Brookfield

4th Grade

Blizzard

Bag #2

Math 4 today

Name _____

1

$$4{,}609 + 3{,}285 = \square$$

2

$2 \times 6 = \square$

$11 - 3 = \square$

$3 \times 5 = \square$

3 Continue the pattern.

206, 203, 200, 197

____, ____, ____

4 Write the numeral for the number words.

two hundred seventy-one thousand, four hundred nine _____

one hundred four thousand, three hundred six _____

5 Which pair are **NOT** related facts?

- ◯ 2 + 7 = 9 and 9 - 6 = 3
- ◯ 12 - 9 = 3 and 3 + 9 = 12
- ◯ 9 - 8 = 1 and 9 - 1 = 8
- ◯ 10 - 6 = 4 and 6 + 4 = 10

6

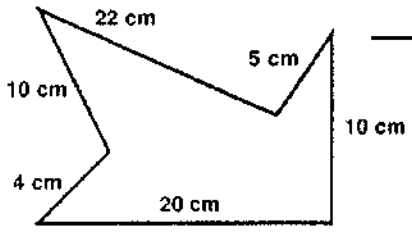
Team Scores in Weekly Bowling Tournament

Day Team:	Stars	Jets
Saturday	327	152
Sunday	478	599
Wednesday	432	557
Friday	455	422

On which day did the Jets have 125 more points than the Stars? _____

7 Hannah spent $1.25 on popcorn and 6 dimes on candy at the movies. Show how to find the amount of money she spent.

8 What is the perimeter of this shape?



_____ cm

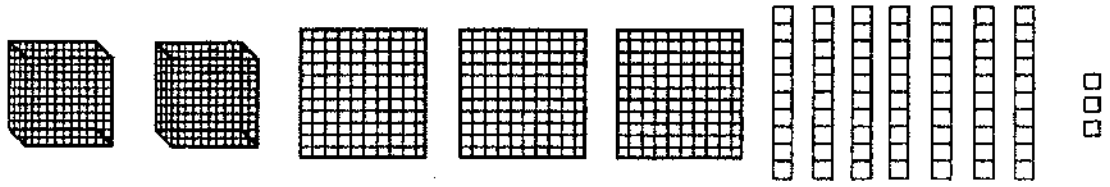
9 In the numeral **568,120**

The **8** is in the _____ place.

The **2** is in the _____ place.

The **5** is in the _____ place.

10 After adding 8 more tens to this model, the numeral shown would be _____.



HOW FOSSILS ARE MADE

How Fossils Are Made

Living things (usually aquatic) die and then get buried quickly under sand, dirt, clay, or ash sediments. Usually, the soft parts decay, or rot away, leaving the hard parts behind. These are ammonites, one of the most common fossils that are found.

As time goes on more and more sediment accumulates. Pressure, heat, and chemical reaction cause the sediments to harden into rock called sedimentary rock.

Movements in the earth's crust, pushes the layers of sedimentary rock back up to higher ground.

Finally, through erosion caused by weather, wind, and water, the fossils become exposed at the surface again.

The Kinds of Fossils

Paleontologists are people who study ancient life. Because they study life forms that are now extinct, they rely on fossils to learn about life in the past. Fossils are the remains of living things that have transformed into stone over millions of years.

Most fossils are found in sedimentary rock. The fossils are made when living things die and get buried by sediments quickly before the hardest parts of the animal have a chance to decay. As sediments accumulate, pressure causes the sediments to harden into rock: Sand sediments become sandstone, clay sediments become shale, and shell sediments become limestone.

Groundwater carrying minerals seeps into the sedimentary rock and helps the fossils form in one of two ways. Sometimes the minerals fill in all of the empty places of the once living thing and form crystals. These crystals cause the remains of the living thing to harden along with the sedimentary rock that it is encased in. Petrified wood is an example of this process, which is called *permineralization*.

At other times, the minerals in the groundwater actually replace the minerals that make up the remains. So over time the hard parts are completely replaced by other minerals. This process is called replacement.

Other important fossils are impressions and molds. These are made when a hard part such as a shell, fills up with sediments that harden, and then the actual shell dissolves leaving nothing but the sediment mold. These molds can tell us much about the body structures of animals and plants.

As well, insects also get trapped in amber, which is fossilized tree sap. In the movie *Jurassic Park*, scientists used dinosaur DNA from the stomachs of mosquitoes trapped in amber to genetically engineer dinosaurs.

Some animals have even been trapped in ice, too, preserving them extremely well. Woolly mammoths and mastodons have been found with hair intact and bones in good condition. Likewise, some animals and plants have been mummified in hot arid conditions like those found in deserts.

Finally, paleontologists can learn about ancient life from trace fossils. Trace fossils are things like footprints or animal droppings, which can tell us about the animal's behaviour.

FOSSILS

Name: _____

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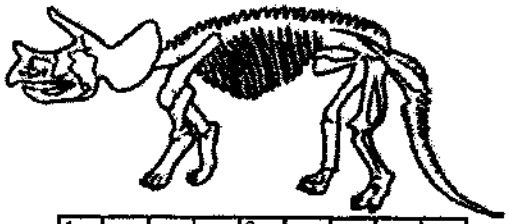
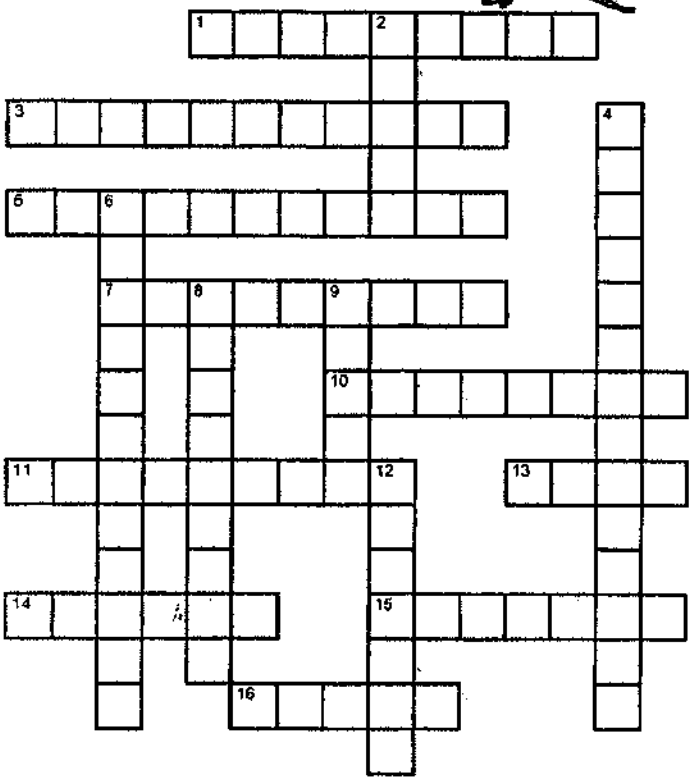




Across

1 Sedimentary rock formed from sand deposits. (9)

3 The kind of rock that you are most likely to find fossils in. (11)

5 The process of changing the hard parts of the remains of an animal or plant with minerals. (11)

7 Sedimentary rock formed from deposits of shells. (9)

10 A fossil that look like a spiral or a rams horns. (8)

11 _____ wood. A permineralized piece of wood. (9)

13 A kind of fossil where an animal or plant leaves only its body impression in the mud. (4)

14 Preserved in ice or snow. (6)

15 Kind of animals most likely to be preserved. (7)

16 Some insect fossils are trapped in this rock made from tree sap. (5)

Down

2 Sedimentary rock formed from clay deposits. (5)

4 Someone who studies ancient life. (14)

6 The science of studying ancient life. (12)

8 Preserved in hot, dry conditions. (9)

9 Fossils such as footprints, burrows, and droppings. (5)

12 Not preserved (7)

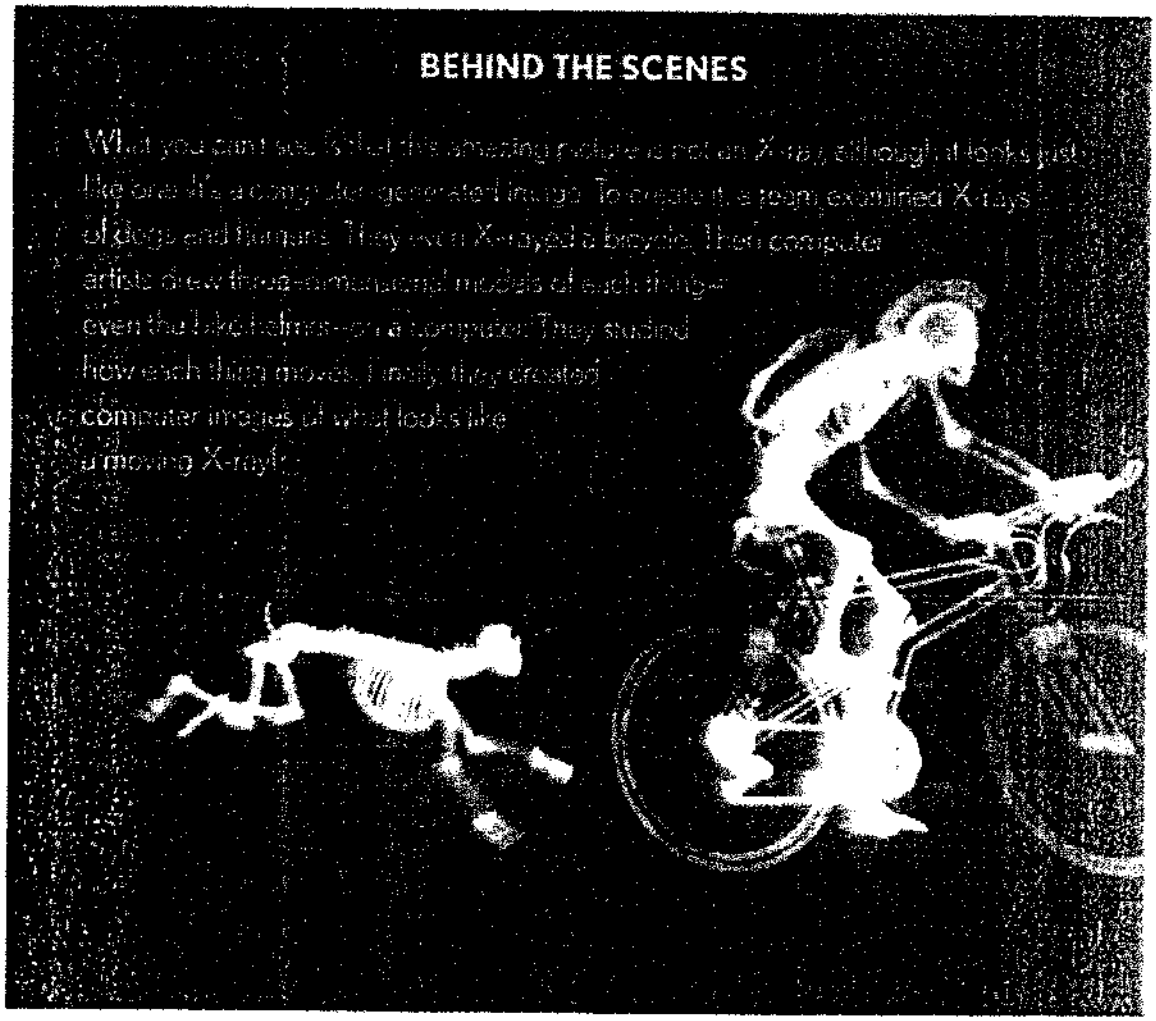
DIGGING BONES

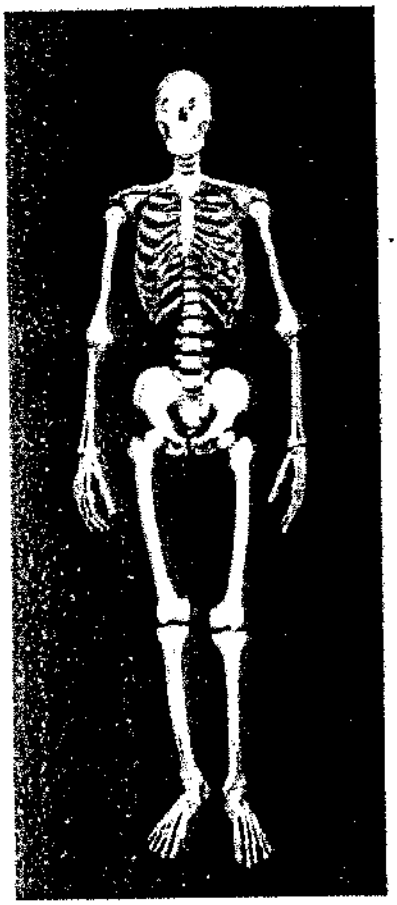
A Look at Skeletons

Dogs and kids have a lot in common. They like to eat, sleep, and play. And they're both mammals, having hair. Look at the image on this page. You'll see even more ways dogs and kids are alike, especially in what's under their fuzzy skins.

For one thing, both humans and dogs are vertebrates, animals with backbones. And of course, being land dwellers, both have lungs with protective ribs.

Look at the picture and compare these two bony skeletons. Find more details on how dogs and humans are alike and different.





WORD WISE

Use this glossary to help you with words you may not know.

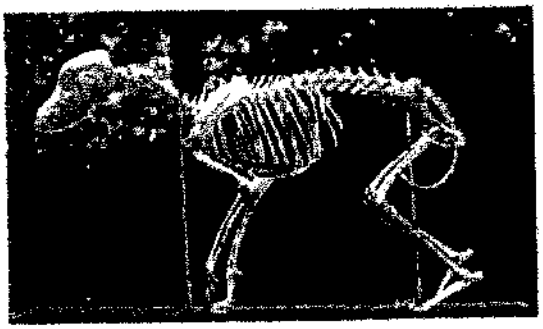
adult (uh-DULT) A grown-up.

image (IM-ij) A picture.

mammal (MAM-uhl) A warm-blooded animal with a backbone and hair or fur. Female mammals produce milk to feed their babies.

maturity (muh-CHUR-uh-tee) Being fully grown.

vertebrae (VUR-tuh-bray) The small bones that make up the backbone. *The singular is* vertebra (VUR-tuh-bruh).



KID VS. DOG

Compare skeletons. What looks the same? What looks different?

	KID	DOG
Number of bones as an adult	206	321
Number of vertebrae	33	50
Number of joints	more than 200	more than 300
Age of maturity	18 years	2 years
Longest bone	femur (thighbone)	ulna (arm bone)
Smallest bone	ossicles (ear bones)	ossicles (ear bones)
Number of ribs	12 on each side	13 on each side

lesson 20

check it out

Digging Bones

Fill in the circle next to the correct answer.

1. The smallest bones in both skeletons are the _____ .
   - (A) thighbones
   - (B) arm bones
   - (C) ear bones
   - (D) ribs

2. A dog's bones are **mature**, or fully grown, _____ .
   - (A) at the same age as a kid
   - (B) at an earlier age than a kid
   - (C) at a later age than a kid
   - (D) when the dog is 5 years old

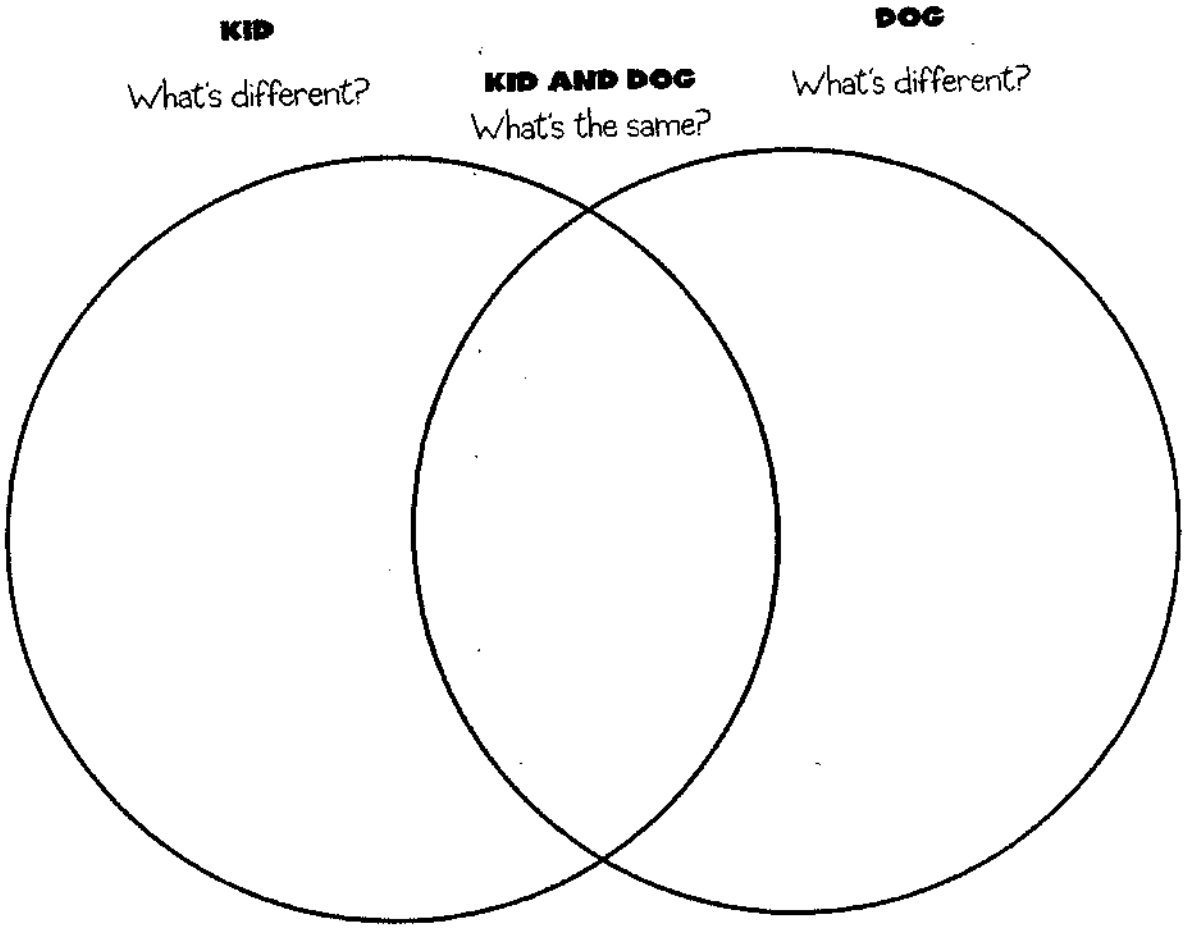
3. If skeletons did not have joints, they would _____ .
   - (A) not be able to move
   - (B) not grow
   - (C) fall over
   - (D) have more bones

4. A dog has _____ bones. A kid does not.
   - (A) rib
   - (B) tail
   - (C) leg
   - (D) neck

5. Which word means the same thing as **vertebrae**?
   - (A) skeleton
   - (B) x-ray
   - (C) ribs
   - (D) backbone

Digging Bones

Complete the graphic organizer below. List how a kid and a dog are alike and different.



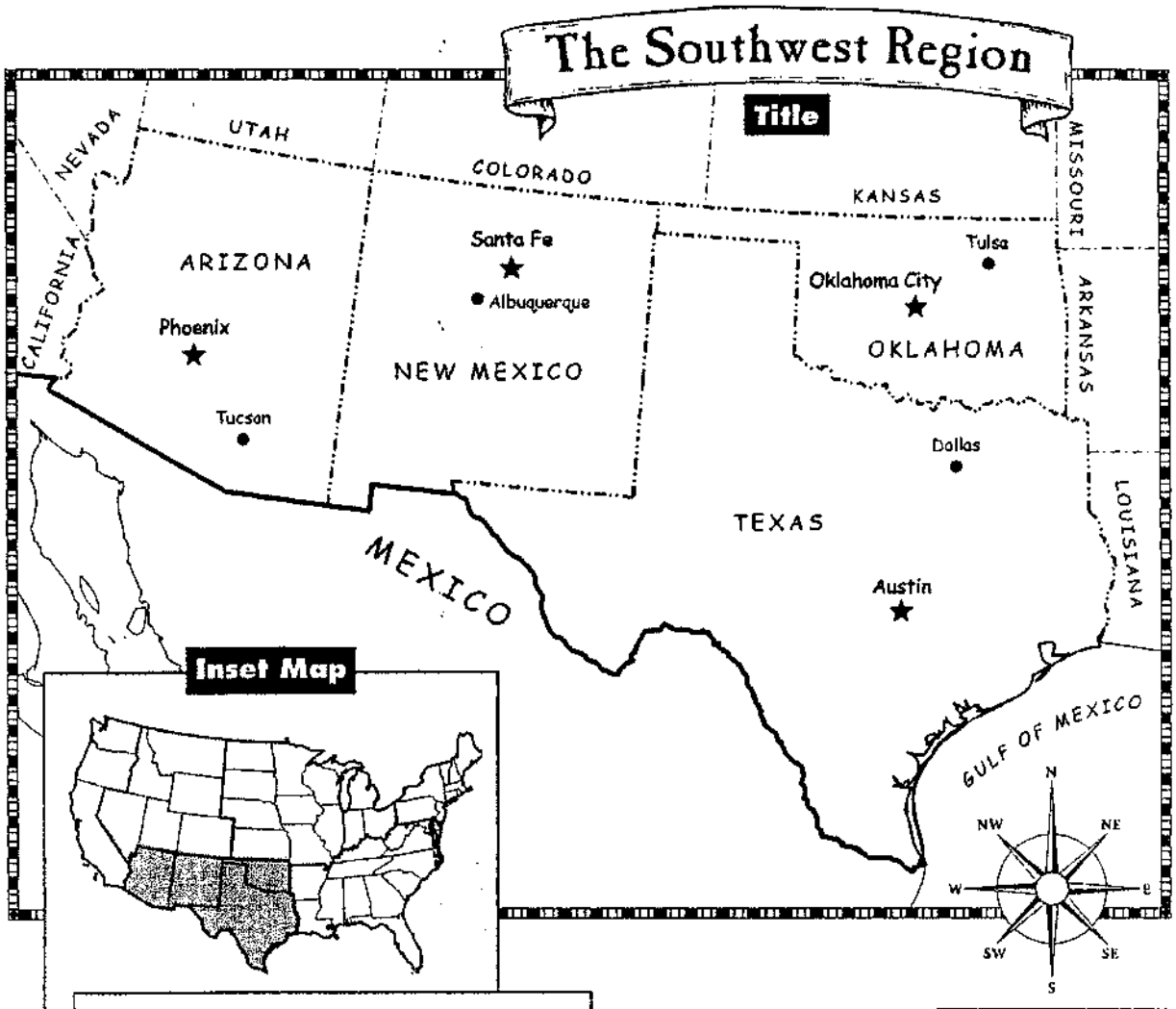
Write About It

Use pipe cleaners to make a kid or dog skeleton. Glue the skeleton on paper. Then write three facts you learned about skeletons.

Name

Parts of a Map

WEEK 1



Draw an inset map that shows just the location of Texas within the Southwest region.

Name _____

Parts of a Map

Monday

1. Which four important parts are labeled on the map?

   _____

   _____

2. According to the title, what is the map showing?

   _____

Tuesday

1. What is another name for the four main directions on a compass rose?

   _____

2. Name the intermediate directions on the compass rose.

   _____

   _____

Wednesday

1. What does the legend show on the map?

   _____

   _____

2. Name the city that is closest to an international border. What country does this city border?

   _____

Name _____

Parts of a Map

Thursday

1. Why is the Southwest region highlighted on the inset map?

_____

_____

2. How many regions of the U.S. are shown on the inset map?

_____

Friday

1. If deserts were added to the map, would the symbol be shown on a compass rose, an inset map, or on a legend?

_____

2. Which state is the farthest west in the Southwest region?

_____

Challenge

Sometimes there is a need for two inset maps. In the space provided on the map, make another inset map that shows only the location of Texas within the Southwest region.

Name: _____

Hyperbole (pronounced: hy-PER-bol-ee) is a an exaggerated phrase used in writing that is not meant to be taken literally.

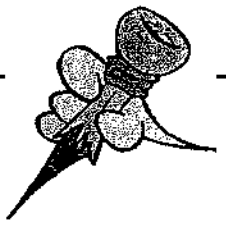
Hyperbole Cafe

by Lill Pluta

Welcome to our restaurant
Where everything's gigantic.
A hundred waiters hold one dish.
Our kitchen can get frantic.
Our soup is deeper than the sea.
Our noodles stretch a mile.
The bread is longer than a train.
It's sure to make you smile.
We pile our peas up mountain high.
One cookie hides the moon.
We pour our iced tea into boats.
We hope you'll visit soon.

Name: _____

Hyperbole



Write a sentence that uses hyperbole to describe each item below.

example: a quick runner

James runs faster than a speeding bullet.

1. a large pile of snow

2. a heavy math book

3. a deep puddle of water

4. a tall boy

5. a quiet girl

Name: _____

Hyperbole

Tell whether each sentence uses hyperbole.
Write "hyperbole" or "not hyperbole" on each line.

_____ **1.** James is growing so fast, soon he'll be taller than the trees.

_____ **2.** My backpack weighed a ton.

_____ **3.** It is raining extremely hard outside.

_____ **4.** I am so tired I could sleep for a year.

_____ **5.** Megan is the best speller in the class.

Rewrite each sentence. Add hyperbole to your new sentence.

6. It is freezing cold outside.

_____

_____

7. The living room in our house is very small.

_____

_____

8. Cara is a very smart girl.

_____

_____