NTI DAY 3

7th Grade

Option b Name: Math Date: 6.G. 3

Fill in the missing words in the problems below then find those words in the word search .

Choose from: *horizontal quadrants negative coordinate plane point origin first ordered pair vertical second*

T	H	J	C	M	T	A	O	G	I	Q	J	H	A	K	T	T	S	Q	L
H	T	P	S	X	G	D	X	L	X	L	C	J	O	J	D	T	M	C	A
F	K	Y	E	Y	O	K	W	D	F	R	N	K	R	A	N	D	B	N	C
Y	Z	W	T	S	R	I	F	Q	L	Q	I	A	X	I	A	N	Z	E	I
L	E	N	A	L	P	E	T	A	N	I	D	R	O	O	C	O	G	G	T
E	H	U	Y	V	M	D	Q	I	E	G	W	P	Q	T	C	C	C	A	R
X	Z	C	L	O	S	X	F	N	Y	Z	U	X	B	M	J	E	M	T	E
H	E	E	A	C	C	Y	K	T	Q	D	I	S	V	X	D	S	Z	I	V
J	P	A	T	A	E	H	K	F	O	B	P	Z	M	N	X	T	X	V	L
D	I	Z	N	P	M	Y	H	N	I	G	K	A	J	L	V	Q	Z	E	U
G	X	T	O	T	X	O	R	D	E	R	E	D	P	A	I	R	R	B	Z
G	S	D	Z	J	I	P	O	D	Z	Q	Q	V	K	Z	O	H	G	M	X
V	K	Z	I	O	E	A	X	F	E	G	O	H	W	L	O	H	C	K	N
N	Y	L	R	R	B	J	E	C	F	O	R	S	B	T	R	T	K	T	C
D	Z	S	O	Q	U	A	D	R	A	N	T	S	Z	T	I	C	J	T	Z
Y	D	S	H	E	O	D	W	D	D	U	Y	C	N	N	G	Q	E	T	T
S	D	V	U	S	C	R	B	R	D	K	U	V	B	Q	I	G	T	M	G
M	Z	C	O	V	V	P	F	I	J	F	U	O	T	J	N	C	M	X	L

1. A _____ _____ is formed by a horizontal number line intersecting with a vertical number line.

2. A pair of numbers (also known as coordinates) that are used to locate an exact point on a coordinate plane are called an _____ _____.

3. The x-axis is the _____ number line of a coordinate plane.

4. The y-axis is the _____ number line of a coordinate plane.

5. A _____ is an exact location on a coordinate plane. It is usually labeled with a letter like ***A***.

6. On a coordinate plane, the ordered pair (0, 0) is known as the _____.

7. A coordinate plane has four _____. They are labeled *I, II, III, and IV*.

8. The ***x***-coordinate is the _____ number in an ordered pair.

9. The y-coordinate is the _____ number in an ordered pair.

10. To be located in Quadrant IV on a coordinate plane the ***x***-coordinate must be a positive number and the ***y***-coordinate must be a _____ number.

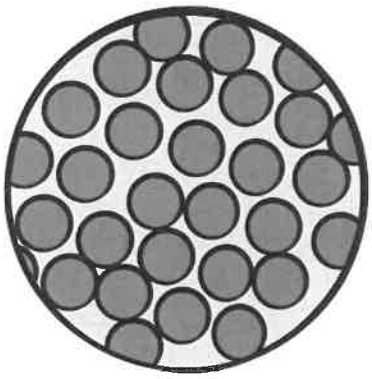
STATES OF MATTER

Science

Name: _____

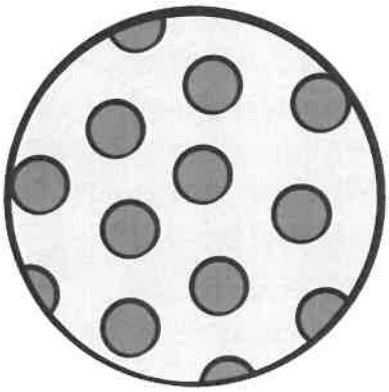
they had formed, and enter into a more flexible, or fluid state. The process we are describing is called **melting**. Melting happens whenever a solid is heated to the point that its particles become so active that they no longer hold their shape. Different substances melt at different temperatures. Scientists call this its **melting point.**

Liquids are in a state of matter with a mid-level range of heat. Their particles are freely moving around and are defined by their tendency to take the shape of whatever object they are contained in. The atoms and molecules of a liquid are still not moving fast enough to escape gravity, though.



LIQUID

When enough heat is added to liquid, the particles speed up even more. Eventually, they may break free from gravity's grip and float freely around whatever container they are in.



GAS

This process of turning liquid to gas is known as **evaporation**. A **gas** has the most energy of all the states of matter, and that means that its particles are moving the fastest. The particles move so fast, and they expand to completely fill any container they are in.

Matter can change state in the other direction as well. When as gas is cooled enough it will return to a liquid state in a process known as **condensation**. This is the process that is responsible for turning clouds to rain.

Liquid, when cooled, can return to a solid state as well. As its particles slow down they eventually reform a solid structure. This process is known as **freezing**.

How Common are State Changes?

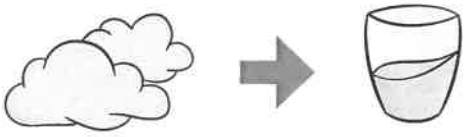
Every substance can become all 3 states. Even rock can become liquid, which we see happen naturally in volcanoes! If we heated them even more, they would become a gas, too. Usually, in nature, temperatures don't get high or low enough for many common items to change states.

Water, on the other hand, easily changes states even at common Earth temperatures. It's not unlikely to encounter solid, liquid, and gas water all in the same day! It's considered a special quality of water that it can change state so easily. Without it, the water cycle (which supports all life on Earth) would cease to exist.

STATES OF MATTER

Name: _____

Give the correct definition for the following changes in state of matter.



GAS **LIQUID**

_____

SOLID **LIQUID**

_____

LIQUID **SOLID**

_____

LIQUID **GAS**

_____

Draw the behavior of the particles in each state.

SOLID **LIQUID** **GAS**

SS

READING COMPREHENSION ACTIVITIES

Name: ..... **Date:** .....

Making a Difference One Vote at a Time

Election Day is a day when Americans have the power to shape the future. By voting, people decide who will lead the country and what new laws might be created. Citizens over the age of 18 can vote in elections, choosing candidates who represent their values and goals. Voting is a right, and many people view it as a responsibility to participate in democracy and help make their communities better places to live.

In addition to electing leaders, voters decide on issues that affect daily life, like roads, parks, and public safety. Voting locations, called polling stations, are set up in schools, libraries, and other community centers. Many people vote in person, but some also vote by mail if they can't attend on Election Day. No matter how they vote, Americans are reminded on Election Day that every single vote can make a difference.

Reading Comprehension Questions

1. **Who can vote in U.S. elections?**

.....

2. **What do people decide on Election Day besides leaders?**

.....

3. **Where are polling stations often set up?**

.....

4. **Why do people consider voting a responsibility?**

.....

5. **Name one way people can vote if they can't be at the polling station.**

.....

The History of Pie

Reading

Have you ever heard the expression "as American as apple pie"? Though pies do exist in other places, they are widely recognized as a symbol of America, and at no time of year do Americans eat more slices of pie than at Thanksgiving! Who invented the wonderful dessert, anyway?

Earliest records place the invention of pies at around 9500 BC by the ancient Egyptians. These pies weren't like modern pies, however; they were simply bread cases filled with honey baked for pharaohs. Many early pie-eaters even skipped the crust altogether and used inedible reeds to hold their pie fillings. The ancient Greeks and Romans are known to have shared pie recipes as well. One popular variety included goat cheese and honey in a rye crust.

By the 1100's, pies had made their way to England, and they finally had real crusts, known as "coffyns," or boxes. However, these crusts were extremely tough and generally not meant to be eaten. To avoid having to use a baking dish, people created thick, dry concoctions of flour and water whose simple purpose was to hold the "pie" filling (usually meat) while it was baking. People could even use the crust as a container for storing leftovers. Though these "coffyns" were much too tough for wealthy people to enjoy as food, they were often eaten by servants and beggars.

During the middle ages, pies became such a phenomenon in England and other parts of Europe that they were used as entertainment! A skilled chef would bake a crust, cut a hole in the bottom, and stuff the pie with one or more live birds. Then, when the pie was cut, the birds would fly out, creating an exciting performance for banquet guests. (A well-known nursery rhyme, "Sing a Song of Sixpence," tells the story of one "animated" pie that was filled with four-and-twenty blackbirds!) Other small animals, such as live frogs, rabbits, and turtles were also sometimes placed in pies, although flying animals were more common. Possibly the craziest pie stunt was to bake an enormous pie crust and insert a person, who would then pop out and perform a dance!

Despite their popularity, pies didn't truly become the desserts we recognize today until the 1500's, when people started to sweeten (and eat) pie crusts. The Pilgrims who journeyed to America in 1620 brought recipes from England very similar to the fruit pies most modern Americans know and love. Of course, after losing half their numbers to starvation the first winter in Massachusetts, the Pilgrims almost certainly lacked sugar to bake sweet pies for the famous First Thanksgiving; however, the feast may have included a dish vaguely resembling crustless pumpkin pie, since the American Indians in the region are known to have grown pumpkins and other squash. Many historians believe the Pilgrims probably filled stewed pumpkins with honey, milk, and spices, roasting them to create a sweet dessert.

The Pilgrims probably had a hand in creating the American apple pie tradition, too, though apples were likely not included in the first Thanksgiving feast. The fruit is not native to North America, so the *Mayflower* carried apple spurs (small tree shoots that grow into apples), and by the Pilgrims' third Thanksgiving in 1623, apple pie was probably on the menu. In the 1700's, pie became even more prevalent as people figured out how to dry apples, making it possible to store them during the cold winter season and bake them into pies year-round. Since then, Americans have developed such a deep love for pie, especially apple pie, that it has become a symbol of America.

Today, if you are one of the 19% of Americans who say apple pie is their favorite, perhaps you can identify with 16th-century British poet Robert Green, who refers to pie in a poem to his love: "Thy breath is like the steame of apple pyes." Delicious! Are you hungry yet?

Name: _____

The History of Pie

1. Information in this passage is organized by _____.
2. What cue words can you find in the passage?

3. Who made the first known pies?

4. How were the first pies different from the pies we eat today?

5. What was one historical use for pies, besides eating?

6. How have pie crusts changed since they were first made?

7. What kind of "pie" did the Pilgrims probably eat at the first Thanksgiving? Why?

8. How did apple pie become popular in America?

Name: _____ Article Title: _____

Timeline

Sequence/Chronological Order

Graphic Organizer