

WRMS



7th Grade

AMI Packet

DAY FIVE

Name _____

- 17** On a winter morning, the temperature before sunrise was -11°F . The temperature then rose by $\frac{1}{2}$ degree each hour for 7 hours before dropping by $2\frac{1}{4}$ degrees each hour for 3 hours. What was the temperature, in degrees Fahrenheit, after 10 hours?

A $-1\frac{1}{4}$

B $-10\frac{1}{4}$

C $-14\frac{1}{4}$

D $-21\frac{1}{4}$

- 18** A painter mixes 6 parts red paint and 8 parts yellow paint to make dark orange paint. Which equation can the painter use to calculate the amount of red paint, R , that is needed to mix with a given amount of yellow paint, Y ?

A $R = \frac{6}{8} + Y$

B $R = \frac{6}{8} - Y$

C $R = \frac{3}{4}Y$

D $R = \frac{4}{3}Y$

Go On

19 Cleo is 38 years old, which is twice as old as Clara will be in 7 years.

Part A

In how many years will Clara be as old as Cleo is now?

- A 12 years
- B 19 years
- C 26 years
- D 33 years

Part B

How old will Cleo be when Clara is as old as Cleo is now?

- A 57 years old
- B 64 years old
- C 71 years old
- D 78 years old

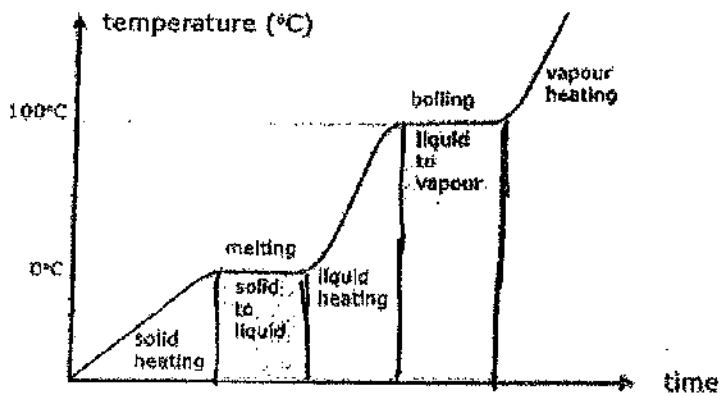
Day 5

Name _____

Matter

All matter exists as solids, liquids, or gases. These are called the states of matter. Matter can change from one state to another if heated or cooled. If ice (a solid) is heated it changes to water (a liquid). This occurs just above 0 degrees celsius (32 degrees fahrenheit). This change is called MELTING. This occurs at 0 degrees celsius (32 degrees fahrenheit). If water is heated, it changes to steam (a gas). This change is called BOILING. This occurs at 100 degrees celsius (212 degrees fahrenheit). The particles of ice, water, and steam are identical, but arranged differently. They also have the exact same amount of particles whether they are in solid, liquid, or gas form.

Increasing Temperature (Graph 1)



1. According to the text and graph 1, at what temperature celsius does liquid begin to boil? _____
2. What happens to liquid when it is taken to 0 degrees celsius? _____
3. What is missing from the graph that would make it better? _____
4. What conclusion can you draw from the graph? Include two pieces of data to support your claim.

5. According to the text, if there were a block of ice out on the school playground and the temperature outside reached 33 degrees fahrenheit, would the block of ice begin melting? Provide evidence to support your claim.

6. Which temperature range would you expect a glass of water could be?
 - a. -10°C - 31°C
 - b. 0°C - 101°C
 - c. 1°C - 99°C
 - d. 100°C - 105°C

day 5

Kaleb was interested about what he read about there being the same amount of mass in something no matter which state of matter it changed into so he decided to test a few different substances. He chose several objects to represent each state of matter. He wanted to see if the weight was the same to the object after he changed the state of matter.

Conservation of Matter (Chart 1)

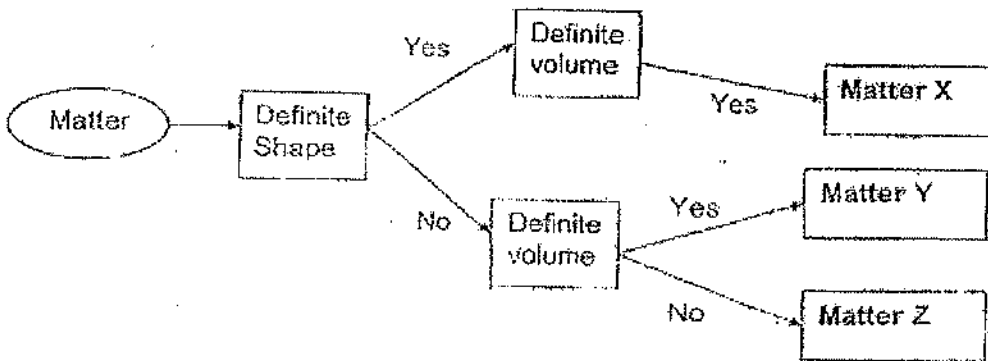
Object	What was done to object	State Change	Starting Weight in oz.	Ending Weight in oz.
Graham cracker	crushed	solid to smaller solid	0.6 oz.	0.6 oz.
Ice Cube	melted	solid to liquid	8 oz.	8 oz.
Orange Juice	frozen	liquid to solid	4 oz.	4 oz.
Sugar & Water	mixture	solid to liquid	water 4 oz. sugar 2 oz.	6 oz.

7. Based on Chart 1, what was the difference in weight between the graham cracker before and after the crushing? _____
8. How much more did the ice cube weigh than the orange juice? _____
9. What conclusion can you draw from the chart of Kaleb's experient? Include two pieces of data to support your claim. _____

10. What tool would Kaleb need to be able to measure the difference in his matter?
- a. thermometer
 - b. beaker
 - c. spring scale
 - d. weight scale
11. According to Chart 1, what state of matter change is adding sugar to water?
- a. solid to liquid
 - b. gas to solid
 - c. liquid to solid
 - d. gas to liquid
12. Make a list of items Kaleb needed to complete his experiment. Include everything he needed.

Matter Characteristics (Chart 2)

State of Matter	Has definite volume (same amount no matter what container it's in.)	How much do the molecules move?	Has definite shape	What happens if I add heat to it?	What happens if I take heat away or cool it?
Solid	yes	vibrating but barely moving	yes	can turn into liquid	nothing
liquid	yes	medium speed moving and sliding past each other	no	can turn into gas	can turn into solid
gas	no	moving fast around and past each other	no	molecules move faster... with enough energy, you can make a plasma.	can turn into liquid
plasma	no	moving extremely fast around and past each other	no	molecules move even faster	needs more research



Look at **Matter Characteristics (Chart 2)** and use that data to read and solve the flow chart above.

13. Matter X _____ 14. Matter Y _____ 15. Matter Z _____

16. Which of these best describe a gas?

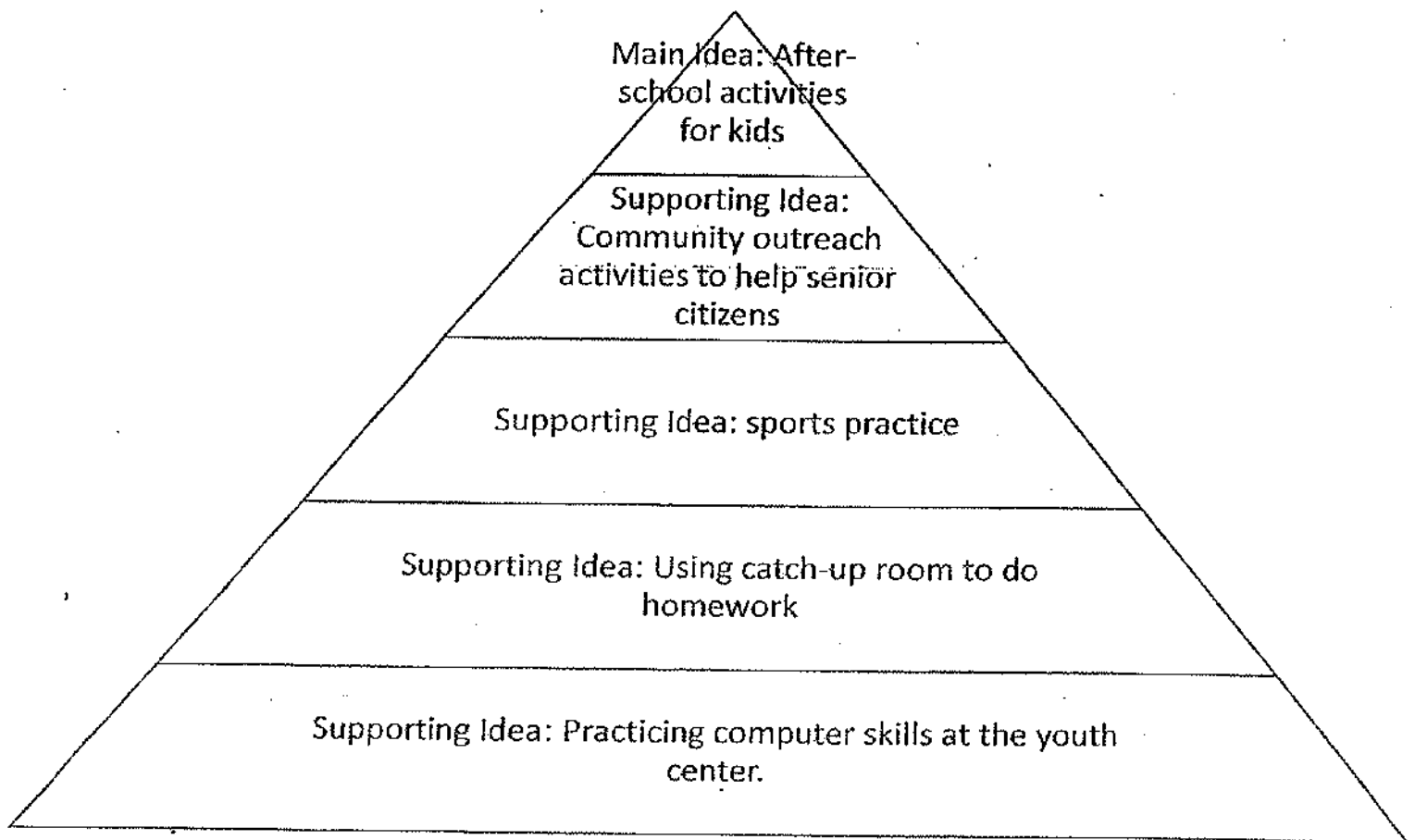
- a. doesn't hold it's own shape, moves extremely fast, does not have definite volume.
- b. does hold it's own shape, only moves enough to vibrate against other molecules, does have definite volume.
- c. doesn't hold it's own shape, moves medium fast beside and around other molecules, does have definite volume.

Writing Alternative Instruction: Day 5

Directions:

Choose one of the main ideas listed on the back of this sheet and fill out the pyramid graphic organizer based on the main idea.

Example:



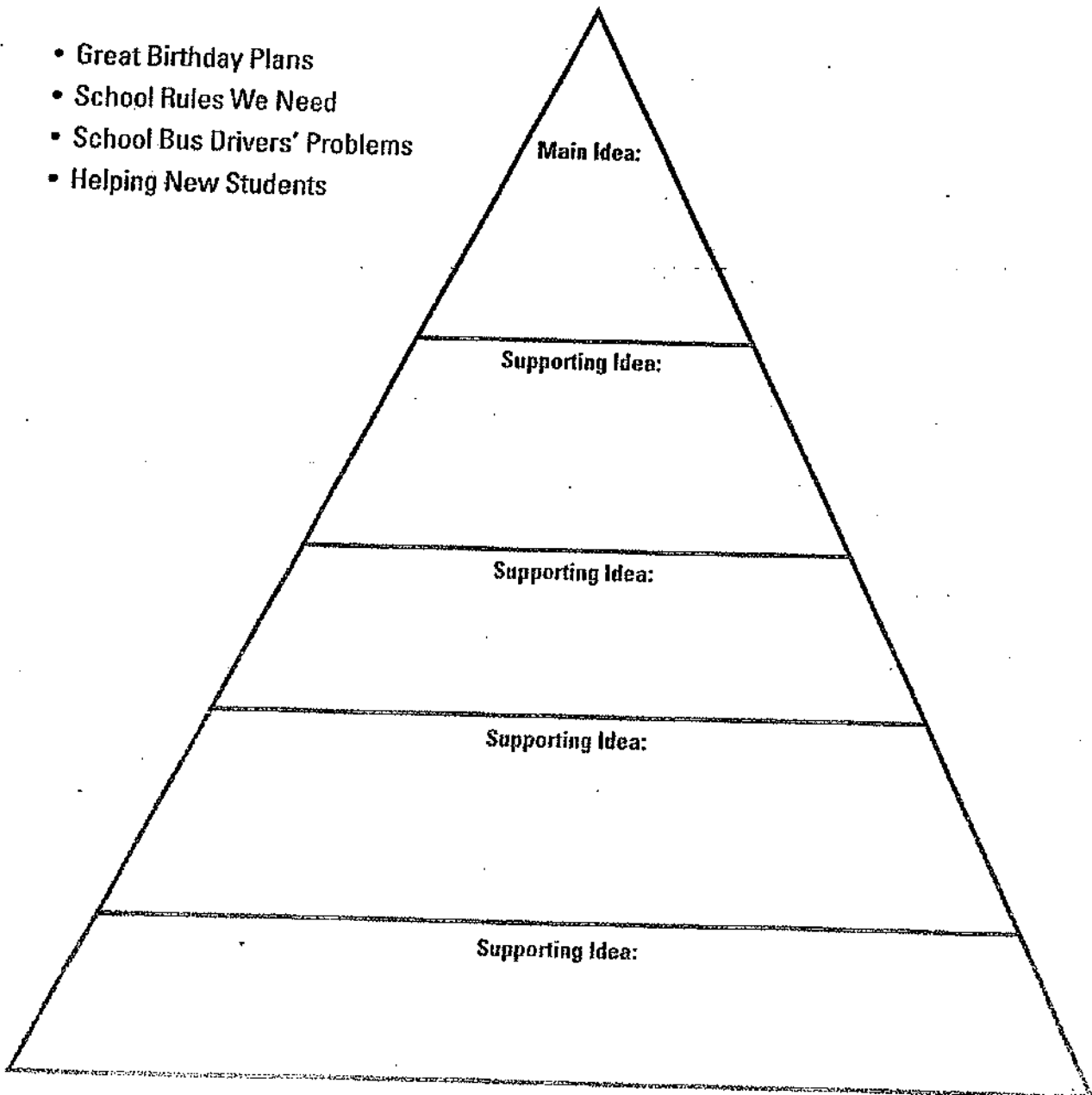
Expository Writing

Name _____ Date _____

Main Idea: WIND-UP

Choose a main idea from the list below, or think of one of your own. Complete the pyramid with four supporting ideas.

- Great Birthday Plans
- School Rules We Need
- School Bus Drivers' Problems
- Helping New Students



The Preposition

A preposition that consists of more than one word is called a *compound preposition*.

SAMPLES: The leader **of** the scout troop led the scouts **out of** the woods. [*Troop* is the object of the preposition *of*, and *woods* is the object of the compound preposition *out of*.]

EXERCISE A Underline the prepositions in the following sentences.

Example 1. Before the hike, the scouts checked the supplies in their backpacks.

1. The scout troop went on a hike.
2. They climbed to the top of Mount Milligan.
3. The climb up the mountain was long and difficult.
4. They crossed over a stream and under fallen trees.
5. During the hike a few scouts went off the trail.
6. Boulders had fallen on the trail from a cliff.
7. They went either around the fallen rocks or between them.
8. There is a great deal of wildlife on the ground and under the brush.
9. On account of snakes, hikers should stay on the trail at all times.
10. The climb down the mountain took them in front of the lodge.

EXERCISE B Underline the compound preposition in each of the following sentences. Then, circle the object of the preposition.

Example 1. Lars and I decided to go to the library instead of the bookstore.

11. We found the biographies next to the mysteries.
12. The seasonal books were in front of them.
13. According to Mr. Wu, some books were not seasonal.
14. They were there because of a space problem.
15. I borrowed the Sue Grafton mystery in spite of its torn cover.
16. A bird book was the only book I liked aside from that.
17. I did not check out the World Series history on account of Lars.
18. Lars checked out that sports book along with a poetry collection.
19. As of last Friday, I had read ten books this month alone.
20. I read Winston Peck's latest novel in addition to Bruce's *Kingdom* and the...

Prepositional Phrases

DEFINITION

The preposition, or another word,

All together, the preposition, its object, and any modifiers of the object are called a *prepositional phrase*.

EXAMPLE Which flowers grow best in this sandy soil? [The prepositional phrase consists of the preposition *in*, the object *soil*, and the adjectives *this* and *sandy*.]

Do not confuse a prepositional phrase that begins with *to* (*to the game, to me*) with an infinitive that begins with *to* (*to read, to be heard*).

EXERCISE A For each of the following sentences, underline the prepositional phrase.

Example 1. Maya Angelou was born in St. Louis, Missouri.

1. Maya Angelou grew up in rural Arkansas.
2. Her career began with dance and drama.
3. Dr. Angelou is fluent in several languages.
4. Audiences throughout the United States have enjoyed Dr. Angelou's lectures.
5. Maya Angelou has also lectured in several foreign countries.
6. Dr. Angelou lived in Cairo, Egypt.
7. Dr. Angelou has also lived and taught in Ghana.
8. In 1969, Maya Angelou wrote an autobiographical novel.
9. She has made several appearances on television.
10. Dr. Maya Angelou's great works are respected around the world.

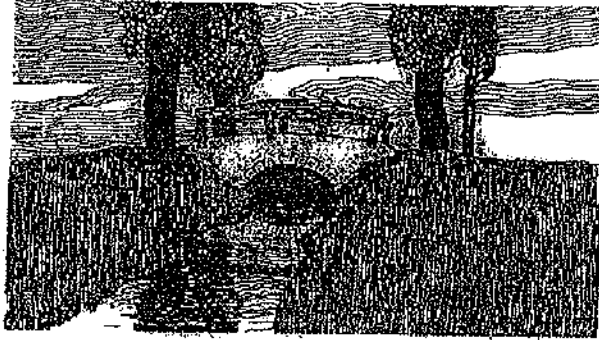
EXERCISE B For each of the following sentences, circle the preposition and underline the object of the preposition.

Example 1. Please don't run (in) the hallway.

11. This film takes place during the Depression.
12. I found my baseball glove underneath the bed.
13. In spite of the rain the band continued playing.
14. Everybody ran five laps around the track.
15. Is Santa Monica near the beach?

The Old Bridge

by Hilda Conkling



The old bridge has a wrinkled face.
He bends his back
For us to go over.
He moans and weeps

5 But we do not hear.
Sorrow stands in his face
For the heavy weight and worry
Of people passing.
The trees drop their leaves into the water;

10 The sky nods to him.
The leaves float down like small ships
On the blue surface
Which is the sky.
He is not always sad;

15 He smiles to see the ships go down
And the little children
Playing on the river banks.

55. Read the following line from the poem:

"The old bridge has a wrinkled face."

Which literary device is used in the line?

- A. simile
 - B. personification
 - C. alliteration
 - D. metaphor
56. Who is most likely the speaker in the poem?
- A. the old bridge over the river
 - B. the blue sky above the bridge
 - C. an old man with a wrinkled face
 - D. a person crossing the bridge
57. What is the best summary of the poem?
- A. A bridge watches ships come and go.
 - B. A bridge would like to run and play with children.
 - C. A bridge works hard while people take it for granted.
 - D. A bridge wishes it could float down the river.

58. In stanza 2, when the poet says, "Sorrow stands in his way/For the heavy weight and worry/Of people passing," she most likely means

- A. the bridge is very old and worn and has seen a lot over the years.
 - B. the bridge is sad that people don't pay attention to it.
 - C. the bridge is very heavy and might collapse from people crossing it.
 - D. everyone who crosses the bridge leaves their troubles behind.
59. Which of these is the best example of a simile?
- A. "He bends his back"
 - B. "The leaves float down like small ships"
 - C. "He smiles to see the ships go down"
 - D. "Sorrow stands in his face"