

# WRMS



## 7<sup>th</sup> Grade

# AMI Packet

## DAY THIRTEEN

Name \_\_\_\_\_

McKenzie makes and sells quilts at an art fair. The materials for each quilt cost \$30.50. She sells the quilts for \$80. If "n" represents the number of quilts she sells, which expression could be used to represent her total profits?

- a.  $30.5n + 80n$
- b.  $80n - 30.5$
- c.  $80 \sim 30.5n$
- d.  $80n - 30.5n$
- e.  $80 + 30.5n$



## Day 13

2.) Sam drew a rectangle that was  $w$  inches wide. The expression  $2(2w) + 2(w)$  represents the perimeter of the rectangle that Sam drew. Which statement relates the perimeter to the width of the rectangle?

- a. The perimeter is 6 inches more than the width
- b. The perimeter is 6 times the width
- c. The perimeter is 2 inches more than the width
- d. The perimeter is 2 times the width

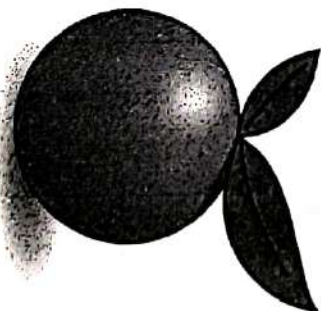
3.) A musician records  $\frac{1}{5}$  of a song in  $\frac{1}{3}$  of an hour. At this rate, how long will it take the musician to complete the entire song? Draw a picture, or set up a proportion to find your answer.

- a.  $3\frac{1}{3}$  hour
- b.  $\frac{2}{5}$  hours
- c.  $2\frac{1}{5}$  hours
- d.  $4\frac{3}{5}$  hours



4.) The cost of oranges in a grocery store is directly proportional to the number of oranges purchased. Jerri paid \$2.52 for 6 oranges. If  $p$  represents the cost, in dollars, and  $n$  represents the number of oranges purchased, which equation best represents this relationship?

- a.  $p = 0.42n$
- b.  $p = 2.52p$
- c.  $p = 6n$
- d.  $p = 15.12n$



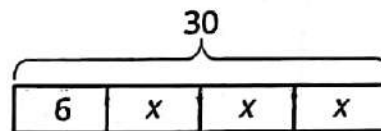
NAME \_\_\_\_\_

DATE \_\_\_\_\_

PERIOD \_\_\_\_\_

**Unit 6, Lesson 3: Reasoning about Contexts with Tape Diagrams (Part 2)**

1. Circle the equation that the diagram does *not* match.
2. Then, draw a diagram that matches the equation you circled.



- $6 + 3x = 30$
- $3(x + 6) = 30$
- $3x = 30 - 6$
- $30 = 3x + 6$



Day 13

## Tornado Warning!

When asked whether they would rather experience a tornado or a hurricane, most people choose a hurricane, hands-down. Why? Although a hurricane is a powerful storm capable of doing much more damage than a single tornado, it is typically predicted several days in advance. People in its path have time to board up windows, stash lawn furniture, stock up on canned food, or even evacuate the area. When a tornado strikes, however, the average warning time is only 13 minutes. Tornadoes are notoriously unpredictable; they develop fast and change direction even faster, giving people very little time to seek shelter. This is a problem that meteorologists have been working to solve for years.

If the current average warning time of 13 minutes seems too short, consider that 100 years ago, tornadoes struck with no warning at all. Without the help of weather radar, meteorologists had no way to know a tornado was forming until it was already on the ground. Although scientists' understanding of weather has greatly increased since then, tornadoes even as late as the 1980's could only be predicted up to five minutes in advance, and a powerful tornado roaring through a town could easily kill hundreds of people who didn't have time to get to safety. In the past, many people thought tornadoes were simply random, unpredictable events. Others worked to learn how tornadoes form, hoping they could one day be able to issue warnings in advance and save countless lives.

The first accurate tornado forecast on record occurred in 1948 at Tinker Air Force Base in Oklahoma. After an unexpected tornado struck the base and caused significant damage, as well as a few deaths, two officers who had been studying severe storms in the area noted the weather conditions. When similar conditions appeared five days later, they used their data to predict that a tornado would form – and they were right. The second time, since people knew to take cover, no one was killed. This successful "experiment" and others like it helped forecasters compile a list of tornado warning signs, such as an area of low pressure and the meeting of warm and cold fronts. This gave them the ability to issue a tornado watch when storm conditions were ideal for the formation of a tornado. Unfortunately, there was still no way to tell if a twister touched down until someone on the ground spotted it.

The use of radar in the 1960's finally made it possible to "see" tornadoes forming from a weather office. Radar emits sound waves and measures how they bounce off objects to monitor things like precipitation and clouds. When a thunderstorm contains an area of strong updraft (a telltale sign of a tornado), radar echoes in that spot are weak, so the storm surrounding it appears as a dark red hook shape, or "hook echo," on the radar image. Although a hook echo does not always indicate a tornado, it means there is a strong possibility that one has formed. This technological advancement allowed forecasters to issue tornado warnings, letting people know to take shelter.

Doppler radar was introduced in the 1980's, revolutionizing tornado prediction by allowing meteorologists to track wind direction – key information when looking for a tornado! Winds blowing toward the radar location and away from it appear on the screen in different colors, so meteorologists look for two opposite colors right next to each other, which indicates rotation. The brighter the colors, the stronger the winds. Powerful rotation is almost a sure sign of a tornado, and it appears on Doppler radar before the "hook echo." This allows forecasters to issue warnings even earlier. Before the 2013 tornado in Moore, Oklahoma, a warning was issued a full 16 minutes before the tornado arrived!

Thanks to radar technology and many determined meteorologists, tornado warning times have grown longer and longer; valuable minutes have saved countless lives from these dangerous storms.

Day 15

NAME \_\_\_\_\_

DATE \_\_\_\_\_ CLASS \_\_\_\_\_

**TORNADO WARNING!! – Reading Check Questions**

1. Why is it so difficult to issue tornado warnings? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
2. How did two men make the first successful tornado prediction? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
3. How did radar make it possible to issue tornado warnings? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
4. How does Doppler Radar help to predict tornadoes earlier? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
5. Based on the information you read in the passage, how would *you* explain the solution to the problem of predicting tornadoes? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

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

**Figurative Language Worksheet 4**

**Directions:** Read the lines of poetry. Figure out which technique is being used: simile, metaphor, hyperbole, or personification. In the boxes, explain how you figured out your answer. It is possible that more than one technique is being used. If you can, explain each.

1. When the wind is low, and the sea is soft,  
And the far heat-lightning plays

Which technique is being used? \_\_\_\_\_

Simile, Metaphor, Personification, or Hyperbole

How do you figure?

(write a sentence explaining your answer)

2. Your beauty was a web of frail delight.

Which technique is being used? \_\_\_\_\_

Simile, Metaphor, Personification, or Hyperbole

How do you figure?

(write a sentence explaining your answer)

3. Now that I am without you, all is desolate;  
All that was once so beautiful is dead.

Which technique is being used? \_\_\_\_\_

Simile, Metaphor, Personification, or Hyperbole

How do you figure?

(write a sentence explaining your answer)

4. The little Road says, Go,  
The little House says, Stay:

Which technique is being used? \_\_\_\_\_

Simile, Metaphor, Personification, or Hyperbole

How do you figure?

(write a sentence explaining your answer)

5. I could grow very still  
Like an old stone on a hill

Which technique is being used? \_\_\_\_\_

Simile, Metaphor, Personification, or Hyperbole

How do you figure?

(write a sentence explaining your answer)



6. My heart is but a haughty snail!

Which technique is being used? \_\_\_\_\_

Simile, Metaphor, Personification, or Hyperbole

How do you figure?

(write a sentence explaining your answer)

7. Your kiss lies on my face  
Like the first snow  
Upon a summer place.

Which technique is being used? \_\_\_\_\_

Simile, Metaphor, Personification, or Hyperbole

How do you figure?

(write a sentence explaining your answer)

8. How sweet the sobbing violin!

Which technique is being used? \_\_\_\_\_

Simile, Metaphor, Personification, or Hyperbole

How do you figure?

(write a sentence explaining your answer)

9. An endless quiet valley spreads out  
Past the blue hills into the evening sky;

Which technique is being used? \_\_\_\_\_

Simile, Metaphor, Personification, or Hyperbole

How do you figure?

(write a sentence explaining your answer)

10. His pigtail is long and thick,  
Like a pump-handle stuck on the end of a stick.

Which technique is being used? \_\_\_\_\_

Simile, Metaphor, Personification, or Hyperbole

How do you figure?

(write a sentence explaining your answer)

## SECTION 1 CULTURE GeoActivity

Use with Southwest Asia & North Africa Today, Section 1.4, in your textbook.

Go to Interactive Whiteboard GeoActivities at  
**myNGconnect.com** to complete this activity online.

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### 1.4 DUBAI: DESERT CITY

## Map a Route in Dubai

Dubai is not a new city, but it seems like one. Since the 1970s, it has quickly grown with towering skyscrapers, attractions for tourists and residents, and a fast new Metro system of trains for mass transportation. This ultramodern light-rail system runs underground in the city center and on elevated tracks outside it.

Suppose you are visiting the city and want to travel to different destinations. Study the map of Dubai's Metro, paying attention to the Red and Green Metro lines and some of the city features located near them. Then answer the questions that follow.

**1. Interpret Maps** Using information from the map, describe the route you would take to each of these sites in Dubai.

- Burj Khalifa** From the airport, how would you get to the skyscraper Burj Khalifa?
- Mall of the Emirates** If you are at Union Square and want to visit this mall, would you travel toward Jebel Ali or Deira City Centre?
- Deira City Centre** When traveling on the Red Line toward Deira City Centre from Nakheel, which station comes first, Burj Khalifa or Mall of the Emirates?
- Transfers** When traveling by the Green Line, at what stations could you transfer to the Red Line?



**2. Make Inferences** Dubai's climate is hot and arid. How was the climate taken into account when the planners and architects chose and designed some of the building sites shown on the map?