



4th Grade

Winter Vacation Packet

Due: Wednesday, January 2, 2019

Name: _____

Directions: Read the following two passages. Then answer the questions that follow.

Little Mo

By James M. Janik

- 1 Montgomery Ashford got his nickname back in sixth grade.
- 2 While the rest of us doubled in size the summer before middle school, Little Mo still had to sit on his feet to see at the movies. When we'd take turns jumping for the rim during basketball in gym class, Little Mo needed a boost to nick the net with a fingertip. Little Mo was, well, little.
- 3 Most guys would waste their time whining about such a lousy break. It's tough to fit in when you're looking up at everyone's chin most of the time. Little Mo never complained. In fact, he saw his shortness as a positive. He was funny that way. Once you knew him and how he saw things, it was impossible to feel sorry for him.
- 4 For most of the year, especially during football and basketball seasons, Little Mo avoided attention. Keeping "under the radar" is what he called it. When March rolled around, things changed. Little Mo lived for the spotlight of baseball season.

- 5 At the start of the first game, the opposing team slung the usual insults. Little Mo just smiled. All the kids on our bench folded their arms, waiting.

- 6 After the pitcher and catcher finished their giggling and snickering and got down to the business of pitching, their smirks faded.

- 7 Little Mo dug in the batter's box, the sleeves of his jersey hanging down past his elbows.

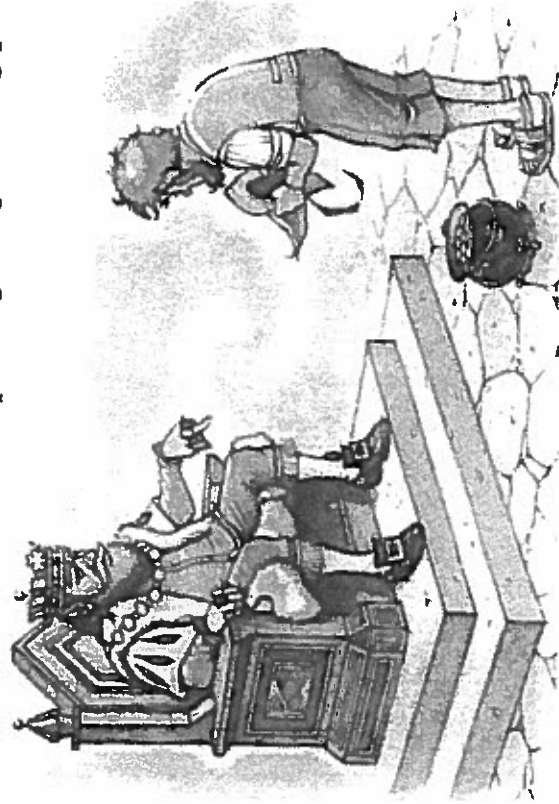


- 12 Giving up a walk to Little Mo was the same as giving up a triple. The next hitter only had to watch two pitches go by, and Little Mo would steal second, then third. Before the pitcher knew what had happened, Little Mo would be standing on third, waiting to score.
- 13 Little Mo set all sorts of league records. He started every All Star game. He was a run-scoring machine.
- 14 By the end of the season, we all wished we weren't quite so tall. Our strike zones were enormous! It took forever for our long legs to carry us to second base on a steal.
- 15 Little Mo grinned whenever we mentioned how lucky he was to be so short and fast. He agreed that he was lucky to get so much attention but never rubbed it in. He was funny that way.
- 16 His luck ended the year he turned thirteen.
- 17 Little Mo went off to summer camp right after our last game. As always, he'd led the league in walks, steals, and runs scored. When he came back from camp, he'd grown six inches. His voice had dropped about three octaves. We didn't recognize him. His mom called it a growth spurt. We called it a disaster. We'd lost the best lead-off hitter in the league's history! What a lousy break.
- 18 But Little Mo didn't see it like that. He said he'd always wanted to give basketball a try. And he thought he might like to try wide receiver, too. We just scratched our heads. He was funny that way.



- 13 "You need to study harder."
14 "You need to try harder."
15 So he did. He cobbled ill-fitting shoes, strummed his harp while the neighbors held their ears, and stepped on the toes of any partner willing to risk a dance with him.
16 And he practiced magic. But he couldn't get the magic to work.
17 To raise his spirits, Eamon walked to the brook one sunlit morning. He cast his fishing line as he cast his mind in search of a solution. Then, gazing at his favorite waterfall, he suddenly knew what to do.
18 The day arrived to go before the throne.

19 "This is leprechaun gold," the king said solemnly, placing the gleaming pot before Eamon. "Can you keep it safe?"



20 The young leprechaun nodded. "I will place it at the end of a rainbow and retrieve it when there's need."

21 After the ceremony, Eamon hid his gold.

22 Summer arrived—the hottest one Ireland had known.

The skies were steely blue with nary a cloud, and the grass withered on the hills.

23 With no rain, there could be no rainbows. With no rainbows, it was impossible for the leprechauns to reach their treasure.

- 33 The king followed Eamon to the waterfall. "You didn't hide it at the end of a rainbow trout, did you?" he joked.
- 34 Eamon chuckled nervously, then pointed. Smaller due to the drought, the waterfall still sent out enough spray for the sun to spread a rainbow in the mist. Eamon reached in and pulled out his pot of gold.

35 The king smiled.
"You're a clever leprechaun. You followed the law, in your own way, and it's lucky you did. Your gold can keep everyone safe until the rains return."



- 36 So he said, and so it was. Each leprechaun took a gold coin from the pot. Together, they used their magic to befuddle the intruders. The village was safe again.
- 37 There was a great celebration—a fine fish dinner, of course.
- 38 Eamon continued to share his gold and his fish until the rains fell. Nobody laughed at him anymore, and everyone came to him for fishing lessons.
- 39 Few, however, were willing to put in the time and energy fishing required.
- 40 "You need to practice harder, study harder, and try harder," Eamon told them, but he said it with a twinkle in his eye.
"Well, we all have our talents. Go ahead and chase your rainbows. Just let me chase mine in my own way."

234 Look closely at the illustration of Little Mo and the catcher on page 271. Describe how Little Mo and the catcher seem to feel. How does this support information in the story? Use details from the story to support your answer.

235 Read these sentences from paragraph 8 of the story.

“When Little Mo crouched, his rectangle seemed to fold up like a road map. From the pitcher’s mound, Little Mo’s strike zone looked like a mail slot.”

Are the similes an effective way to emphasize how hard it was to pitch to Little Mo? Use details from the story to support your answer.

4.NBT.1

1. A. How is the 2 in the number 582 similar to the 2 in the number 528?

Answer _____

- B. How is the 2 in the number 582 different from the 2 in the number 528?

Answer _____

4.NBT.2

2. In which of the following base ten numerals does the digit in the thousands place represent a value that is 10 times the value represented by the digit in the hundreds place?

- A. 2687
- B. 4825
- C. 5752
- D. 7781

3. The numbers are ordered from greatest to least. One number is missing.

582,378 _____ 576, 201

Which number is missing?

- A. 573, 095
- B. 575,195
- C. 578,263
- D. 576,200

4. Which symbol makes this sentence true?

239,475 ○ 240,467



Part A: Round each type of baked good to the nearest hundred.

- Cookies _____
- Brownies _____
- Muffins _____

Part B: The soccer team baked about the same amount of two types of baked goods. What types were they? Explain your answer.

4.NBT.4

9. Solve. Explain the process of regrouping.

$$\begin{array}{r} 3892 \\ - 2567 \\ \hline \end{array}$$

10. A recycling center recycles plastic bottles, aluminum cans, and glass bottles. The table shows the amount of each material the center recycled in one day.

Material Recycled	
Material	Amount Recycled
Plastic Bottles	13,952
Aluminum Cans	8,596
Glass Bottles	3,735



13. Mrs. Smith bought 3 boxes of crayons. Each box has 17 crayons.

Part A: Write a number sentence to find how many crayons Mrs. Smith bought in all.

Part B: Use the distributive property of multiplication to find the total number of crayons. Show your work.

14. Multiply and show your work.

$$4,234 \times 6 = \square$$

4.NBT.6

15. A 4th grade teacher bought 4 new pencil boxes. She has 260 pencils. She wants to put the pencils in the boxes so that each box



19. A musical started at 1:10 P.M. and ended at 3:40 P.M. How long was the musical? Show your work. *Elapsed Time*

Answer _____

20. Lea spent 8 days on her vacation. She spent $\frac{3}{4}$ of her vacation at Disney World. How many days of her vacation did she spend at Disney World? *Show your work.*

- A. 2 days
- B. 3 days
- C. 4 days
- D. 6 days

Lesson 2 Tools for Experimenting

M3.1a Use appropriate scientific tools to solve problems about the natural world.

S2.1a Indicate materials to be used and steps to follow to conduct the investigation and describe how data will be recorded (journal, dates and times, etc.).

S2.2a Explain the steps of a plan to others, actively listening to their suggestions for possible modification of the plan, seeking clarification and understanding of the suggestions and modifying the plan where appropriate.

S2.3a Use appropriate "inquiry and process skills" to collect data.

S2.3b Record observations accurately and concisely

You can use the correct tools to make scientific observations.

Tools are the instruments that help you conduct an experiment.

Recording observations means to write down the information gathered during an experiment.

Directions Read the following information.

Scientists use instruments to help them make observations. Scientists throughout the world use the same measuring systems so they can understand each other's experiments.

Tools that you might use in your classroom experiments include:

- metric ruler to find height, length, width
- spring scale to find weight
- pan balance to find mass
- Fahrenheit (°F) and Celsius (°C) thermometers to find temperatures
- graduated cylinders and measuring cups to find volume

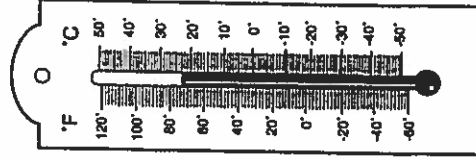


Guided Questions

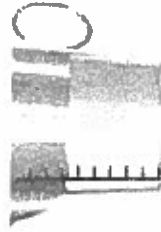
Why do scientists around the world use the same measuring systems?

What are five **tools** you might use in a classroom experiment?

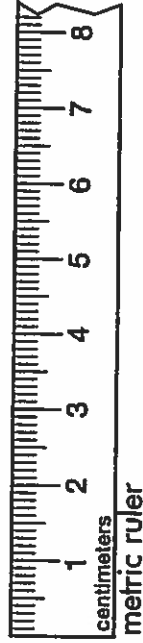
thermometer



measuring cup



pan balance



graduated cylinder



spring scale



Directions For each question, write your answer in the space provided.

1. Which tools will you use to measure the height, weight, mass, and volume of a cube of metal?

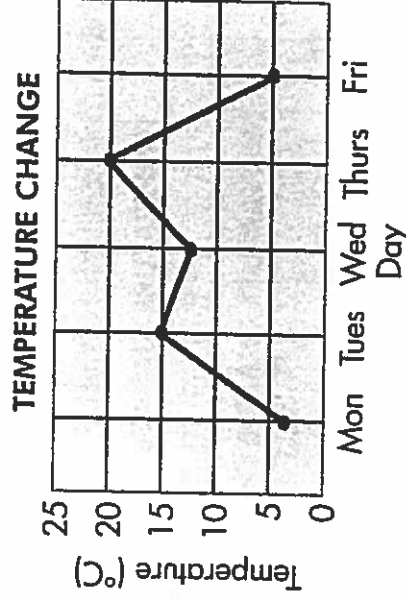
height _____

weight _____

mass _____

volume _____

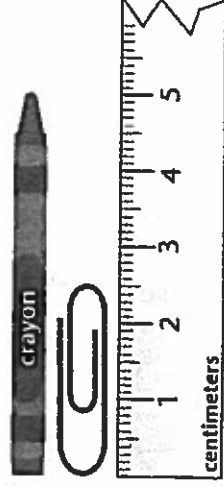
Base your answers to questions 2 and 3 on the graph below.



2. What is the recorded temperature of the object on Tuesday? Is this temperature higher or lower than the recorded temperature on Monday?
- _____
- _____
3. On what day was the temperature recorded at exactly 5°C?
- _____
- _____
4. Why is it important for scientists to keep accurate records?
- _____
- _____

Directions (9–14): Each question is followed by four choices. Decide which choice is the best answer. Circle the letter of the answer you have chosen.

Base your answers to questions 9 and 10 on the drawing below.



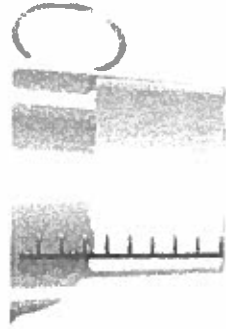
9 What is the science tool shown above measuring?

- A mass
- B width
- C length
- D temperature

10 What is the length of the crayon to the nearest centimeter?

- A about 3 cm
- B about 4 cm
- C about 5 cm
- D about 6 cm

11 What is best measured with the tool shown below?



- A color of apple skin
- B length of an apple stem
- C height of an apple tree
- D volume of apple juice

12 Why is a journal useful to a scientist?

- A to write letters home
- B to write short stories
- C to list the names of everyone who helped in an experiment
- D to record observations made in an experiment

Lesson 4 Analyze and Display Data

- S3.1a** Accurately transfer data from a science journal or notes to appropriate graphic organizer.
S3.2a State, orally and in writing, any inferences or generalizations indicated by the data collected.
S3.3a Explain their findings to others, and actively listen to suggestions for possible interpretations and ideas.
S3.4a State, orally and in writing, any inferences or generalizations indicated by the data, with appropriate modifications of their original prediction/explanation.
S3.4b State, orally and in writing, any new questions that arise from their investigation.

You can make inferences or generalizations by analyzing and displaying scientific data.

Data is information gathered in an experiment.

A **graphic organizer** is a drawing, chart, or graph, in which you can accurately display data.

Directions Read the following information.

When you do an experiment to try to answer a scientific question, you make observations and collect information. The information you gather from the experiment is your **data**. But what will you do with the data you have collected?

Scientists transfer, or move, their data from their science journal or notes into a **graphic organizer**. Here are three ways you can organize your data.

You might make a drawing of something you observed. For example, if you were observing the birds in your neighborhood, you might draw the birds you see.

A second way you might organize your observations is in a chart. For example, if you were observing the growth of two plants, you might put your data into a chart like this:

	PLANT 1	PLANT 2
Height at 1 week	1 cm	1 cm
Height at 2 weeks	5 cm	3 cm

A third way to organize data is by using a graph. A graph is useful for showing changes that occur during an experiment. A graph has lines that

Guided Instruction

Guided Questions

What is data?

What is one way to organize data?

SUNSET TIMES

DAY	TIME
Monday	5:00 P.M.
Tuesday	5:02 P.M.
Wednesday	5:04 P.M.
Thursday	5:06 P.M.

3. The chart above shows sunset times for four days. Based on the chart, predict what time sunset be on Friday.
-
4. What conclusion can you draw from the information in the sunset chart above?
-

Apply the
New York State
Learning Standards
to the State Test

Directions: For each question, write your answer in the space provided. Base your answers to questions 5 through 8 on the information and data below.

The air temperatures below were taken at 3 P.M. on Monday, Tuesday, Wednesday, Thursday, and Friday.

Monday 8°C Tuesday 13°C Wednesday 18°C
Thursday 15°C Friday 20°C

- 5 Complete the following chart with the data from above.

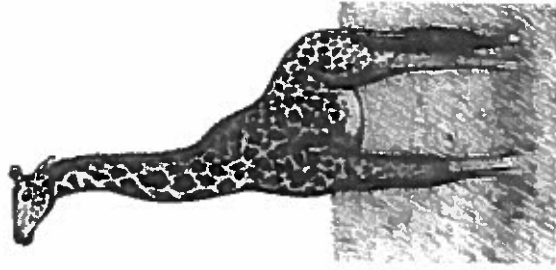
AIR TEMPERATURES AT 3 P.M.

DAY OF THE WEEK	TEMPERATURE

8 What new question might this data lead you to ask?

Directions (9–14): Each question is followed by four choices. Decide which choice is the best answer. Circle the letter of the answer you have chosen.

9 Which of the following would best show the changes in the height of a growing giraffe?



- A chart
- B graph
- C paragraph
- D drawing

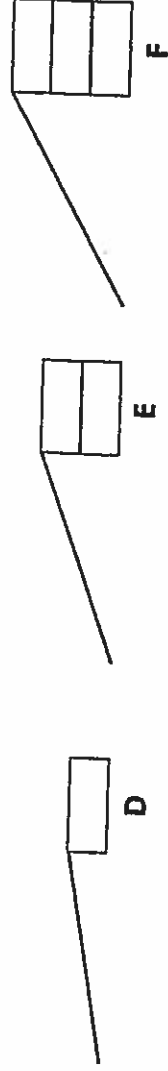
10 Which of the following would best show the differences in the shapes of footprints of animals?

- A chart
- B graph
- C paragraph
- D drawing

11 Why do scientists put data into charts or graphs?

- A It makes it easier to study the data.
- B It's a good way to organize data.
- C It's helpful when explaining data to others.
- D All of the above.

- 14 Tom rolled a ball down each of the ramps shown below. He rolled a ball down each ramp twice. Every time he rolled the ball, he timed how many seconds it took for the ball to roll to the bottom of the ramp. He put his data into a chart. What conclusion can be made from Tom's data?



	FIRST ROLL	SECOND ROLL
Ramp D	4 seconds	5 seconds
Ramp E	3 seconds	3 seconds
Ramp F	2 seconds	2 seconds

- A The ball rolled fastest down the highest ramp.
 B The ball rolled fastest down the lowest ramp.
 C The ball rolled fastest down the middle ramp.
 D The height of the ramp did not affect how fast the ball rolled.