

NTI

6<sup>th</sup>

Grade

Day

9

MTM

#1

Group

Day  
p

# 6th Grade NTI Day #9



## Function Machines - Filling in Missing Digit

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

Determine the number that correctly fills in the blank in the function machine.

1)

Input	Output
56	8
28	4
49	7
	5
42	6

2)

Input	Output
9	63
10	70
3	21
8	56
	14

3)

Input	Output
8	24
10	26
	21
2	18
4	20

4)

Input	Output
5	
3	23
9	29
4	24
8	28

5)

Input	Output
8	32
10	
7	28
5	20
2	8

6)

Input	Output
9	3
11	5
15	9
14	8
16	

7)

In	12	9	5	13
Out	9	6	2	10

8)

In	5	2	6	9
Out	45	18	54	81

9)

In	56	64	48	32
Out	7	8		4

10)

In	9		8	7
Out	12	6	11	10

11)

In	18	60	24	12
Out	3	10	4	2

12)

In	9	7	2	5
Out	45		10	25

## Answers

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_
11. \_\_\_\_\_
12. \_\_\_\_\_



## Lesson #9

### Be Your Own Hero

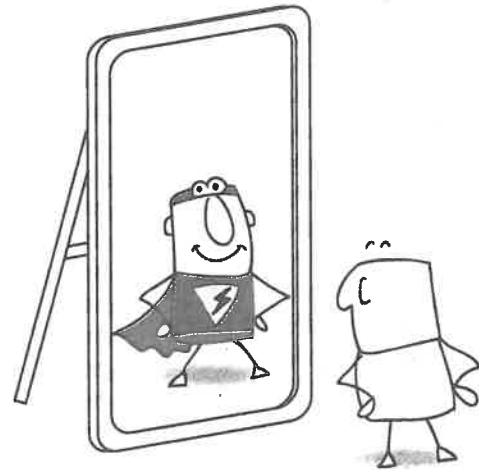
How is your self-esteem today? Things may be a little rocky, or you may be having a great day. In either case, your self-esteem has a lot to do with how you respond. Self-esteem is what you believe about yourself, in general. Like everyone, you experience successes and failures, and there are certain emotions that go along with these ups and downs. With plenty of self-esteem, no error, failure, or disappointment will be enough to debilitate you. You may feel sad or upset for a while, but you'll bounce back fairly quickly.

For someone with low self-esteem, however, a mistake or disappointment can be a real crisis. Poor self-esteem makes a person vulnerable to outside forces and dependent upon them; he relies heavily on compliments and encouragement from others. A bad grade, an unkind comment, or even a simple mistake can be disastrous, or at best, it underscores a general feeling of negativity. People with low self-esteem are unlikely to take risks, and they have trouble when things get tough. They don't think they deserve to have what they want, so it is difficult to be happy or feel motivated to do things.

According to the National Mental Health Information Center, having positive self-esteem has many benefits. For example, people whose self-esteem is intact feel secure and are able to handle conflict. They take pride in themselves and what they can do; they believe in their own abilities and are more likely to have strong, healthy relationships and good friends. They face demanding situations with more ease, and often see a challenge as an opportunity for learning and growth.

Self-esteem affects just about everything you do. It plays a big role in decision-making and choices. It drives you to seek out your full potential, allows you to be your own hero, and helps you chase your dreams. Confidence is like a suit of armor that protects you and lets you navigate all kinds of situations. If you think your self-esteem can use some shoring up, try a few of these suggestions.

As you prepare for your day, look into the mirror, smile, and tell yourself, "I can." Decide to kick negative thoughts out of your head! Make a list of things that you enjoy doing and that you are good at. If you get stuck, have a friend or parent help you. Give your best to everything you do. Find a way to help others by volunteering or just helping someone else who is struggling. Kindness can increase self-esteem because doing good helps you realize how much you really matter.



- RI.6.2 1. Reread paragraph two. What is the main idea of the paragraph?
- A) Low self-esteem leads to dependency, lack of motivation, and gloom.
  - B) Having good self-esteem has many benefits.
  - C) Self-esteem is how you feel about yourself, in general.
  - D) both B and C
- RI.6.4 2. You can tell from the context clues that being *vulnerable to outside forces* means “\_\_\_\_\_.”
- A) depending on events and other people to feel good
  - B) being defenseless against things that are hurtful
  - C) being tough and remaining strong when things are difficult
  - D) both A and B
- RI.6.6 3. The author claims that having positive self-esteem has many benefits. What reasons or evidence is given to support this? Underline it in the text.
- L.6.4.A 4. Use context clues in paragraph four to determine the meaning of *shoring up*.
- strengthening      supporting      reinforcing      all of these
- L.6.5.A 5. Confidence is like a suit of armor.... Which of these is the best interpretation?
- A) The phrase is a metaphor for going to battle against low self-esteem.
  - B) The phrase is an idiom, meaning a suit of armor boosts confidence.
  - C) The phrase is a simile that compares confidence to a protective shield.
  - D) The figure of speech is a way to exaggerate the power of positive thinking.
- L.6.5.A 6. “It drives you to seek out your full potential, allows you to be your own hero, and helps you chase your dreams.” Explain the meaning of the underlined phrase.
- 
- RI.6.4 7. Determine the meaning of the underlined phrase. “For example, people whose self-esteem is intact feel secure and are able to handle conflict.”
- A) Self-esteem is positive and healthy.
  - B) Self-esteem is lacking.
  - C) Self-esteem is damaged.
  - D) all of the above

Name:

Science

## Lesson 42 6<sup>th</sup> - NTI Day 9

# Earth, Moon, and Sun

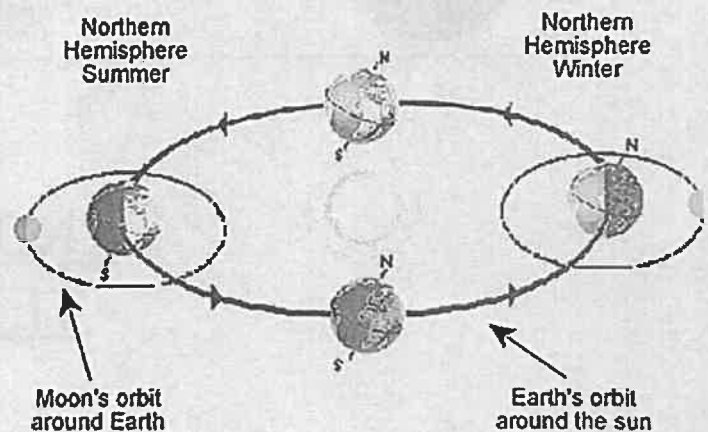
The celestial bodies, the Sun, Earth, and our Moon, form a unique connection that results in the occurrence of days, years, and seasons. Earth, which is constantly spinning, **revolves** around the Sun, a journey that takes approximately 365 days or what we know as a year. The distance from the Earth to the Sun averages around 93 million miles (150 million kilometers). Earth moves along a path shaped like an elongated circle, also known as an **ellipse**.

A complete **rotation** of the Earth on its axis takes 24 hours, resulting in a day. This **axis** is an invisible line that penetrates the Earth from the North to the South Pole. As the Earth spins, the side facing the Sun basks in daylight, while the opposite side is shrouded in darkness, creating our cycle of day and night.

The tilt of the Earth on its axis leads to varying daylight hours across different seasons. Every hour, the Earth rotates 15 degrees, thus leading to the change in time zones by one hour. Earth is divided into 24 **standard time zones**, each approximately 15 degrees wide in terms of longitude. The **International Date Line** is recognized as the point on the globe where a new day commences.

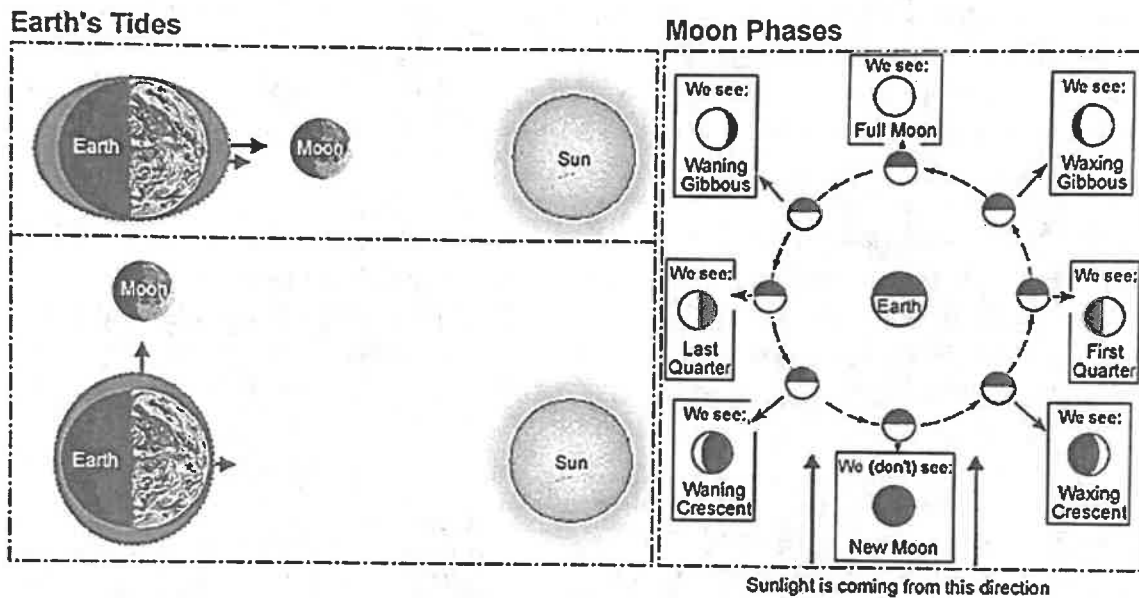
Several planets in our solar system have smaller bodies, termed **moons**, revolving around them. Earth has a solitary moon, composed of dust and rock, and is roughly one-quarter of Earth's size. Every 28 days, which is approximately a month, the Moon completes a full orbit around the Earth at a distance of about 238,866 miles (384,400 km). Earth's gravitational force keeps the Moon in its orbit. As the Moon travels around the Earth, its appearance changes due to the shifting size of its illuminated portion visible from Earth, a phenomenon known as **phases**.

Earth and Moon Orbits



The Sun and Moon exert a gravitational pull on Earth, its oceans, and even on us! As the Moon is approximately 400 times closer to Earth than the Sun, it has a greater influence on the oceans. This pull from the Moon is stronger on the side of Earth closer to it, causing a rise, or **high tide**. On the opposite side of Earth, the weaker pull from the moon also creates a high tide, while **low tides** occur between the two high tides.

The concept of eclipses involves the Earth and Moon passing through each other's shadows. During a lunar eclipse, the Moon enters Earth's shadow, temporarily depriving it of sunlight. Meanwhile, a solar eclipse occurs when the Earth is shadowed by the Moon, blocking sunlight from reaching us for a brief time. The relationship between the Sun, Earth, and Moon is fascinating, as it influences our everyday lives in profound ways.



END OF  
TEXT



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

# Lesson 42

## Earth, Moon, and Sun

*6th - Day 9*

1. How long does it take for the Earth to revolve around the Sun?

- A. 365 hours
- B. 365 days
- C. 24 hours
- D. 28 days

2. What is the path that Earth moves along called?

- A. Circle
- B. Spiral
- C. Square
- D. Ellipse

3. How long does it take for the Earth to rotate on its axis?

- A. 24 days
- B. 365 days
- C. 24 hours
- D. 15 hours

4. Why do we have day and night?

- A. Because the Earth is flat
- B. Because the Sun moves around the Earth
- C. Because the Earth rotates on its axis and the side facing the Sun has daylight
- D. Because the Moon covers the Sun

5. What causes the change in time zones by one hour?

- A. The Earth's rotation of 15 degrees every hour
- B. The Sun's movement across the sky
- C. The Moon's orbit around the Earth
- D. The changing of the seasons

Name:

# Lesson 42

## Earth, Moon, and Sun

6. How often does the Moon orbit the Earth?

- A. Every 365 days
- B. Every 24 hours
- C. Every 15 hours
- D. Every 28 days

7. What causes the high tides on Earth?

- A. The rotation of the Earth
- B. The gravitational pull from the Sun
- C. The gravitational pull from the Moon
- D. The movement of the clouds

8. What is a lunar eclipse?

- A. When the Moon passes through Earth's shadow
- B. When the Earth passes through the Moon's shadow
- C. When the Moon covers the Sun completely
- D. When the Earth covers the Sun completely

9. What happens during a solar eclipse?

- A. The Moon enters Earth's shadow
- B. The Sun enters the Earth's shadow
- C. The Sun enters the Moon's shadow
- D. The Earth is shadowed by the Moon, blocking sunlight from reaching us

10. Why does the Earth have varying daylight hours across different seasons?

- A. Because the Sun moves closer and farther from the Earth
- B. Because of the Earth's tilt on its axis
- C. Because the Earth changes shape
- D. Because of the changing speed of Earth's rotation