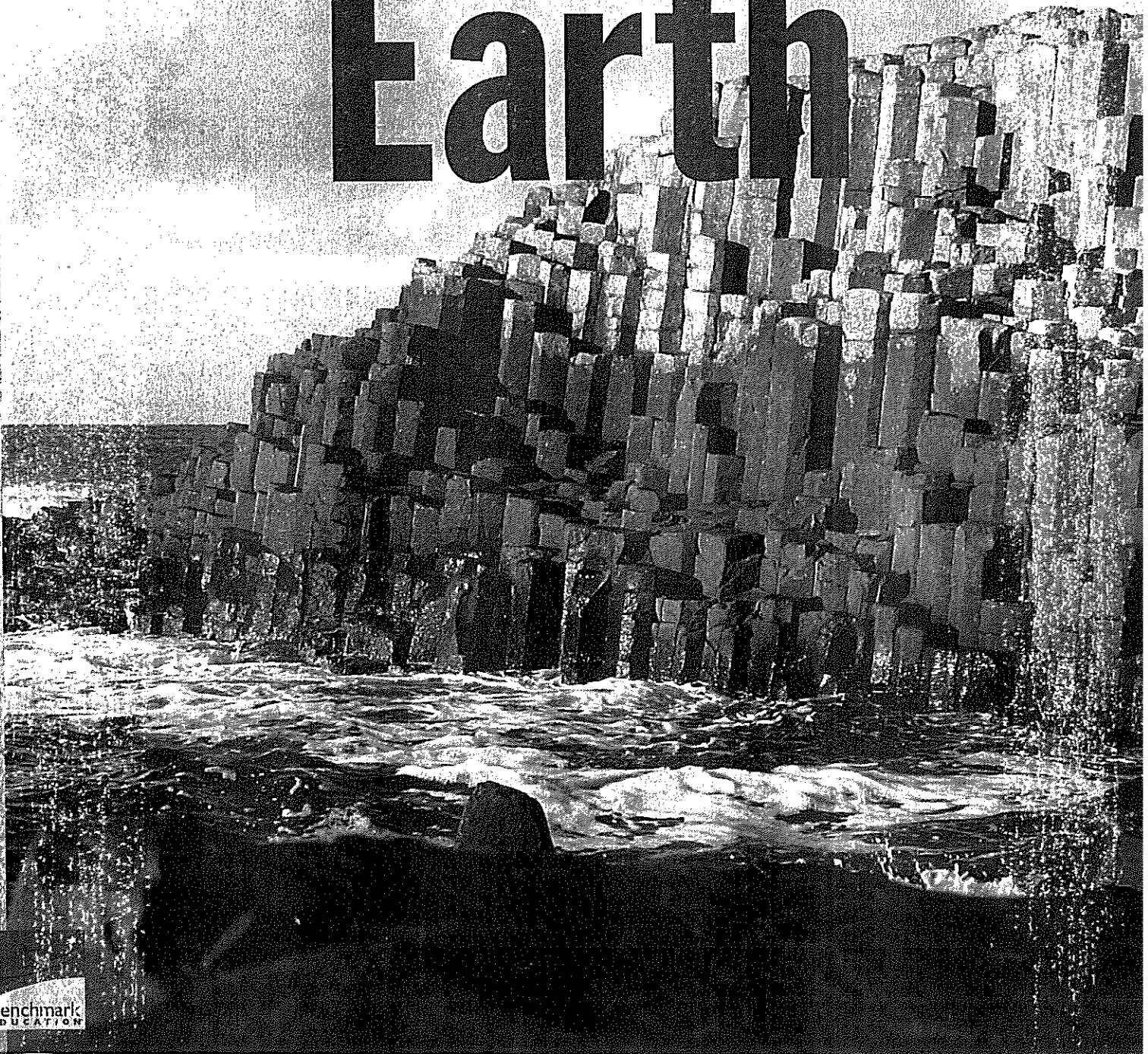


Wind and Water
**Change
Earth**



Wind and Water Change Earth

Essential Question

How do we react to changes in nature?





Remember
to annotate
as you read.

Volcano!

- 1 Under Earth's crust is a layer of large, rocky plates called the mantle. These plates shift and move around.
- 2 Sometimes plates push against each other with so much force that one plate slides on top of the other. This causes the mantle to melt and push up, melting even more rock. The heat and pressure build until a vent or crack opens in the crust. This causes an eruption!
- 3 An erupting volcano spews hot gas, rocks, and ash. Molten rock, or lava, flows down the volcano, changing the landscape forever.



Remember
to annotate
as you read.

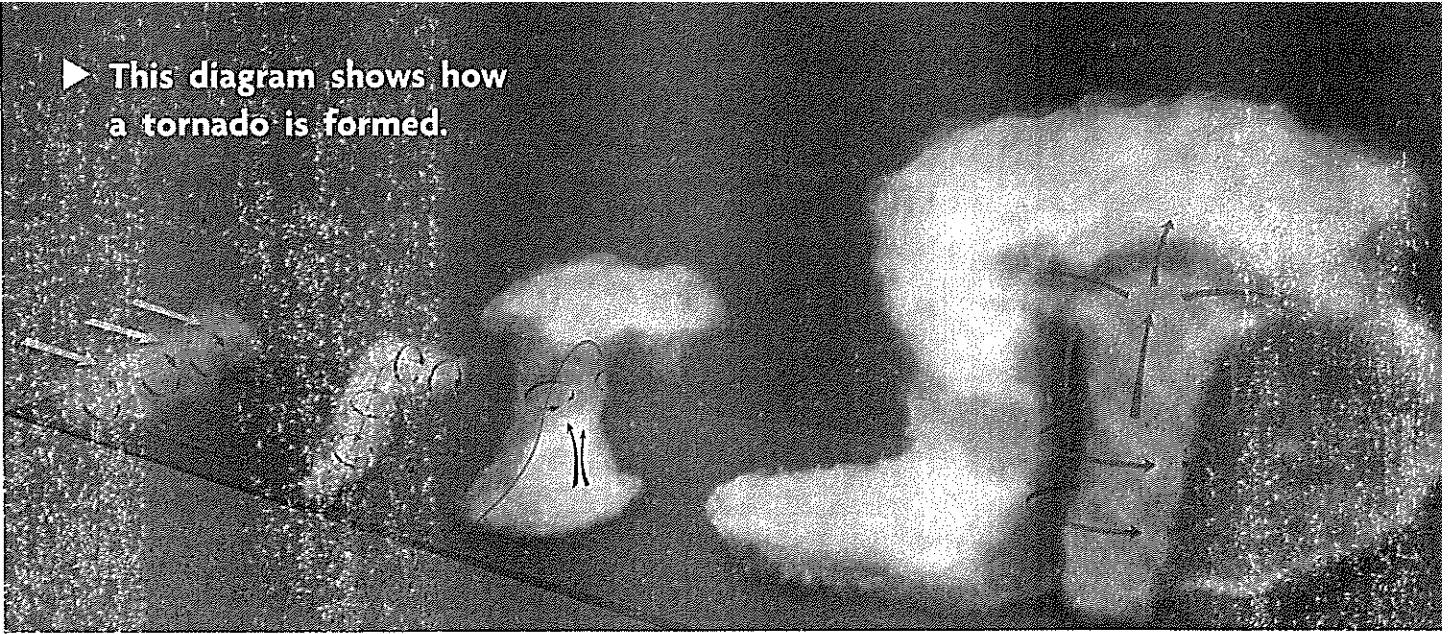
Tornado!

- 1 It's the fastest, most unpredictable wind on the planet. It spins around, forming a funnel shape, and destroys everything in its path. It tears apart buildings, uproots trees, and tosses cars as if they were toys! Although a tornado may not last very long, its damage can take years to repair.

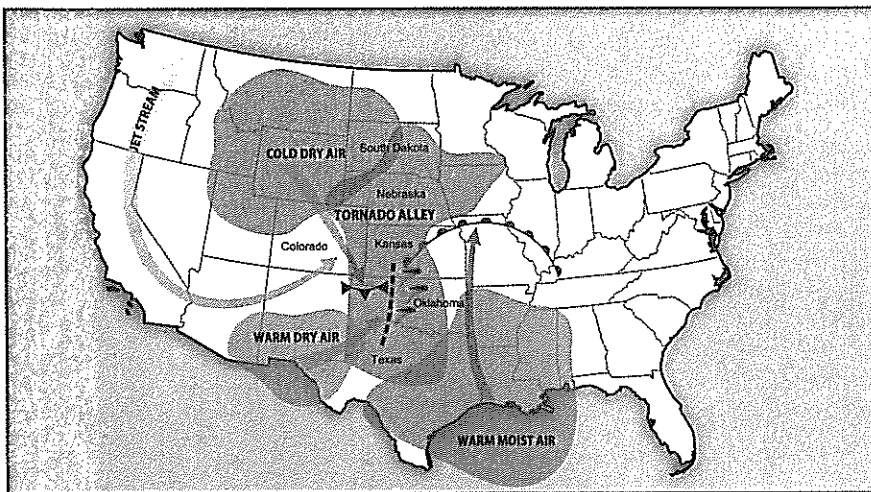


▲ Tornadoes can damage or destroy homes, cars, and land.

► This diagram shows how a tornado is formed.



- 2 Tornadoes usually come from thunderclouds. Warm air on the ground rises to meet cooler air moving down toward Earth. When the air masses meet, a large thundercloud forms.
- 3 As warm and cool air swirls in the thundercloud, it forms a funnel. If the funnel is strong, it drops from the cloud and becomes a tornado!



▲ The area where tornadoes occur most often is known as Tornado Alley.

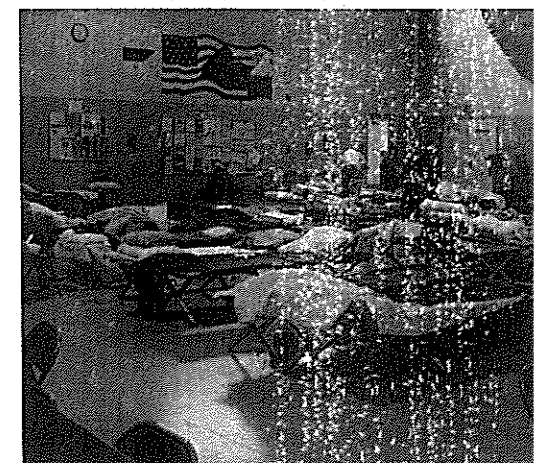
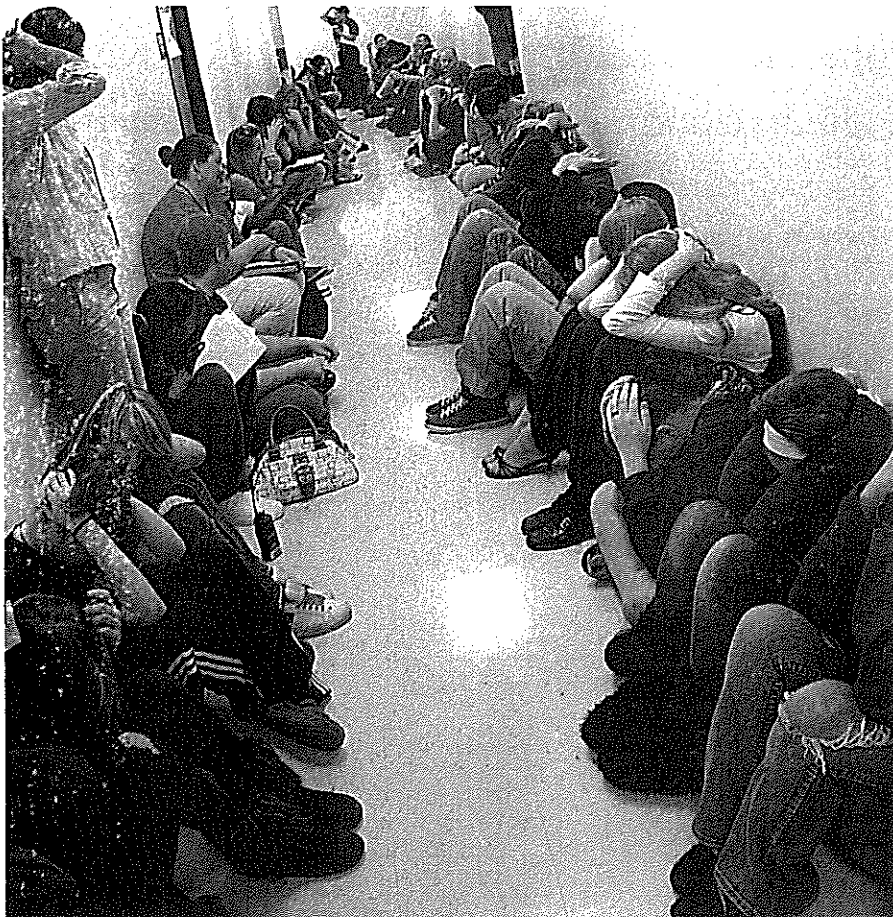
4 Tornadoes can do serious damage to Earth and our environment. Some tornadoes are powerful enough to level forests and foothills. That means many animals end up losing their habitats. Fish are forced to go deeper in lakes and streams. After a tornado, the dirt and debris that remain in the air cause pollution.



5 What if there's a tornado warning?
Read what Adam Reynolds and his
family did.

6 “We were eating dinner and heard
the sirens. The sky became dark, and
it started hailing! We rushed to the
basement with our transistor radio.”

7 If you don't have a basement, go
inside a closet. Listen to the radio for
information and stay safe!



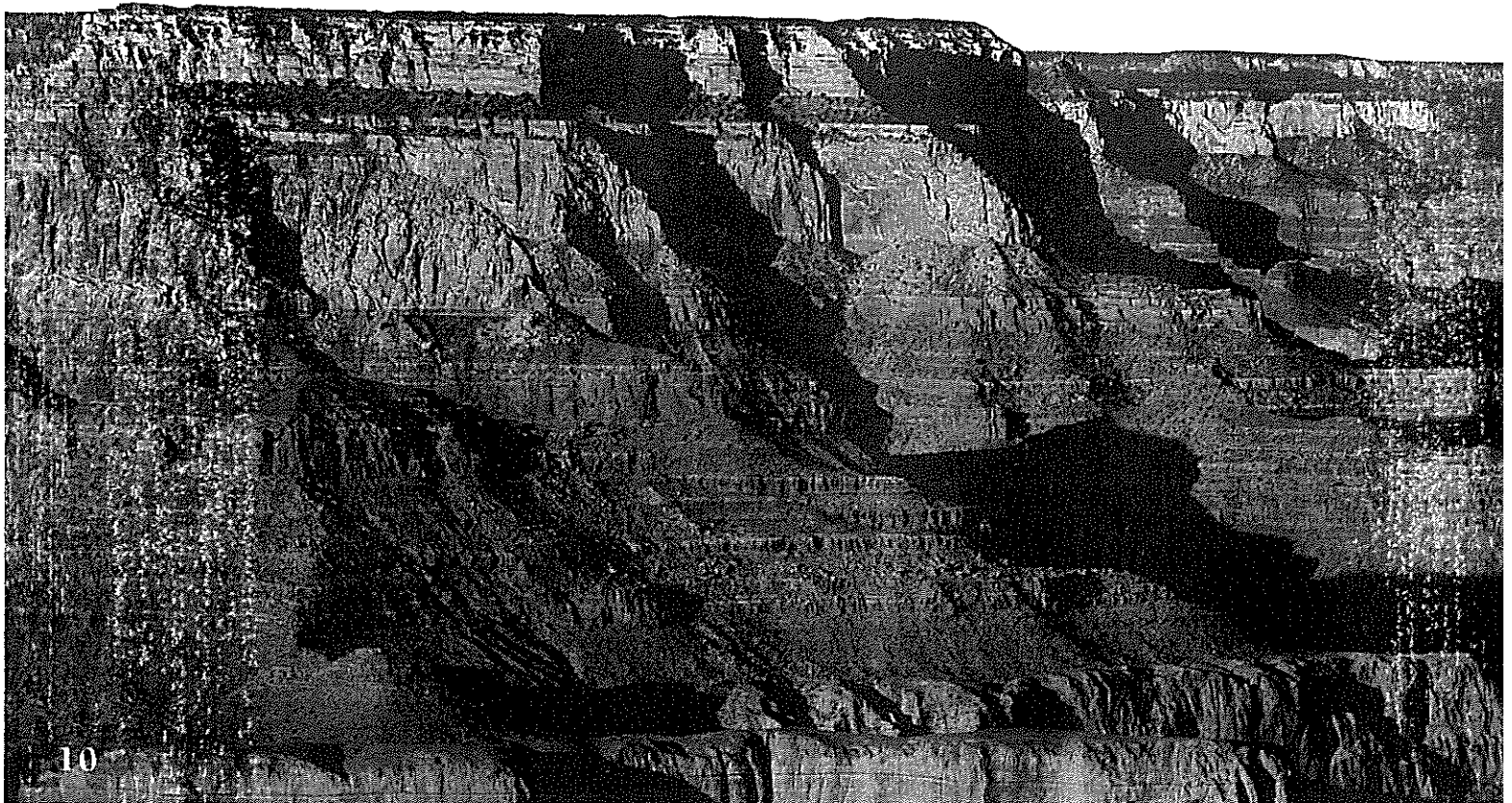
▲ During a tornado warning, people gather in hallways, basements, and shelters.

Remember
to annotate
as you read.

Water's Awesome Wonder

- 1 Did you know that water can be an artist? It can when it flows downhill and carves rock into amazing shapes!
- 2 When water moves over rock, it slowly wears away the rock. We call that *erosion*. In my opinion, erosion can create something beautiful. The Grand Canyon is a great example of this!

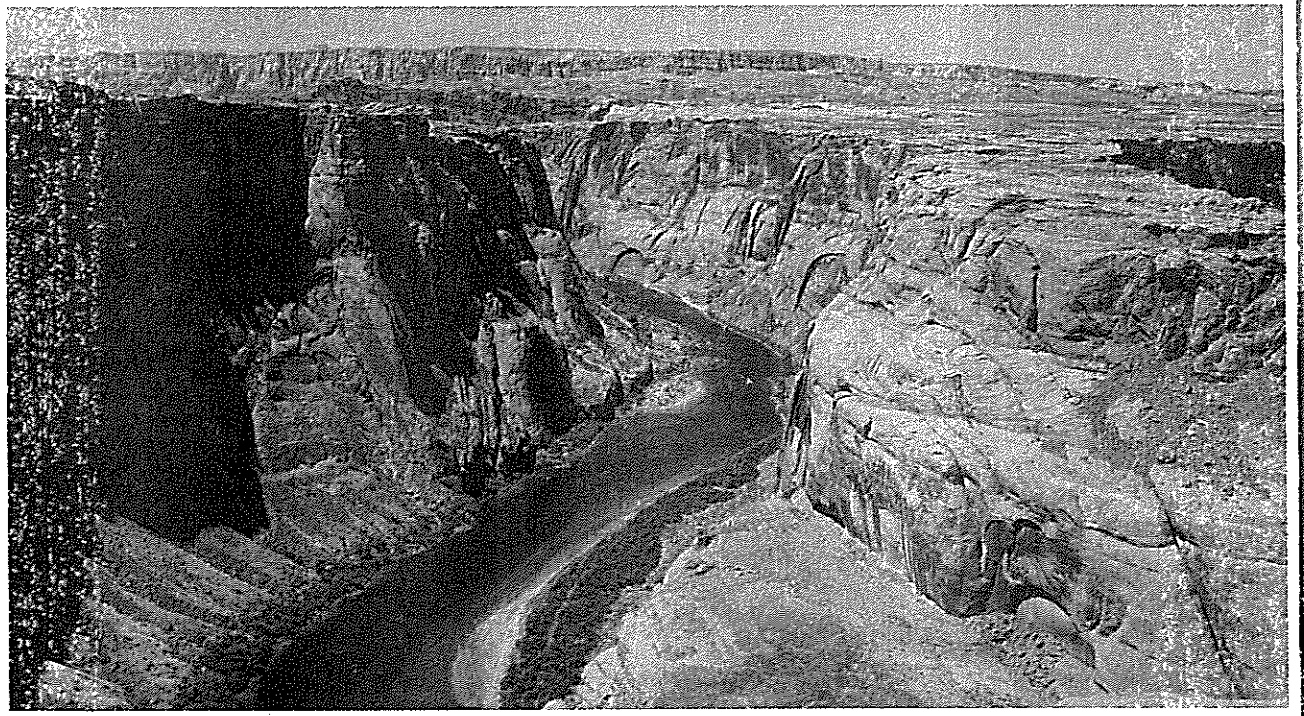
▼ Arizona's Grand Canyon became a national park in 1919.



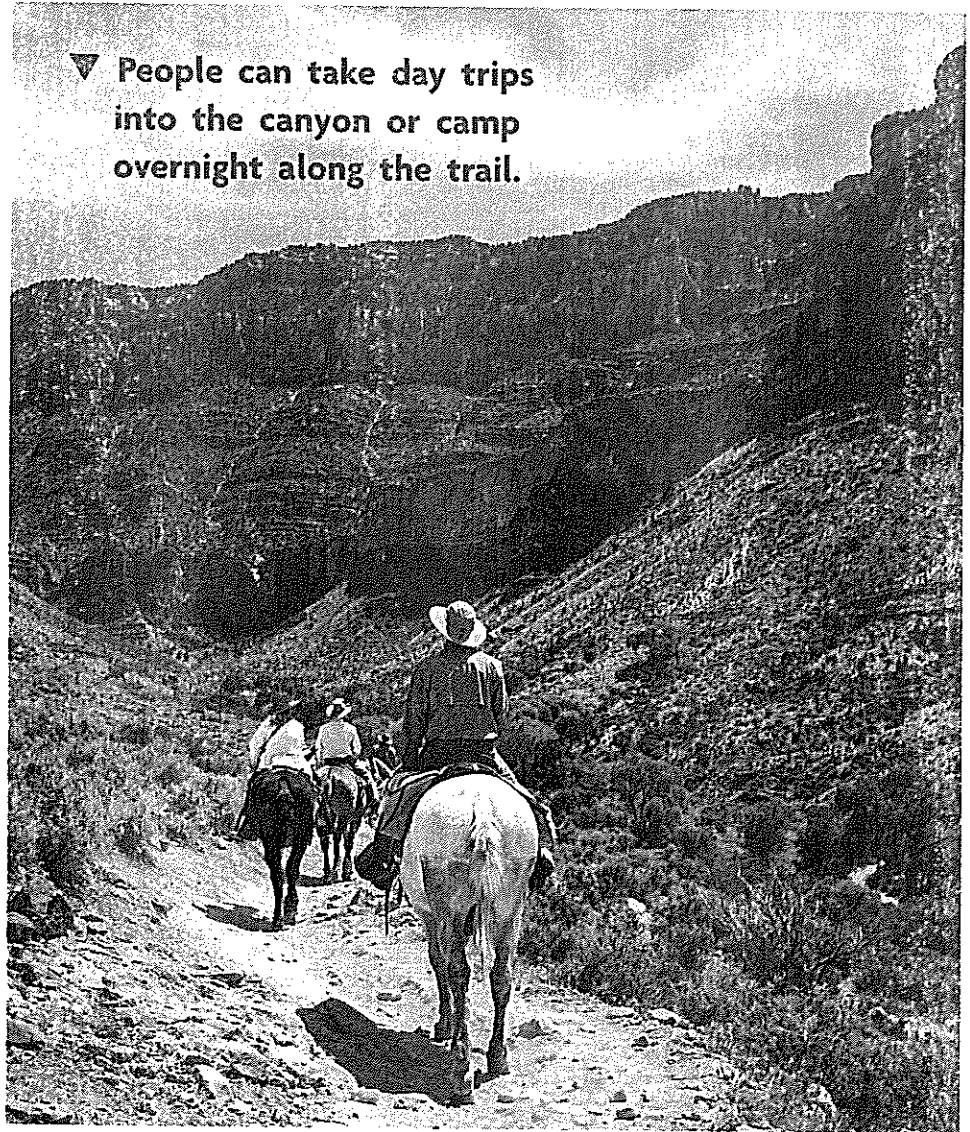
3 The Grand Canyon began to form long ago. The Colorado River flowed across the desert floor, carving through the rock in its path. Wind, sand, and mudslides cut away even more rock. Slowly the gash became deeper and deeper.

4 Today this beautiful canyon is more than a mile deep in some places. It can even be seen from space.

▼ **The Colorado River has been carving the Grand Canyon for over five million years.**



▽ People can take day trips into the canyon or camp overnight along the trail.



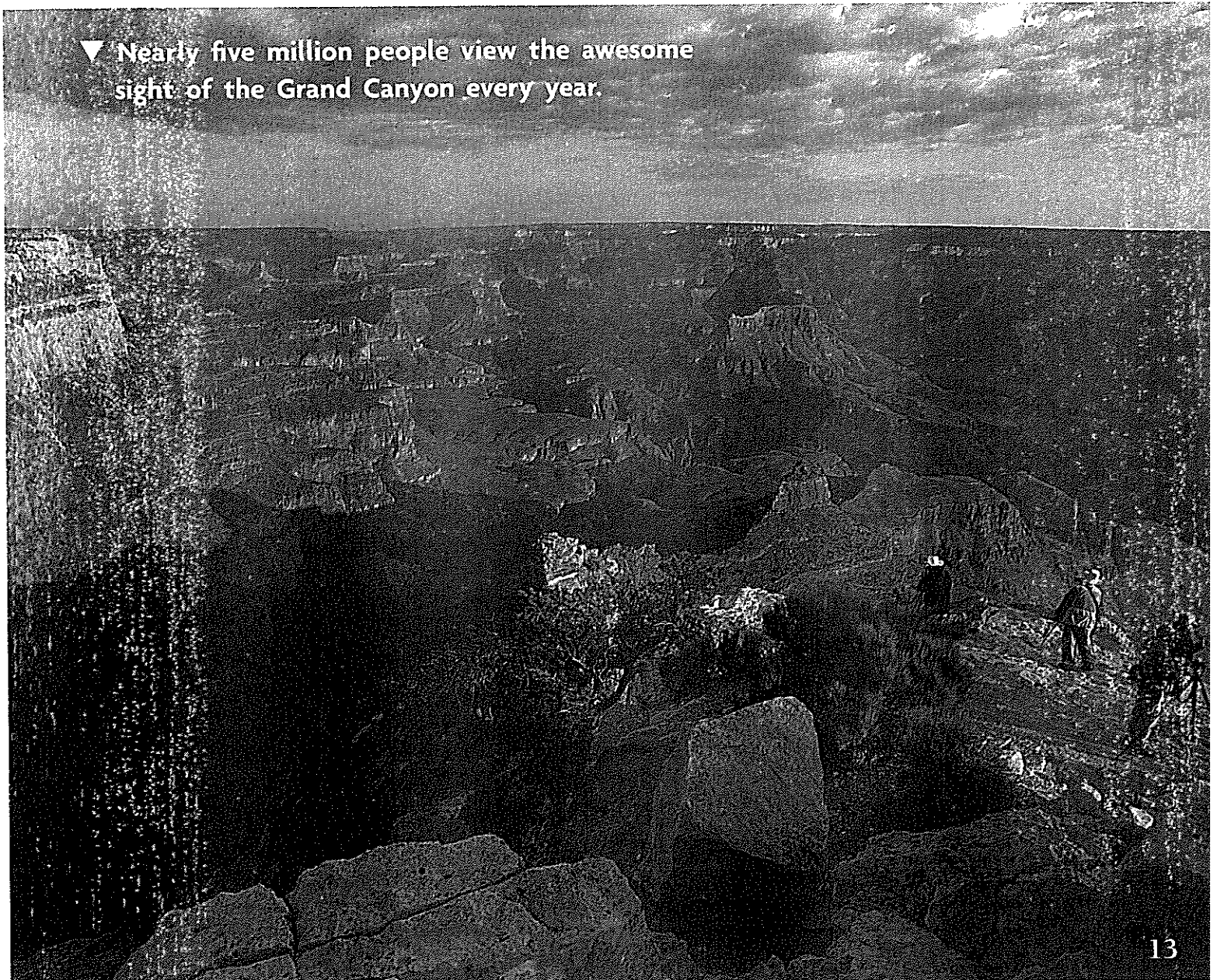
5 People visit the Grand Canyon for many reasons. It is one of the most beautiful places on Earth, with its unusually shaped rocks and colorful canyon walls.

6 Mule rides, hiking, and rafting down the Colorado River are three exciting ways for visitors to see the fantastic shapes and colors of the canyon.

7 So you see why I think erosion and weathering created something beautiful in Arizona's desert.

8 The Grand Canyon is so much more than just a deep hole in the ground. It is a sculpture that has been carved over five million years by the mighty forces of nature. And it is still being shaped today!

▼ Nearly five million people view the awesome sight of the Grand Canyon every year.



BuildReflectWrite

Build Knowledge

Identify the causes and effects of wind and water erosion on Earth and our environment.

Cause	Effect

Reflect

How do we react to changes in nature?

Based on this week's texts, write new ideas and questions you have about the essential question.

Research and Write

Choose a famous natural landmark caused by weathering and erosion. Write a short informative/explanatory report in which you describe this landmark and explain how it was formed.

Choose Your Topic

This week, conduct a pre-search to identify the rock formation your class would like to research. Construct guiding questions that will help you focus your research on the information you will need to write your class report.



Synonyms



Antonyms

SYNONYMS

ANTONYMS

Name: _____

Color the antonyms purple and color the synonyms yellow.

Created by Kadeen © Mrs
KadeenTeaches 2017

clean
tidy

tiny
large

quick
fast

big
large

pretty
ugly

day
night

stop
go

true
false

slow
fast

little
small

mad
angry

up
down

close
shut

young
old

pretty
beautiful

tall
short

wet
dry

easy
hard

sharp
dull

pull
tug

nice
kind

yes
no

back
front

happy
glad

bring
carry

nice
mean

rich
poor

shout
yell

sick
ill

home
house

Below
under

hot
cold

sweet
sour

friend
pal

front
back

first
last

start
begin

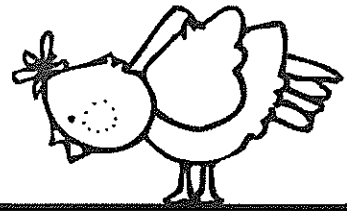
night
day

girl
boy

cry
weep

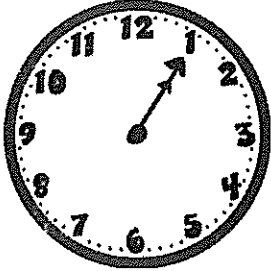
Telling Time

Name: _____

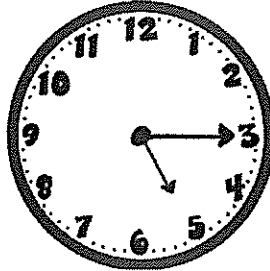


Directions: Write the time shown on these clocks. 1.MD.C.7

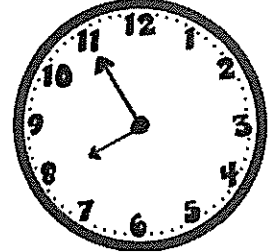
1.



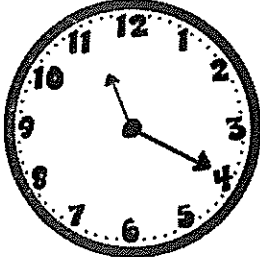
2.



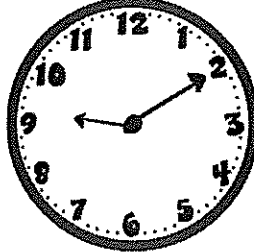
3.



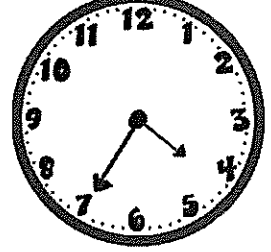
4.



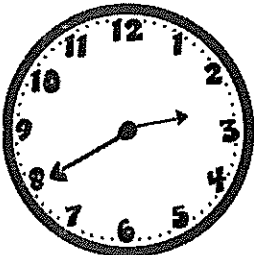
5.



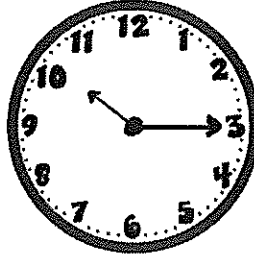
6.



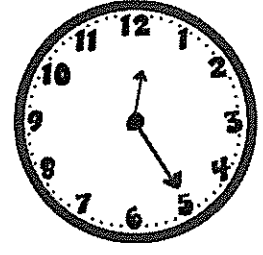
7.



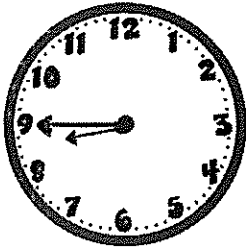
8.



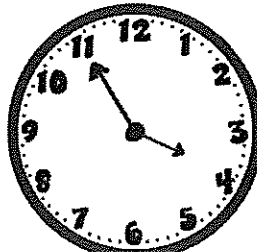
9.



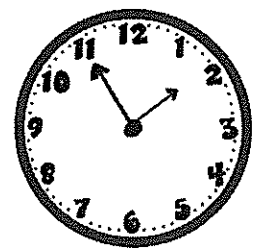
10.



11.



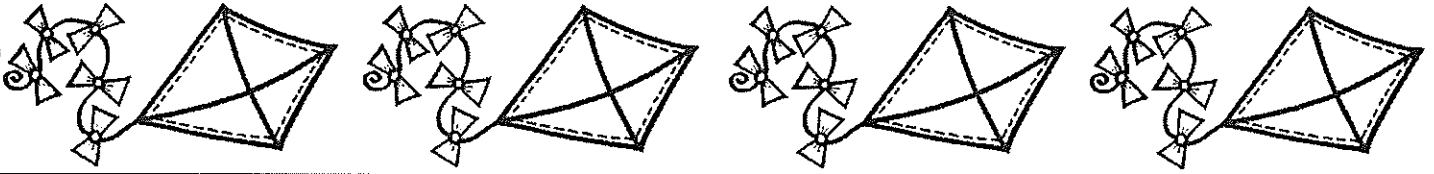
12.



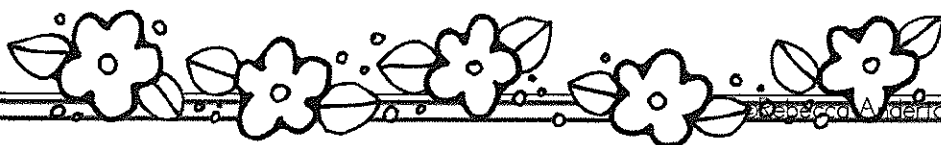
Name: _____

Measurement Story Problems

Directions: Read each story problem to solve. 2.MD.B.5



1. Jon's mom measured some fabric for a quilt. Then she measured 10 more feet of fabric. Now she had 45 feet of fabric. How many feet of fabric did she measure before?
2. Kate measured some string to fly her kite. She thought it was too long so she cut off 28 inches. Now her string is 134 inches. How many inches was Kate's string before she cut it?
3. Jack ran 7 fewer yards than Zack. Zack ran 64 yards. How many yards did Jack run?
4. Samantha kicked the soccer ball 12 more feet than Grace. Grace kicked the soccer ball 53 feet. How many feet did Samantha kick the soccer ball?



Name: _____

EXPLAIN YOUR REASONING

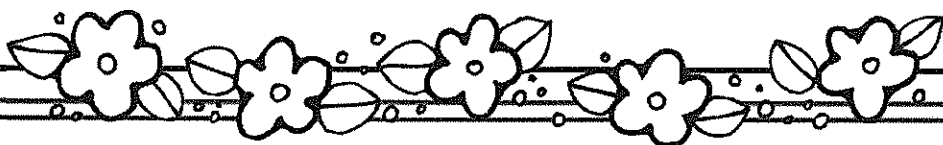


Directions: Add or subtract and explain your reasoning with drawings, pictures or words. 2.NBT.B.7, 2.NBT.B.8, 2.NBT.B.9

Kaitlin had 480 stickers. She gave some of her stickers to Sam. Now Kaitlin has 250 stickers. How many stickers did Kaitlin give to Sam?

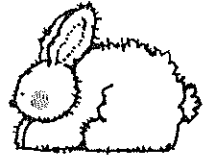
James earned \$160 from selling his baseball cards. His younger sister earned \$35 from her lemonade stand. How much did James and his younger sister earn together?

Of the 323 students playing on the playground, 100 were playing on the black top. All the rest of the students were playing on the playground. How many students were playing on the playground?

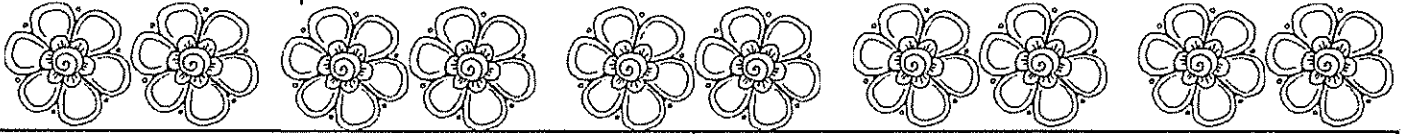


Name: _____

MONEY Problem SOLVING



Directions: Solve the problems. 2.MD.C.8



1. If Gina has 3 dimes and 4 pennies, how much money does she have?

2. If Pam has 2 quarters and 2 nickels, how much money does Pam have?

3. Len has 2 dimes and 3 nickels. How much money does Len have?

4. Emma has 3 quarters and 4 pennies. How much money does Emma have?

5. Dan has 7 dimes, 3 nickels and 8 pennies. How much money does Dan have?

6. Matt has 2 quarters and 6 dimes. How much money does he have?

7. Sarah has 2 quarters, 5 nickels and 12 pennies. How much money does she have?

8. Jon has 1 quarter, 2 dimes, 1 nickel and 4 pennies. How much money does Jon have?



Name: _____

Adding 4 {2-digit} numbers

Directions: Add the numbers using your place value strategies.
2.NBT.B.6

$$\begin{array}{r} 10 \\ 42 \\ 26 \\ + 55 \\ \hline \end{array}$$

$$\begin{array}{r} 22 \\ 18 \\ 34 \\ + 49 \\ \hline \end{array}$$

$$\begin{array}{r} 37 \\ 25 \\ 25 \\ + 15 \\ \hline \end{array}$$

$$\begin{array}{r} 77 \\ 45 \\ 16 \\ + 15 \\ \hline \end{array}$$

$$\begin{array}{r} 14 \\ 49 \\ 26 \\ + 29 \\ \hline \end{array}$$

$$\begin{array}{r} 87 \\ 24 \\ 10 \\ + 19 \\ \hline \end{array}$$

$$\begin{array}{r} 30 \\ 26 \\ 22 \\ + 45 \\ \hline \end{array}$$

$$\begin{array}{r} 47 \\ 46 \\ 42 \\ + 24 \\ \hline \end{array}$$

$$\begin{array}{r} 38 \\ 22 \\ 58 \\ + 77 \\ \hline \end{array}$$

$$\begin{array}{r} 93 \\ 14 \\ 13 \\ + 33 \\ \hline \end{array}$$

$$\begin{array}{r} 22 \\ 34 \\ 86 \\ + 14 \\ \hline \end{array}$$

$$\begin{array}{r} 35 \\ 16 \\ 33 \\ + 59 \\ \hline \end{array}$$

$$\begin{array}{r} 53 \\ 46 \\ 29 \\ + 73 \\ \hline \end{array}$$

$$\begin{array}{r} 41 \\ 20 \\ 83 \\ + 64 \\ \hline \end{array}$$

$$\begin{array}{r} 39 \\ 55 \\ 25 \\ + 68 \\ \hline \end{array}$$

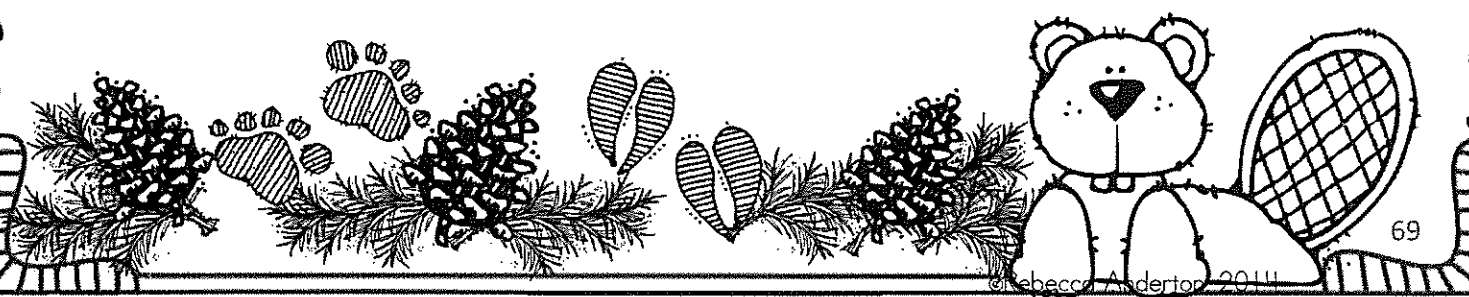
$$\begin{array}{r} 54 \\ 29 \\ 35 \\ + 14 \\ \hline \end{array}$$

$$\begin{array}{r} 29 \\ 39 \\ 37 \\ + 20 \\ \hline \end{array}$$

$$\begin{array}{r} 62 \\ 47 \\ 22 \\ + 27 \\ \hline \end{array}$$

$$\begin{array}{r} 59 \\ 32 \\ 13 \\ + 92 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ 28 \\ 45 \\ + 39 \\ \hline \end{array}$$

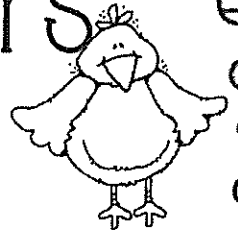


Name: _____

Subtracting 3-digit numbers

{without regrouping}

Directions: Add the numbers using your place value strategies. 2.NBT.B.7, 3.NBT.A.3



$$\begin{array}{r} 589 \\ - 368 \\ \hline \end{array}$$

$$\begin{array}{r} 931 \\ - 420 \\ \hline \end{array}$$

$$\begin{array}{r} 423 \\ - 102 \\ \hline \end{array}$$

$$\begin{array}{r} 542 \\ - 321 \\ \hline \end{array}$$

$$\begin{array}{r} 387 \\ - 274 \\ \hline \end{array}$$

$$\begin{array}{r} 789 \\ - 102 \\ \hline \end{array}$$

$$\begin{array}{r} 232 \\ - 220 \\ \hline \end{array}$$

$$\begin{array}{r} 199 \\ - 146 \\ \hline \end{array}$$

$$\begin{array}{r} 896 \\ - 532 \\ \hline \end{array}$$

$$\begin{array}{r} 759 \\ - 430 \\ \hline \end{array}$$

$$\begin{array}{r} 974 \\ - 343 \\ \hline \end{array}$$

$$\begin{array}{r} 824 \\ - 602 \\ \hline \end{array}$$

$$\begin{array}{r} 799 \\ - 342 \\ \hline \end{array}$$

$$\begin{array}{r} 498 \\ - 270 \\ \hline \end{array}$$

$$\begin{array}{r} 299 \\ - 250 \\ \hline \end{array}$$

$$\begin{array}{r} 426 \\ - 113 \\ \hline \end{array}$$

$$\begin{array}{r} 757 \\ - 222 \\ \hline \end{array}$$

$$\begin{array}{r} 616 \\ - 412 \\ \hline \end{array}$$

$$\begin{array}{r} 864 \\ - 104 \\ \hline \end{array}$$

$$\begin{array}{r} 558 \\ - 310 \\ \hline \end{array}$$

$$\begin{array}{r} 765 \\ - 234 \\ \hline \end{array}$$

$$\begin{array}{r} 744 \\ - 602 \\ \hline \end{array}$$

$$\begin{array}{r} 698 \\ - 245 \\ \hline \end{array}$$

$$\begin{array}{r} 567 \\ - 224 \\ \hline \end{array}$$

$$\begin{array}{r} 492 \\ - 250 \\ \hline \end{array}$$

$$\begin{array}{r} 668 \\ - 115 \\ \hline \end{array}$$

$$\begin{array}{r} 792 \\ - 402 \\ \hline \end{array}$$

$$\begin{array}{r} 519 \\ - 310 \\ \hline \end{array}$$

$$\begin{array}{r} 786 \\ - 504 \\ \hline \end{array}$$

$$\begin{array}{r} 696 \\ - 244 \\ \hline \end{array}$$



Mixed **DOUBLE DIGIT**

Name: _____

Addition & Subtraction {With Regrouping}

Directions: Add or subtract. 2.NBT.B.5

$$\begin{array}{r} 28 \\ + 29 \\ \hline \end{array}$$

$$\begin{array}{r} 52 \\ - 15 \\ \hline \end{array}$$

$$\begin{array}{r} 47 \\ + 46 \\ \hline \end{array}$$

$$\begin{array}{r} 92 \\ - 35 \\ \hline \end{array}$$

$$\begin{array}{r} 49 \\ + 26 \\ \hline \end{array}$$

$$\begin{array}{r} 60 \\ - 39 \\ \hline \end{array}$$

$$\begin{array}{r} 34 \\ + 59 \\ \hline \end{array}$$

$$\begin{array}{r} 90 \\ - 42 \\ \hline \end{array}$$

$$\begin{array}{r} 56 \\ + 49 \\ \hline \end{array}$$

$$\begin{array}{r} 72 \\ - 54 \\ \hline \end{array}$$

$$\begin{array}{r} 67 \\ + 23 \\ \hline \end{array}$$

$$\begin{array}{r} 53 \\ - 28 \\ \hline \end{array}$$

$$\begin{array}{r} 36 \\ + 45 \\ \hline \end{array}$$

$$\begin{array}{r} 40 \\ - 16 \\ \hline \end{array}$$

$$\begin{array}{r} 44 \\ + 39 \\ \hline \end{array}$$



$$\begin{array}{r} 40 \\ - 28 \\ \hline \end{array}$$

$$\begin{array}{r} 60 \\ - 34 \\ \hline \end{array}$$

$$\begin{array}{r} 28 \\ + 39 \\ \hline \end{array}$$

$$\begin{array}{r} 36 \\ + 29 \\ \hline \end{array}$$

$$\begin{array}{r} 52 \\ - 47 \\ \hline \end{array}$$

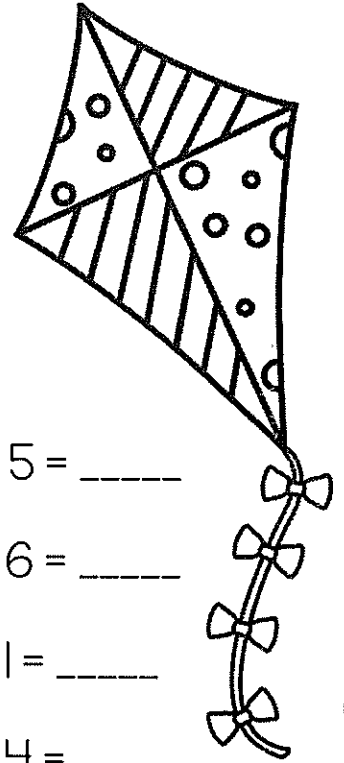
$$\begin{array}{r} 26 \\ + 27 \\ \hline \end{array}$$



FLUENCY Facts

Name: _____

Directions: Add. 2.OA.B.2



$5 + 3 = \underline{\quad}$

$2 + 7 = \underline{\quad}$

$4 + 8 = \underline{\quad}$

$4 + 6 = \underline{\quad}$

$2 + 3 = \underline{\quad}$

$7 + 3 = \underline{\quad}$

$8 + 5 = \underline{\quad}$

$2 + 9 = \underline{\quad}$

$0 + 5 = \underline{\quad}$

$9 + 5 = \underline{\quad}$

$8 + 4 = \underline{\quad}$

$3 + 6 = \underline{\quad}$

$2 + 8 = \underline{\quad}$

$5 + 9 = \underline{\quad}$

$2 + 1 = \underline{\quad}$

$1 + 2 = \underline{\quad}$

$8 + 6 = \underline{\quad}$

$8 + 4 = \underline{\quad}$

$7 + 6 = \underline{\quad}$

$5 + 7 = \underline{\quad}$

$5 + 3 = \underline{\quad}$

$5 + 4 = \underline{\quad}$

$9 + 7 = \underline{\quad}$

$6 + 7 = \underline{\quad}$

$4 + 5 = \underline{\quad}$

$9 + 5 = \underline{\quad}$

$9 + 8 = \underline{\quad}$

$3 + 9 = \underline{\quad}$

$4 + 1 = \underline{\quad}$

$0 + 7 = \underline{\quad}$

$$\begin{array}{r} 6 \\ + 2 \\ \hline \end{array}$$

$$\begin{array}{r} 0 \\ + 9 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ + 1 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ + 3 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ + 4 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ + 7 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ + 2 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ + 8 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ + 9 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ + 4 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ + 5 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ + 1 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ + 9 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ + 3 \\ \hline \end{array}$$

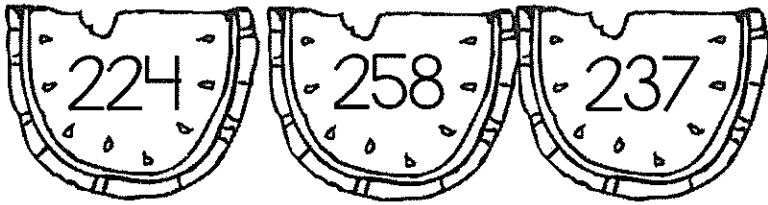
$$\begin{array}{r} 6 \\ + 4 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ + 6 \\ \hline \end{array}$$

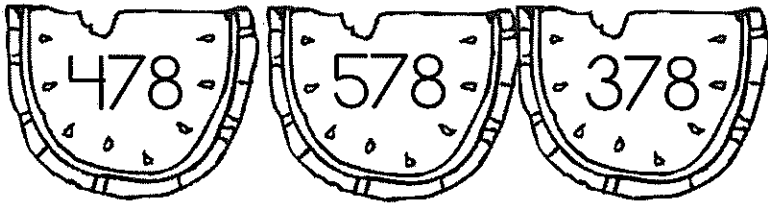
Number Order

Name: _____

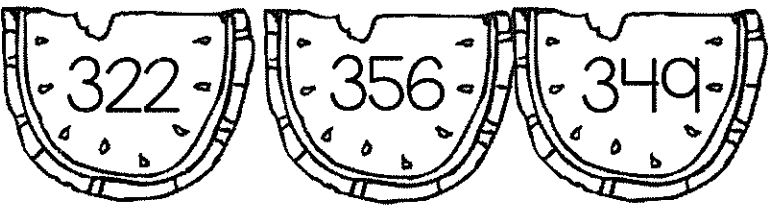
Directions: Put the numbers in order from least to greatest. 2.NBTA.4



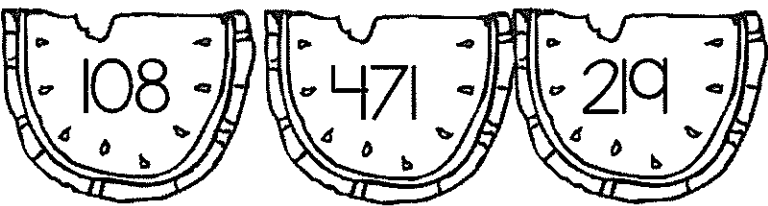
224	237	258
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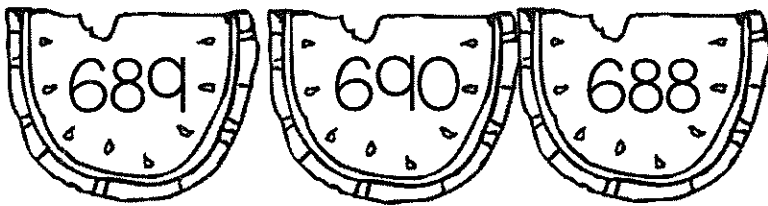
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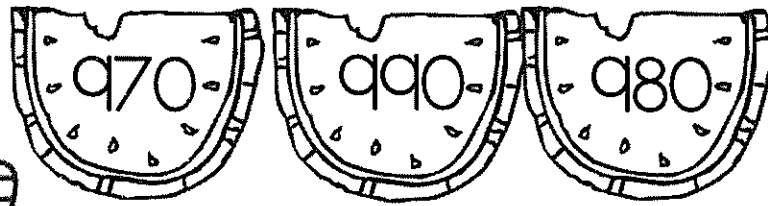
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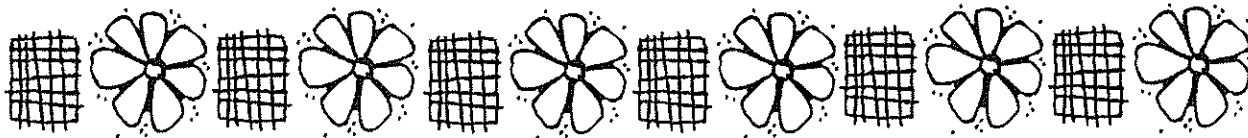


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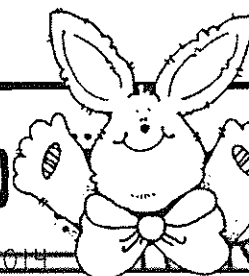
Expanded Form

Name: _____

Directions: Read the number written in standard form. Write the matching number in expanded form. Write whether the number is odd or even. 2.NBTA.3 & 2.OAC.3



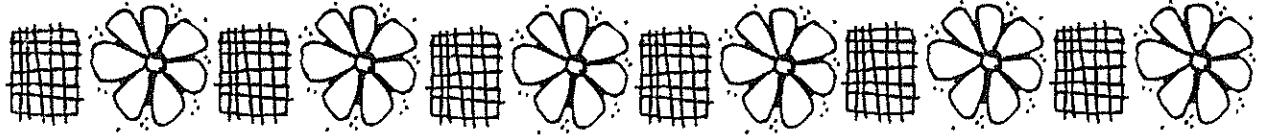
254	$200 + 50 + 4$	even
399		
518		
910		
370		
589		
847		
388		
570		
843		



Name: _____

Expanded Form

Directions: Read the number written in standard form. Write the matching number in expanded form. Write whether the number is odd or even. 2.NBTA.3 & 2.OAC.3



273	$200 + 70 + 3$	odd
316		
952		
810		
654		
291		
165		
289		
794		
257		

