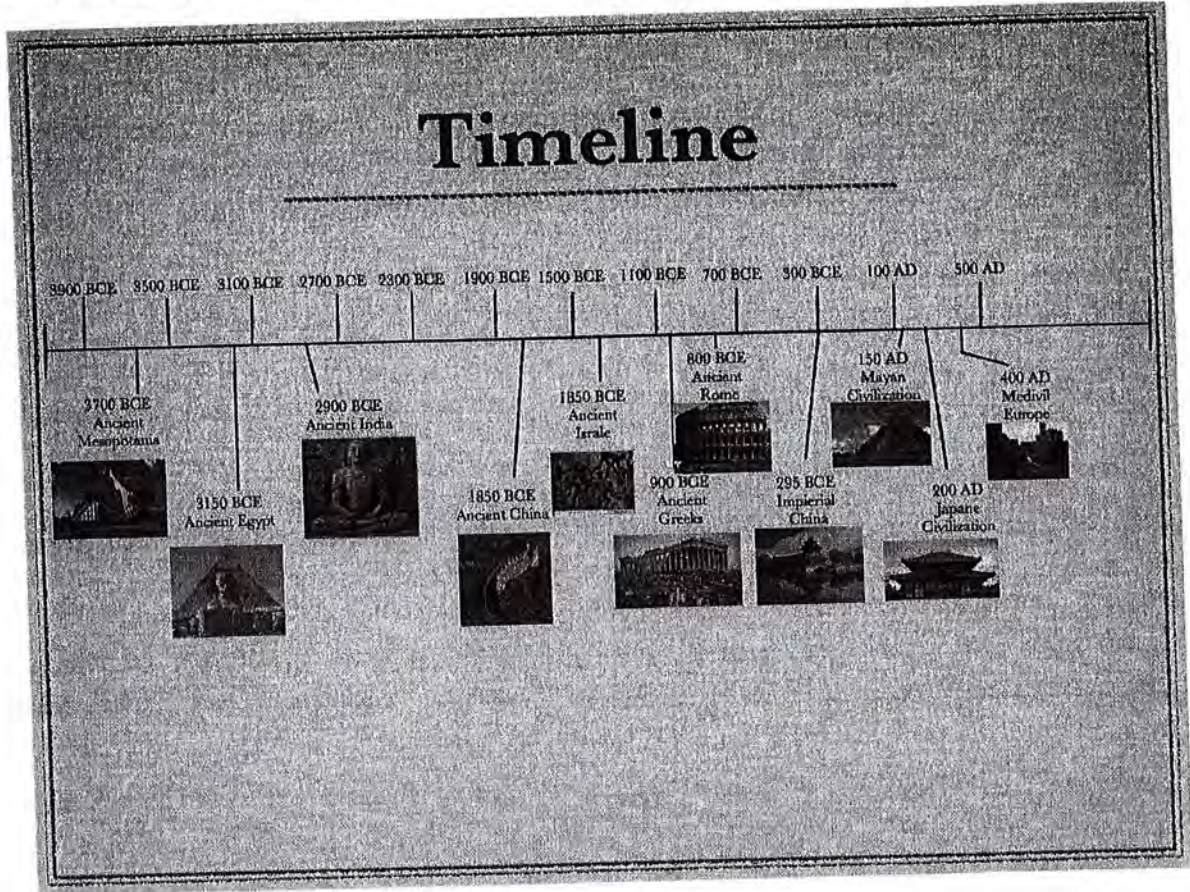

© 2012 Encyclopædia Britannica, Inc.
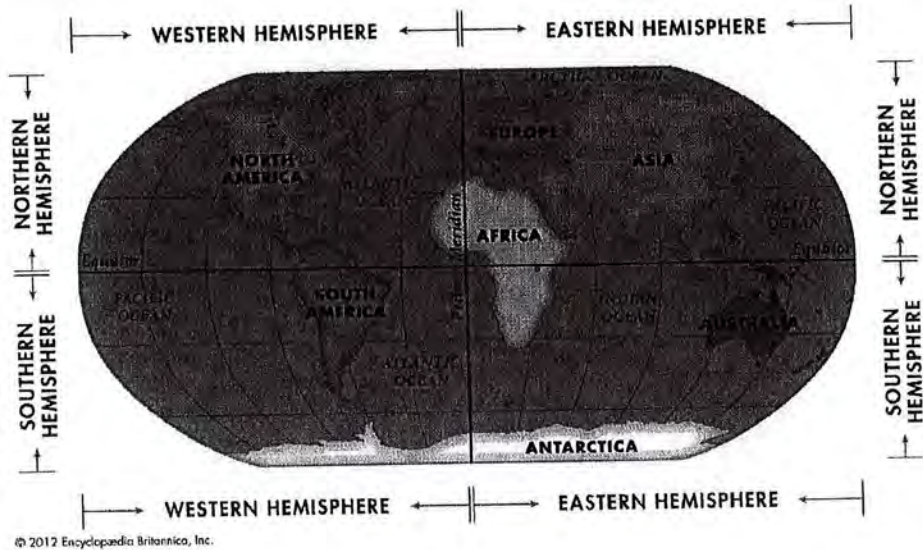
The intersecting pattern formed from all of the latitude and longitude lines is known as a **geographic grid**.

Maps usually have a **compass rose** on them to show which direction the map is facing. The **cardinal directions** are north, south, east, and west while the **intermediate directions** are northeast, northwest, southeast, and southwest.
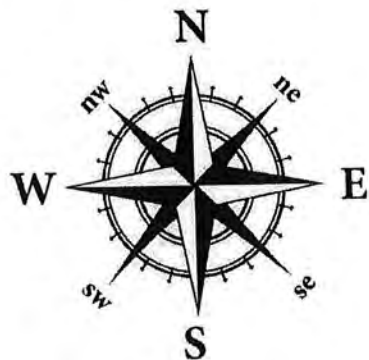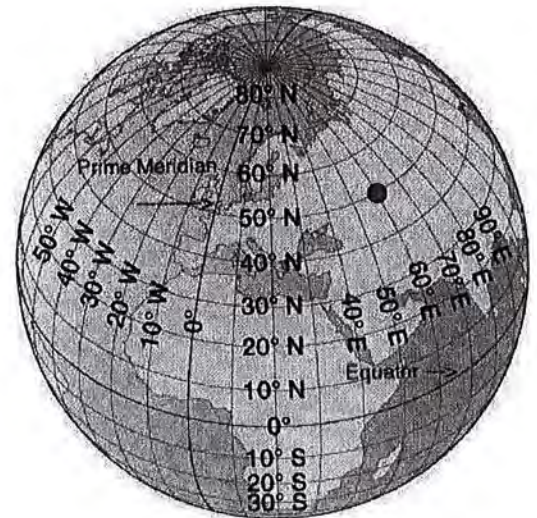
Timelines are used to organize events from the past into **chronological order**, which means arranging events from the earliest time to the most recent.

Timeline

| 3900 BCE | 3500 BCE | 3100 BCE | 2700 BCE | 2300 BCE | 1900 BCE | 1500 BCE | 1100 BCE | 700 BCE | 300 BCE | 100 AD | 500 AD |

3700 BCE
Ancient
Mesopotamia

3150 BCE
Ancient Egypt

2900 BCE
Ancient India

1850 BCE
Ancient China

1850 BCE
Ancient
Israle

900 BCE
Ancient
Greeks

800 BCE
Ancient
Rome

295 BCE
Impierial
China

150 AD
Mayan
Civilization

200 AD
Japane
Civilization

400 AD
Medivil
Europe

A.D. means "Anno Domini" which is Latin for "in the year of the Lord" meaning after Jesus Christ (historical figure) was born. **B.C.** means "before Christ" which means before Jesus Christ (historical figure) was born. These abbreviations are being phased out due to the attempt of taking the bias towards Christianity out of the study of history. In some texts, A.D. will be replaced with **C.E.** which means Common Era while B.C. will be replaced with **B.C.E.** which means Before Common Era. An **Era** is defined as a period of time that is associated with a particular quality, event, person, or invention.

There is no year zero however, you will often see a zero (0) on timelines as a placeholder. While the number zero is on the timeline, you will never refer to an event as happening in the year zero. The year 1 A.D. immediately follows the year 1 B.C.

Sometimes you will see the word circa, or just the letter c when referring to dates or times that are estimated. For example, circa 500 BC or c.1500 AD. **Circa** is the Latin word for "around" or "approximately". This means that the event occurred around that time and that we do not have the exact date.

To see how long an event lasted between two dates that are both A.D. or both B.C. you do the following:

IF BOTH ARE A.D. →SUBTRACT
IF BOTH ARE B.C. → SUBTRACT

EXAMPLES:

1960AD – 2009 AD = 49 years
If someone was born in 1960 then they would be 49 years of age in 2009.

221 BC – 206 BC = 15 years

To see how long an event lasted between two dates that fall in a combination of A.D. and B.C. you do the following:

1 BC date and 1 AD date → ADD

EXAMPLE:
206 BC – circa 220 AD = circa 426 years
Circa was used in the answer because it was a part of the timespan. Since we do not know the exact AD year in this situation we must write circa in the answer to show that it is an approximate number of years, not exact.

A **decade** lasts ten years. In modern times you will hear people say the sixties, seventies, eighties, etc. (Example: 1980 – 1989 = The Eighties).

A **century** lasts 100 years. It starts on the year 01. (Example: 1501 B.C.).

To figure out the name of a century that ends with "00" you look at the first two numbers of that year and that is the answer.
The name of the century for the year 2000 AD is the "20th Century AD".
To figure out the name of a century of a year that doesn't end with "00" you look at the first two numbers of that year and add one (+1).
The name of the century for the year 2009 is the "21st Century AD".
When a year only has three numbers you add zeroes to the front to make it four numbers.
951 BC would be changed to 0951 BC. 4 AD would become 0004 AD.

EXAMPLES:
 200 BC → 2nd Century BC
 250 BC → 3rd Century BC
1700 AD → 17th Century AD
1799 AD → 18th Century AD

Millennium = 1000 years
Century = 100 years
Score = 20 years
Decade = 10 years

History is a record of the past.

Geography is a science that deals with the location of living and nonliving things on earth and the way they affect one another (study of people, places, and the environment).

Government is the people and groups within a society that have the authority to make laws, to make sure they are carried out, and to settle disagreements.

A **citizen** is a legal member of a country.

To **migrate** means to move from one area to settle in another.

Economics is the study of how resources are managed in the production, exchange, and use of goods and services.

Scarcity is a word economists use to describe the conflict between people's desires and limited resources. You might say that water is scarce in the desert which means that there is a limited amount of water there.

Culture is the beliefs, customs, art, and ways of living that a group of people share.

Archaeology is the study of human history and prehistory through the excavation of sites and the analysis of artifacts and other physical remains. It is the scientific study of material remains (as fossil relics, artifacts, and monuments) of past human life and activities.

Anthropology is the study of humankind, in particular. It is the study of human beings and their ancestors through time and space and in relation to physical character, environmental and social relations, and culture.

Practice Latitude and Longitude:

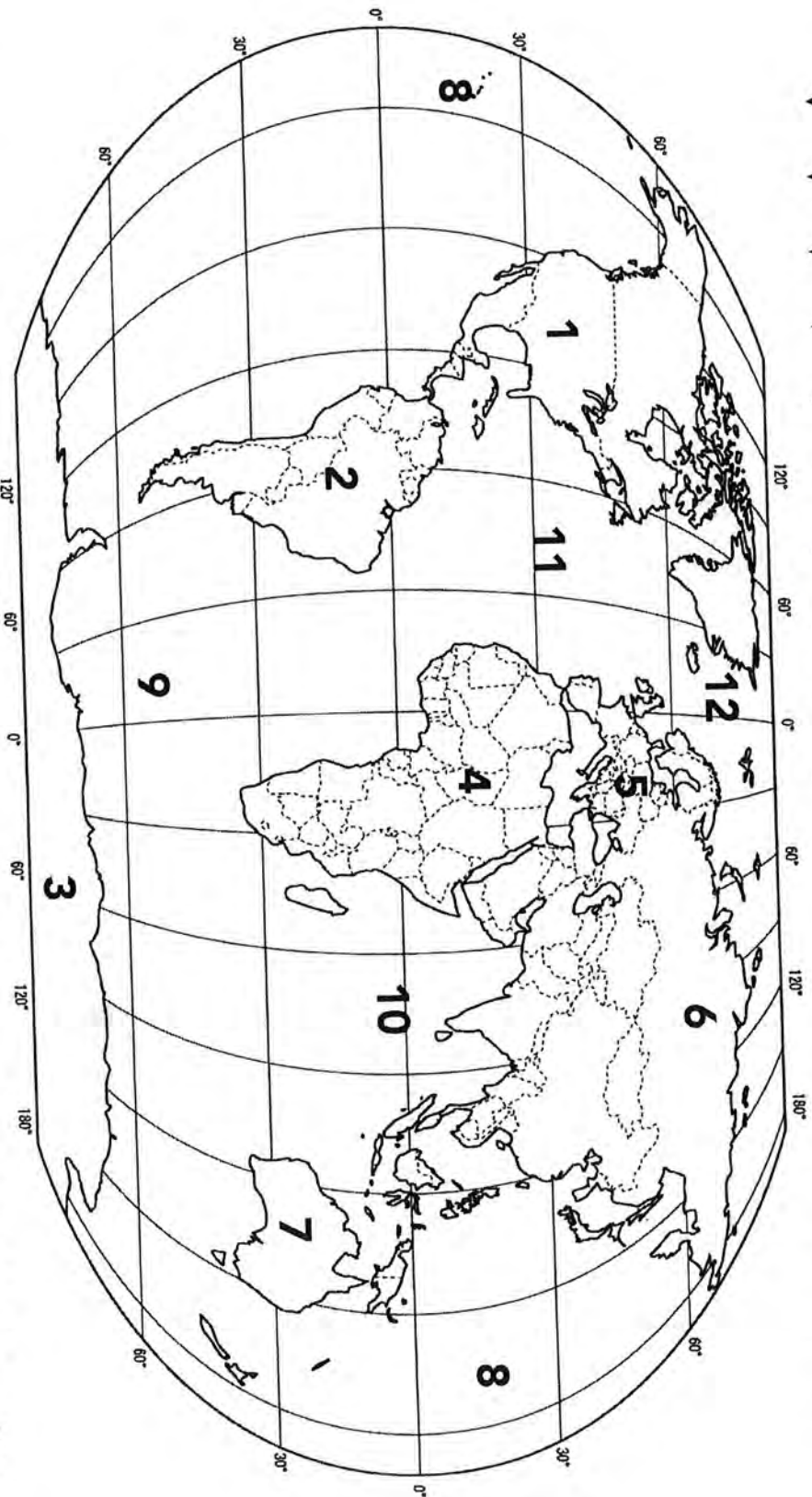http://earthguide.ucsd.edu/earthguide/diagrams/latitude_longitude/

Practice Continents and World geography:

http://world-geography-games.com/world.html

Learning Timelines (Video)

https://www.youtube.com/watch?v=o50HA6QTxj0

CONTINENTS and OCEANS

Directions: Write the number on the line beside the name of each ocean or continent.

_____ Southern Ocean   _____ Asia   _____ Indian Ocean

_____ Antarctica   _____ Atlantic Ocean _____ North America   _____ Arctic Ocean

_____ Africa   _____ Europe   _____ South America   _____ Pacific Ocean

Force and Motion

Directions: Use examples from the text to fill in the blanks.

Force and Motion: Facts

1. List 6 examples of motion.

_____   _____   _____

_____   _____   _____

2. Motion is the _____ of _____ or _____.

What is Force?

3. Force is a fancy word for _____ or _____.

4. Force makes things move or, _____ motion.

5. Two natural examples of force include _____ and _____.

6. Gravity produces a force that _____.

7. Give two examples of the force of gravity.

_____

_____

8. Magnetism produces a force that _____

_____

Types of Contact Forces

Directions: Draw a line to match the examples to each type of force.

9. The force that is used for a football player to run across the field.

    a.   normal force

10. The force you use to push your chair under your desk.

    b.   applied force

11. The force that is used for a straw that is bent to become straight again.

    c.   frictional force

12. The force that is used when a flower is blown across the yard.

    d.   tension force

13. The force that is used to allow you to jump on a trampoline.

    e.   spring force

14. The force that is used to hang wet clothes on a clothesline.

    f.   resisting force

Directions: Using evidence from the article, provide a complete sentence for problems 15 – 17.

What is Inertia?

15. Using the definition of inertia, explain why a grocery cart is easier to push with 1 item versus 20 items.

_____

_____

_____

What is Friction?

16. After Tommy and his dad ran out of gas, Tommy offered to help push their truck out of the intersection. He thought that it would be easy since he pushes his toy truck around at home. Use what you have learned about friction to explain why Tommy was wrong.

_____

_____

Velocity

17. On the way home from school, the bus took a left onto the Maxwell St. Explain what caused the bus to change it's speed?

_____

_____

Newton's Laws of Motion

Directions: Using Newton's Three Laws of Motion, imagine being at a baseball game. Decide which event shows an example of each Law of Motion. Write your answer on the line.

18. The pitcher throws the ball. The ball hits the bat and forces the ball soaring into the air.

_____

19. The baseball flies in one direction toward the out field.

_____

20. The player in the outfield catches the ball, stopping it from flying further.

_____

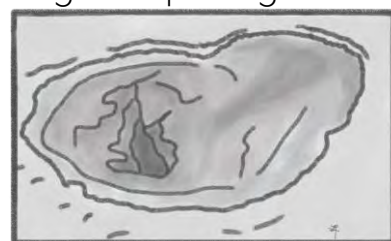| 1st Law of Motion |
| 2nd Law of Motion |
| 3rd Law of Motion |

National Parks Road Trip

You are off on a road trip with friends to explore the National Parks. There are over 400 National Park sites in the United States, and you decide to explore Yellowstone National Park. This park spans three states. You choose to visit the Wyoming section on this trip. You gather the following information at the visitor center.
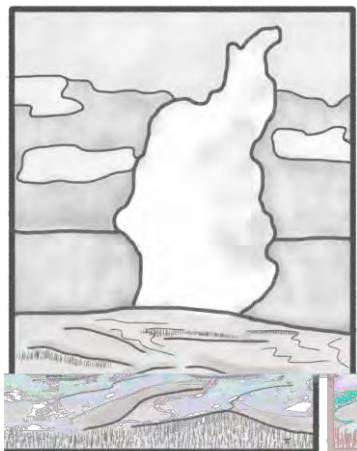
YELLOWSTONE NATIONAL PARK

Where can you find the largest herd of wild bison in North America? Yellowstone National Park is home to not only bison, but the largest concentration of mammals in the lower 48 states. Yellowstone is a seasonal park with a complex ecosystem. This park spans the states of Idaho, Montana, and Wyoming. People have been in Yellowstone for more than 11,000 years. The Tukudika people are the most well-known Native Americans to use the land before Euro-Americans began exploring the land in the 1800's. Yellowstone became a park in 1872. There are many things to do at the park. From hiking, fishing, biking, camping, and nature-watching, there is something for everyone. One of the most popular wonders to explore are the thermal basins. Visitors can explore hot springs, mudpots, fumaroles, and geysers. Over half of the world's most active geysers are located within Yellowstone. Old Faithful, a cone shaped geyser in Wyoming, erupts approximately every 90 minutes. Park Rangers and volunteers work hard to protect the park. Visitors can pledge to act responsibly and safely by staying on the trails, being bear aware, and stashing any trash.

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Road Trip Friends: _____

_____

Yellowstone National Park
WYOMING
IDAHO
MONTANA
Established 1872

START HERE

First, watch the video: https://tinyurl.com/vjcpegy

Using Chrome as your browser, launch Google Earth by going to: https://www.google.com/earth enter the following into the search bar exactly as it appears: **Old Faithful, Yellowstone National Park, WY, USA**

Finally, go to the following website: https://www.nps.gov/yell/learn/nature/bison.htm
Watch the video before answering the questions.
How do bison adapt to the snow? _____
_____
_____
_____
_____

Describe the importance of bison to Native Americans. _____
_____
_____
_____

From the areal view, describe the landscape and surrounding area.

_____
_____
_____
_____
_____
_____
_____

Now click the person figure. Drag and drop onto a blue dot or line. Describe the park from one or more of these locations.

_____
_____
_____
_____
_____
_____
_____
_____

Now, zoom out, and choose another hot spring nearby to explore.
Name of hot spring: _____
Description using at least 3 adjectives:
_____
_____
_____

Now, navigate to **Sapphire Pool, Wyoming**. Choose a blue dot (or line) to enter first person view. Describe this hot spring using a simile or metaphor.
_____

Name: _____

DIG DEEPER

To answer the questions, go to the following website:
https://www.nps.gov/yell/learn/nature/bison.htm

There were once 30 million animals on the frontier. Describe why and how the decline of bison correlates to the decline of Native American tribes.

_____
_____
_____
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_____
_____

Complete the chart using information from the website listed above

All About Bison

Description	
Behavior	
Diet	
Predators	
Migration	
Conservation	