

## Fifth Grade Distance Learning – Week 1

Dear students and families,

Here is your first distance learning packet. Please complete and return by May 8<sup>th</sup>. You can turn in a hard copy to the school but we prefer and highly encourage work to be submitted online. You can take pictures or scan and send through Class Dojo or email. Feel free to work on notebook paper or a word document. You do not have to print this packet. If you need assistance, please check in with your teacher during their office hours. Below you will find our office hours and a breakdown of the learning you will be doing. We miss you and hope you are doing well.

Miss Huff, Mrs. Kellogg, Miss Parks, and Mrs. Summa

### Office Hours

Miss Huff: M, W, F 1-3 and T, Th 10-12

Mrs. Kellogg: M, W, F 1-3 and T, Th 10-12

Miss Parks: M-F 10-12

Mrs. Summa: M-F 10-11, 1-2

### Learning Description

Social Studies: Read the passages about the battles of the American Revolution and write an opinion paragraph stating which battle was most influential in helping the Americans win the war. Cite evidence from the text to explain two-three reasons that support your opinion.

Math: Complete the Design a Fish Aquarium performance task to practice volume. Draw a picture of your aquarium, include dimensions for cm., in., and gal.(conversion: 1 in. = 2.5 cm.), and write a short description (not report! 😊) that explains how you got your answers. Complete the spiral review throughout the week. For additional practice, play Prodigy to practice other math skills.

Writing: Pick two writing assignments from the writing choice board.

Science: Read the two articles on day and night. Draw a model (use words and pictures) use to answer the essential question: What causes day and night? Please watch this video: <https://www.youtube.com/watch?v=l64YwNl1wr0>

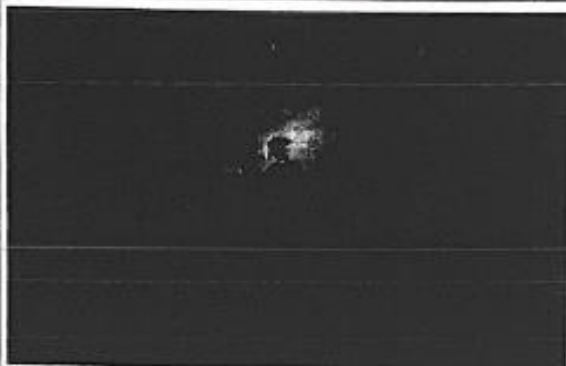
Reading: Read a book of your choice for 20 minutes each day. Check out YouTube read-alouds and/or audiobooks as options. Read the paired texts on Earth's Revolution vs. Rotation and complete the questions.

# The Battle of Trenton

## American Revolution Articles- Important Events Edition

Article 5

December 26, 1776



Capture of the Hessians at Trenton  
by John Trumbull

In the spring of 1776, George Washington and his troops had moved south from Massachusetts to Long Island, New York. While there, the British attacked and they suffered great losses. Many soldiers left after the Battle of Long Island, and Washington had to ask for soldiers to stay. He wanted to get away from the British and avoid future attack and more casualties. While being chased by the British, Washington moved his troops further south through New Jersey to Pennsylvania. British General Howe and most of the British soldiers stayed in New York.

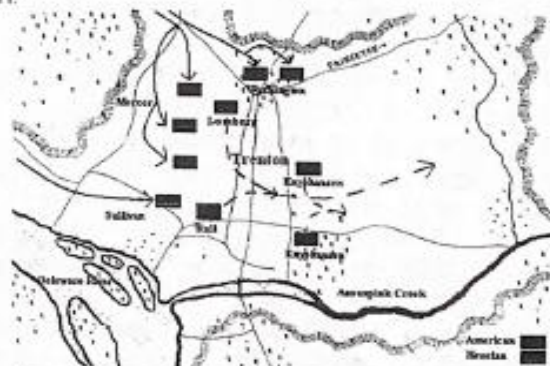
By winter, they made camp in Pennsylvania on the southern side of the Delaware River. Few armies fought battles during the winter, and Washington knew this was his chance to surprise the Hessians (German soldiers working for the British) in Trenton, New Jersey. Many of the American soldiers were ready to give up, and Washington knew he needed to win a battle to build courage in his army.

On Christmas night of 1776, Washington put his plan into action. Washington and his division of the army crossed the Delaware River. A violent snowstorm raged and the Delaware River was full of ice. This did not stop Washington or his determined soldiers. They boarded their boats and began the trip across the Delaware. After the crossing, they made the nine mile march to Trenton.

At this time, the Continental Army was low on supplies and money. The soldiers did not have uniforms, and many of them did not have boots. As they marched towards Trenton, their feet began to bleed and many got frostbite. Despite being behind schedule and the harsh weather, they marched on.

While Washington marched from the Delaware River, other divisions of the army planned to meet them in Trenton. They attacked the Hessians while they slept after celebrating the Christmas holiday. They fought for about an hour before the Hessians finally surrendered. Nearly 1,000 Hessian troops were captured and taken prisoner and then marched through Philadelphia.

Although this battle was difficult for the American soldiers, this victory inspired courage and pride within the army. It gave them hope for the future.



The Battle of Trenton

# The Battle of Saratoga

## American Revolution Articles- Important Events Edition

Article 6

1777

In 1777, the British began creating a plan that they hoped would separate the New England colonies. They thought if they controlled all of New York, this would keep supplies and communication from getting to Massachusetts and the rest of the New England colonies. They planned to send soldiers to Albany, New York where they would join British General John Burgoyne who was coming down from Canada with his soldiers. The groups of soldiers would attack the city from the north, south, and west.

However, because some of the groups got into fights along the way, all of the British soldiers did not make it there to help Burgoyne. The Battle of Saratoga was actually two battles between September and October of 1777. The first battle was the Battle of Freeman's Farm and second was the Battle of Bemis Heights.



Surrender of General Burgoyne  
by John Trumbull

### The Battle of Freeman's Farm

As British General John Burgoyne and around 6,000 of his troops headed towards Albany, New York, American General Horatio Gates and his nearly 12,000 Continental soldiers stopped him outside of Saratoga, New York. Gates and his troops held their lines and kept the British from advancing south towards Albany. Burgoyne was forced to go back to his camp and create a new plan.

### The Battle of Bemis Heights

On October 7, 1777, Burgoyne led 1,500 of his men on a mission to investigate the area and was met by an attack led by Continental General Benedict Arnold. At this time, Burgoyne only had about 5,000 troops left and his supplies were running low. Arnold and the Continental Army pushed the troops back. On October 8, Burgoyne ordered a retreat but Continental General Horatio Gates met him with forces numbering around 20,000 troops and surrounded the British at Saratoga. Burgoyne was forced to surrender on October 17, 1777. He and his army returned to Britain, never to return to North America, in disgrace.

### A Turning Point

The Battles of Saratoga are considered the **turning point** in the Revolutionary War. A turning point is an event that causes a change. After this battle, it looked as though the Americans may win the war. The French were convinced that the Americans were a new nation and made an alliance with America. They sent soldiers, ships, and supplies to support the Americans. This would be the help the Americans needed to win the war.

# The Battle of Yorktown

## American Revolution Articles- Important Events Edition

Article 8

1781

When the French joined the Americans as allies, they sent troops and supplies to America to help in the war. They also sent the French Navy to help defeat the British Navy. General Rochambeau from France worked closely with George Washington during the war.

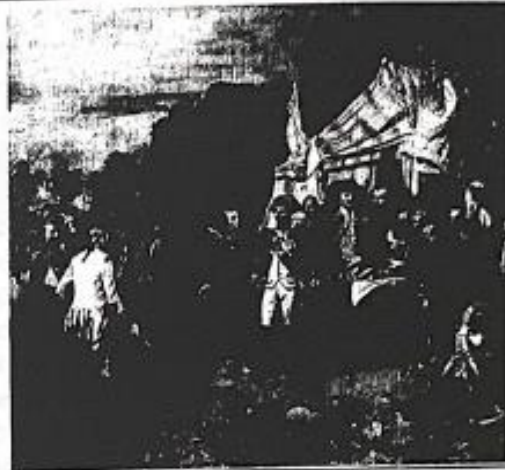
General Henry Clinton replaced William Howe as the commander of the British troops. He believed he could defeat the Americans by moving his troops south. He thought if he took control of the Southern Colonies he would be able to end the war. He put Lord Charles Cornwallis in charge of leading the troops south while he remained in New York with a small army.

General Clinton sent British soldiers to Georgia by ship. Cornwallis took over Savannah, Georgia and declared all of Georgia to be in

control of the British. He then headed to Camden, South Carolina where he also defeated the Americans. Feeling that the war was now in their favor, they headed to Virginia and made camp at Yorktown. Yorktown, Virginia was on the York River and near the Chesapeake Bay, where the British Navy could join them. General Clinton said that he would send more troops by ship to meet Cornwallis in Yorktown.

Washington and Rochambeau were working on a plan to stop the British. They could not decide if they should attack General Clinton in New York or head to Yorktown and attack Cornwallis. General Lafayette told Washington that Admiral de Grasse was bringing a French fleet of twenty-eight ships to America from the West Indies and they were going to the Chesapeake Bay. Washington and Rochambeau decided to meet the French in Yorktown to stop Cornwallis.

Washington did not want Clinton to know of his plan to move American troops to Yorktown. He sent a small division of his army to New York to distract Clinton. Then, on August 18, 1781, he marched 14,000 American soldiers south toward Yorktown. Admiral de Grasse got to the Chesapeake Bay and attacked the British Navy there. The French fleet outnumbered the British fleet and the British ships were forced to retreat back to New York. Admiral de Grasse then positioned his fleet in the Chesapeake Bay at the mouth of the York River. This prevented the British Navy from bringing more troops and also kept Cornwallis from leaving by ship. Once Washington and his men reached Virginia on September 28, they made a semi-circle surrounding Yorktown. They were joined by 3,000 of Admiral de Grasse's men. Cornwallis and his men were now completely surrounded.



Rochambeau and Washington giving their last orders before battle

Cornwallis and his troops built earthworks of wood that surrounded the Fort at Yorktown. Once Washington had Yorktown surrounded, they began bombarding the earthworks with fire in hopes to eventually get across them. They moved closer and closer while exchanging gunfire with the British. The Continental Army outnumbered the British army and Cornwallis had no hope that he would get more troops from New York with the French Navy occupying the Chesapeake Bay. On October 16, he tried to escape by taking his troops across the York River to Gloucester Point but it was storming and only one set of boats made it across. An evacuation was impossible.



Storming Yorktown

On October 17, 1781, Cornwallis decided the situation was hopeless for the British. He sent a drummer boy and a soldier with a white flag to Washington in surrender. Negotiations began on October 18 and official papers of surrender were signed on October 19. In the ceremony of surrender, American and French soldiers lined up facing each other and the British soldiers walked between them. They surrendered their weapons in a pile while a band played an old British tune called, "The World Turned Upside Down." Cornwallis refused to attend the ceremony, stating he was sick. He sent his second in command to give Rochambeau his sword of surrender. Rochambeau pointed to Washington, who refused to accept it. He had his second in command accept the sword. Almost 8,000 British soldiers were taken as prisoners of war along with all of their weapons.

This battle turned Britain's world upside down. After eight years of war, the American Continental Army, with help from France and Spain, had defeated the most powerful army in the world.

## The Treaty of Paris

1783



1783 Treaty of Paris

The Battle of Yorktown basically ended the Revolutionary War, although a few minor battles between the British and the colonists occurred over the next two years until King George III finally ordered a **cease**, or end, to the war. American, French, Spanish, and British representatives met in Paris, France in 1783 to create a peace treaty. Benjamin Franklin, John Adams, and John Jay represented the United States of America.

The peace treaty stated that Britain recognized that the thirteen colonies were free and independent states and that Britain no longer had claim to the land or government. It also stated the boundaries for the United States that allowed for expansion to the west. Spain had joined America and France in the war and they received Florida in the treaty. The prisoners of war on both sides were released and the treaty stated that Loyalists would no longer be persecuted and their property would be returned. Finally, the Thirteen Colonies, the United States of America, were free.

## Design a Fish Aquarium

In this unit, you learned how to find the volumes of prisms. Use this new knowledge to design an aquarium.

Many pet stores recommend that for each inch of fish, an aquarium should have 1 gallon of water. One gallon of water is about 231 cubic inches. The dimensions of your aquarium will depend on the size and number of fish you put in it.

1. Use the table, books, or the Internet to find the kinds of fish you want to put in your aquarium.

- What size fish will you choose?
- How many of each fish?

Tropical Fish Size	
Fish Name	Length (in.)
Platy	2.5
Marble angelfish	6
Cherry barb	1.5
Dwarf gourami	3
Goldfish	5

2. Use the size of the fish to determine how many gallons of water your aquarium needs. Then decide how many cubic inches your aquarium tank needs to be.

- How many "inches" of fish do you want in your aquarium?
- How many gallons of water do you need?
- About how many cubic inches are in 1 gallon?

3. Decide on the dimensions of your tank. Use estimation to write the volume and dimensions in centimeters.

- Is the aquarium too large or too small to be reasonable? Should you adjust your selection of fish?

4. Write a short report about your aquarium. Include some of the following:

- An explanation of how you decided on the number of gallons of water your aquarium needed and how many cubic inches your aquarium should be.
- How estimation was used to convert your measurements.



Cherry Barb



Dwarf Gourami



Marble Angelfish

Name \_\_\_\_\_

Week 28

1.

$$8 \overline{)4,128}$$

2. How many unit cubes would you need to create a figure that was 16 unit cubes tall and 4 unit cubes deep with 3 extra unit cubes in front?

\_\_\_\_\_

3.

\_\_\_\_\_ thousands = 500 tens

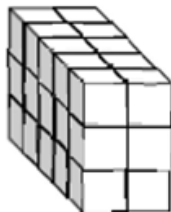
\_\_\_\_\_

4. Will the product be more or less than  $\frac{2}{8}$ ?

$$2\frac{3}{4} \times \frac{2}{8}$$

\_\_\_\_\_

5. Find the volume of the figure by counting the unit cubes.



\_\_\_\_\_

6. Write an expression for the calculation triple the number 15 and then add 56 divided by 7.

7. Draw a visual to solve

$$5 \div \frac{1}{3} =$$

8.

$$\frac{4}{6} \times 12 = \underline{\hspace{2cm}}$$

How could you change the fraction to get an answer greater than the product?

9.

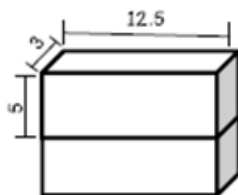
$$\begin{array}{r} 837 \\ \times 57 \\ \hline \end{array}$$

10.

$$0.15 \div 0.3 =$$

\_\_\_\_\_

11. Find the volume of the rectangular prism.



\_\_\_\_\_

12. Is a square a rhombus? Explain.

13.

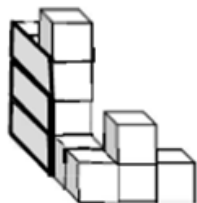
$$873 \times 10^4 =$$

\_\_\_\_\_

14. How many one-fourth cup servings are in 9 cups of peanuts?

\_\_\_\_\_

15. How many cubic units would fit into the figure?



\_\_\_\_\_

16. Marcus stacked 2 pieces of wood on top of one another. If each piece was  $\frac{2}{3}$  of a foot tall, how tall was his pile?

\_\_\_\_\_


# Weekly Writing Choice Board

Name: \_\_\_\_\_

Number of Activities to be Completed: \_\_\_\_\_

Date Assigned: \_\_\_\_\_ Due Date: \_\_\_\_\_

Instructions: Color the boxes to indicate the writing activities you completed. Follow your teacher's instructions for completing the activities and handing in this assignment.

<p>Do monkeys make good pets? Write one paragraph to explain your thoughts on this topic.</p>	<p>Write a poem to describe autumn. (Some poems do not rhyme.)</p>	<p>Would you rather speak two languages or be able to talk to animals? Write two paragraphs explaining the reasons behind your choice.</p>
<p>Make a top ten list of your most precious possessions. Use one sentence to describe why each possession is important.</p>	<p>Respond to this quote: "Why worry? If you've done the very best you can, worrying won't make it any better." — Walt Disney Write two paragraphs to explain what this quote means to you.</p>	<p>Write a list of five positives and five negatives (complete sentences) that describe your thoughts on the following topic: <i>Some malls and public places have banned unaccompanied children.</i></p>
<p>Write a review! Write an honest review about a business, activity, restaurant, movie, or book. Your review should be one or two paragraphs in length.</p>	<p>Write a fictional story about a pirate ship in the Atlantic Ocean. Your story should take up ½ page and your illustration should take up the other ½ of the page.</p>	



## About Day and Night

### Why Does Earth Have Day and Night?

While you don't feel it, Earth is spinning. Once every 24 hours Earth turns — or rotates on its axis — taking all of us with it. When we are on the side of Earth that is facing the Sun, we have daylight. As Earth continues its spin, we are moved to the side facing away from our Sun, and we have nighttime. If we were looking down on Earth from above the north pole, we could see that Earth rotates counterclockwise, and we would watch daylight and darkness sweeping across our globe from east to west.



### Do other planets have day and night?

Yes! All the planets in our solar system spin on their axes (so does our Sun!) and so they have day and night cycles. There are differences, however, in the length of day and night — the cycles are made even more complex by the tilt of a planet's axis and its rate of orbit. Some planets rotate faster than Earth and some rotate slower. Mars has a day and night cycle similar to Earth. Mars rotates on its axis once every 24.6 hours. Venus turns once on its axis every 243 Earth days (which is only slightly longer than it takes for Venus to go around the Sun!). Mercury's day and night cycle is more complex. Mercury rotates one-and-a-half times during each orbit around the Sun. Because of this, Mercury's day — from sunrise to sunrise — is 176 Earth days long. The larger planets spin much faster. Jupiter rotates once every 10 hours, Saturn spins once every 11 hours, and Neptune completes a rotation in 16 hours. Pluto, at the farthest reaches of our solar system, spins on its axis once every 6.4 days.

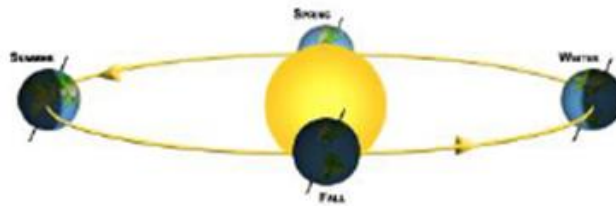
Something to ponder: Does Pluto even have a "day" and "night" like we think of on Earth? Pluto is so distant from the center of our solar system that our Sun would look like a very bright star in its sky!

### Why does Earth's day length change during the year?

Every location on Earth experiences an *average* of 12 hours of light per day but the *actual* number of hours of daylight on any particular day of the year varies from place to place. Locations around Earth's equator only receive about 12 hours of light each day. In contrast, the north pole receives 24 hours of daylight for a few months in the summer and total darkness for months in the winter. These two annual times of light and dark are separated by a long sunrise and a long sunset.

Earth rotates on its axis; this causes us to experience day and night. But Earth's axis is tilted 23.5 degrees (the angle is measured between Earth's equatorial plane and the plane in which it orbits our Sun). As Earth orbits our Sun, the axis points toward the same location in space — almost directly toward Polaris, the North Star. This means that during Earth's movement around our Sun each year, our polar regions spend looooooong periods pointed toward our Sun in the summer (for example, July in the northern hemisphere, or December in the southern hemisphere) and long periods pointed away from our Sun during the winter. At latitudes greater than 66.5 degrees (90 degrees minus 23.5 degrees, the tilt of the axis), the regions above the Arctic and Antarctic circles on our globe, days of constant darkness or light occur.

[https://www.lpi.usra.edu/education/skytellers/day\\_night/](https://www.lpi.usra.edu/education/skytellers/day_night/)



*Tilted Earth at summer, spring, fall, and winter positions around the Sun, clearly showing polar regions in daylight and dark at winter/summer positions.*

Because of this tilt and Earth's movement around our Sun, there is a time when Earth's north pole is tilting 23.5 degrees toward our Sun. This is the summer solstice, the first day of the northern hemisphere summer and the longest day of the year in the northern hemisphere. On December 21 or 22, Earth's north pole is tilting 23.5 degrees away from our Sun and the south pole is tilted toward our Sun. This is the winter solstice, the shortest day of the year in the northern hemisphere. Twice each year — during the equinoxes ("equal nights") — Earth's axis is not pointed toward our Sun. The spring equinox in March marks the beginning of the transition from 24 hours of darkness to 24 hours of daylight at the north pole. The fall equinox in September marks the shift into 24 hours of darkness at the north pole. During the equinoxes every location on Earth (excluding the extreme poles) experiences a 12-hour day length.

Other planets also experience these changes in day and night length because they too are tilted on their axes. Each planet's axis is tilted at a different angle. Jupiter is tilted only 3 degrees, so its change in day and night length as it moves around the Sun is less extreme than that of Earth. Neptune's axis is tilted 30 degrees, so day and night changes would be more extreme on Neptune than on Earth. Uranus presents an interesting case because its axial tilt is even more extreme — 98 degrees! This means that the north pole of Uranus is pointed at the Sun during the north polar summer; the south pole is in total darkness. During the north polar winter, some 42 Earth years later, the south polar axis points at the Sun and the north polar region is in total darkness. During the spring and fall, when its axis is perpendicular to the incoming rays of the Sun, Uranus experiences a 17-hour day and night cycle as it spins on its axis.

#### **Good news for overachievers: Earth's days are getting longer!**

Researchers examining ancient corals noted that annual growth patterns suggested there were more days in a year in Earth's distant past. Fossil corals, 380 million years old, from the Devonian Period recorded 400 daily cycles. About 290 million years ago in the Pennsylvanian Period, there appear to have been 390 daily cycles each year. Assuming that Earth's revolution around our Sun has not changed dramatically, this means that the number of hours per day has been increasing and that Earth's rotation has been slowing. Today's day length is 24 hours. During the Pennsylvanian Period a day was ~22.4 hours long. In the Devonian Period, a day was ~21.8 hours long. Earth's rotation appears to be slowing approximately 2 seconds every 100,000 years. Why are Earth's days getting longer? Some scientists suggest that tidal cycles create a "drag" on Earth, causing it to slow down.

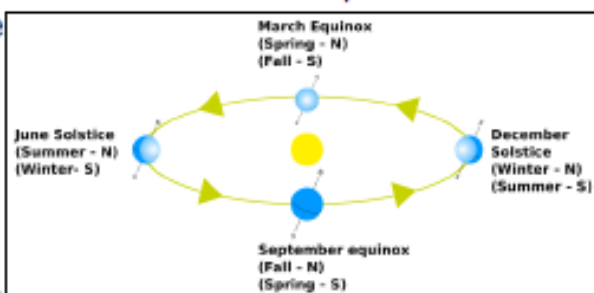
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# Earth's Revolution

Have you ever noticed that your classroom globe is tilted? This is no accident. Globes are made to be replicas, or models, of the Earth. Earth tilts on its axis<sup>1</sup> toward the sun at 23.5 degrees. This tilt is why we have seasons. If the Earth's axis was straight up and down with no tilt, the temperature would never change. The Earth's tilt, combined with its revolution around the Sun, causes summer, fall, winter, and spring.

The Earth revolves around the Sun in an elliptical, or oval, orbit<sup>2</sup>.

When the North Pole is tilted toward the Sun, the Northern Hemisphere has summer while the Southern Hemisphere has winter. About six months later, when the North Pole is tilted away



from the Sun, the Southern Hemisphere has summer while the Northern Hemisphere has winter.

It takes Earth 365.242 days to make a complete revolution around the Sun (or 365 and about one quarter days). This is what we call the solar year. Our modern calendar only has 365 days EXCEPT every four years, we add another day to February. These years are called leap years. 2016 was a leap year, and the next will be 2020. But wait, 0.242 is not an exact quarter of a day. Over the course of many years, those thousandths of a day can add up! Luckily, Pope Gregory XIII fixed this glitch in 1582 by establishing the Gregorian calendar, which is what we still follow today. If we didn't follow the Gregorian calendar, every 128 years, we would be ahead of the solar year by one day. So how was the problem fixed? Leap years occur every 4 years except in years ending with two zeroes that aren't divisible by 400. The year 1896 was a leap year, but the year 1900 was not. This helped our calendar catch up to the solar year.

<sup>1</sup>axis: imaginary line on which something spins

<sup>2</sup>orbit: the curved path around a star, planet, or moon

# The Earth Spins

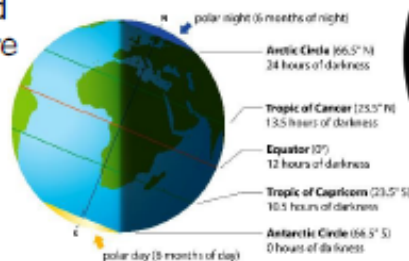
It is easy to mix up the terms "rotate" and "revolve," but the two are very different. Revolving means to go around. The Earth revolves around the Sun, creating our seasons. Rotating means to spin. The Earth rotates on its axis, creating day and night. When our side of the Earth is facing the sun, we are experiencing day. When the Earth rotates away from the Sun, we experience night. It takes about 24 hours for the Earth to make one full rotation. We can't feel the Earth spinning, although sometimes it feels like we can when we look up at the sky and watch the clouds.

Earth rotates counter-clockwise. This rotation is why the Sun appears to rise in the east and set in the west. Also, because the Earth rotates and revolves at the same time, the Sun is in a different place in the sky during the seasons. In the summer, the Sun is high over our heads, while in the winter, the sun seems to be lower in the sky. But, the Sun is not actually moving in the sky.

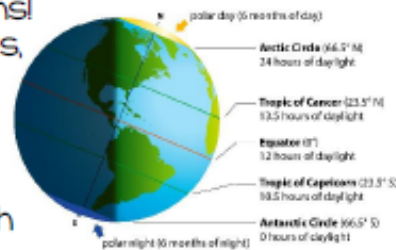
The Earth's tilt and revolution affect the length of our days and nights. In the summer, when we are tilted toward the Sun, our days are longer than our nights. But in the winter, when we are tilted away from the sun, our nights are longer than our days. Unless you live along the equator, you will not have 12 hours of day and 12 hours of night.

There are some places on Earth that have day and night for six months! In the summer and winter at the poles, there is polar night and polar day, also called midnight sun. At the North Pole, from early October until early March, there is no sunlight. During this same time at the South Pole, the sun never sets!

**winter solstice (December 21)**



**summer solstice (June 21)**



Name: \_\_\_\_\_ Date: \_\_\_\_\_

Use both texts to answer the following questions.

1. According to *The Earth Spins*, why does it seem that the Sun is rising and setting in the sky?

- a. The clouds are moving.
- b. The Earth is rotating.
- c. The Earth is revolving.
- d. The Earth is tilted.

2. In paragraph 3 of *Earth's Revolution*, what does the word *modern* mean?

- a. current
- b. outdated
- c. old-fashioned
- d. ancient

3. What happens in a leap year?

- a. Every four years, people skip a day on the calendar.
- b. Every 400 years, we add a day to the calendar.
- c. Every four years, people have no sunlight for six months.
- d. Every four years, we add a day to the calendar.

4. The Northern Hemisphere has summer when...

- a. the North Pole is tilted toward the Sun.
- b. the South Pole is tilted away from the Sun.
- c. the Southern Hemisphere has winter.
- d. all of the above

5. Which of the following statements is NOT true?

- a. There are parts of the Earth that have extended daylight.
- b. The Earth revolves to create day and night.
- c. We have seasons because the Earth revolves.
- d. The Sun is higher in the sky and days are longer in the summer.

6. According to *The Earth Spins* which shows an effect of the Earth revolving?

- a. There are 24 hours in a day.
- b. Our nights are longer in the winter.
- c. We have day and night.
- d. Half of the Earth is in complete darkness in the winter.

7. What information can you learn from the diagrams in *The Earth Spins*?

- a. December at the South Pole brings total darkness.
- b. The summer solstice begins in December.
- c. The North Pole has 6 months of darkness in the winter.
- d. June at the North Pole brings total darkness.