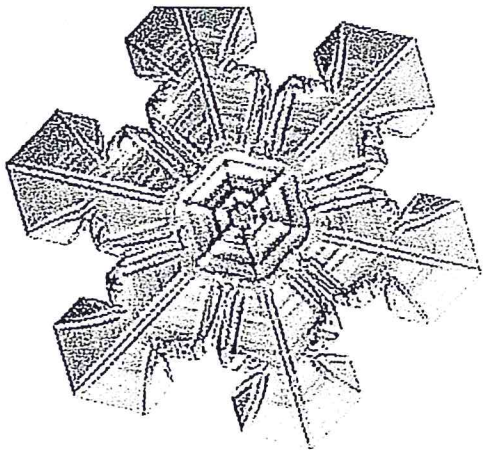
Let It Snow!

WR News talks to an award-winning snowflake expert.

Most people stay indoors during a snowstorm, but Kenneth Libbrecht is not most people. When flurries start drifting down from the sky, the scientist heads out into the cold. He takes his camera with him.

Outside, Libbrecht waits for snowflakes that are just right. Finally, he spots the glittery ice crystals he's been waiting for. As the snowflakes fall, Libbrecht catches them. Then he points his camera and shoots.



Kenneth Libbrecht

Libbrecht caught these cool crystals on camera.

The scientist's shiny snapshots recently earned him an award. The award is given to top science photographers around the world.

Libbrecht takes pictures of snowflakes to learn more about their shapes. The crystals form when **water vapor,** or steam, in a cloud freezes. Every snowflake grows into a **hexagon.** That is a six-sided shape. However, no two snowflakes look the same. Experts are not sure why.

To solve the mystery, Libbrecht has traveled to snowy places around the world. He has taken pictures of snowflakes in Canada, Alaska, and Vermont. He takes his research back to his science lab. That is in California.

Libbrecht has collected nearly 10,000 snowflake **images,** or pictures. He spends most of the winter studying them. The scientist's outdoor adventures are far from over, though. Libbrecht continues to journey to other snowy places to take more photos.

"I really enjoy ... watching the snow fall and trying to see what I can find," he told *WR News.* "It's a bit of a treasure hunt."

Meet the Snow Man

Read to learn about scientist Kenneth Libbrecht's snowy side.

Kenneth Libbrecht

***WR News*: How do you take pictures of snowflakes?**
Kenneth Libbrecht: When I find a good one, I'll [catch it] using a little paintbrush. I then stick it under my microscope and take a picture.

***WR News*: What advice do you have for kids who want to study snowflakes?**
KL: You don't need a lot of fancy equipment. With a simple magnifying glass on a snowy day, you can really see quite a bit if you just stop and look.

Name: _____ Date: _____

1. What does Libbrecht use a paintbrush for when he is photographing snowflakes?

A. He uses a paintbrush to paint snowflakes.

B. He uses a paintbrush to make snow shapes.

C. He uses a paintbrush to catch snowflakes.

D. He uses a paintbrush to draw on his camera.

2. What does the text describe?

A. how images are captured by cameras

B. how a snowflake forms

C. Libbrecht's education

D. different examples of science photography

3. *Weekly Reader News* asked Kenneth Libbrecht what advice he has for kids who want to study snowflakes. This was his reply:

"You don't need a lot of fancy equipment. With a simple magnifying glass on a snowy day, you can really see quite a bit if you just stop and look."

Based on his reply, what might Libbrecht think about studying snowflakes?

A. He thinks it is a mysterious experience.

B. He thinks it is a boring experience.

C. He thinks it is relatively easy.

D. He thinks it is relatively hard.

4. Read the following quote from Kenneth Libbrecht: "I really enjoy watching the snow fall and trying to see what I can find. It's a bit of a treasure hunt."

Why does Kenneth Libbrecht use the phrase "treasure hunt"?

A. to suggest he is looking for something hidden

B. to suggest he is searching for something valuable

C. to suggest he wants to find snowflakes made of gold

D. to suggest he just really enjoys what he does

5. The primary purpose of this passage is to describe

A. the best pictures ever taken of snowflakes

B. the places around the world with the most snow

C. the reasons that no two snowflakes look alike

D. the work of a scientist who studies snowflakes

6. What has Libbrecht done to learn why no two snowflakes look the same?

7. What word might the author use to describe Kenneth Libbrecht? Be sure to explain your answer with evidence from the text.

8. The question below is an incomplete sentence. Choose the word that best completes the sentence.

Kenneth Libbrecht plans to visit lots of snowy places _____ he wants to take more pictures of snowflakes.

A. but

B. although

C. if

D. because

9. Use the word "expert" in a sentence.

Day 12

Lesson: Commas and Introductory Elements

Lesson Topic: Use commas after introductory phrases Part 1

Question 1:

Choose the sentence that correctly uses a comma after the introductory phrase.

When the play ended the entire audience burst into applause.

- When the play ended, the entire audience burst into applause.
- When the play ended the entire audience burst into applause.
- When, the play ended the entire audience burst into applause.
- When the play, ended the entire audience burst into applause.
- none of the above

Question 2:

Choose the sentence that correctly uses a comma after the introductory phrase.

We have no idea what our neighbor is building in his garage.

- We, have no idea what our neighbor is building in his garage.
- We have no idea, what our neighbor is building in his garage.
- We have no idea what our neighbor, is building in his garage.
- We have no idea what, our neighbor is building in his garage.
- none of the above

Question 3:

Choose the sentence that correctly uses a comma after the introductory phrase.

While visiting Istanbul I took pictures of the bazaar and the Hagia Sophia.

- While visiting Istanbul I took pictures, of the bazaar and the Hagia Sophia.
- While, visiting Istanbul I took pictures of the bazaar and the Hagia Sophia.
- While visiting, Istanbul I took pictures of the bazaar and the Hagia Sophia.
- While visiting Istanbul, I took pictures of the bazaar and the Hagia Sophia.

- none of the above

Question 4:

Choose the sentences that correctly uses a comma after the introductory phrase.

Though I'm sure you're right I want to double check the numbers just in case.

- Though I'm sure you're right I want to double check, the numbers just in case.
- Though I'm sure you're right, I want to double check the numbers just in case.
- Though I'm sure, you're right I want to double check the numbers just in case.
- Though, I'm sure you're right I want to double check the numbers just in case.
- none of the above

Question 5:

Choose the sentence that correctly uses a comma after the introductory phrase.

Before I started my research I didn't know anything about Ireland.

- Before I started my research I didn't know anything about Ireland.
- Before, I started my research I didn't know anything about Ireland.
- Before I started my research, I didn't know anything about Ireland.
- Before I started, my research I didn't know anything about Ireland.
- none of the above

Question 6:

Choose the sentence that correctly uses a comma after the introductory phrase.

On a long branch of a pine tree the woodpecker sat for hours.

- On a long branch of a pine tree, the woodpecker sat for hours.
- On a long branch, of a pine tree the woodpecker sat for hours.
- On a long branch of a pine tree the woodpecker, sat for hours.
- On a long branch of a pine tree the woodpecker sat for hours.

- none of the above

Question 7:

Choose the sentences that correctly uses a comma after the introductory phrase.

Down at the rushing river I saw a deer taking a drink of water.

- Down, at the rushing river I saw a deer taking a drink of water.
- Down at the rushing, river I saw a deer taking a drink of water.
- Down at the rushing river I saw a deer, taking a drink of water.
- Down at the rushing river, I saw a deer taking a drink of water.
- none of the above

Question 8:

Choose the sentence that correctly uses a comma after the introductory phrase.

After a long day of swimming we ate an enormous dinner.

- After a long day, of swimming we ate an enormous dinner.
- After a long day of swimming we ate an enormous dinner.
- After a long day of swimming, we ate an enormous dinner.
- After, a long day of swimming we ate an enormous dinner.
- none of the above

Question 9:

Choose the sentence that correctly uses a comma after the introductory phrase.

When I give the signal I want everyone to run from one end of the gym to the other as fast as you can.

- When I give the signal, I want everyone to run from one end of the gym to the other as fast as you can.
- When I give the signal I want everyone to run, from one end of the gym to the other as fast as you can.

- When I give the signal I want everyone to run from one end of the gym to the other as fast as you can.
- When, I give the signal I want everyone to run from one end of the gym to the other as fast as you can.
- none of the above

Question 10:

Choose the sentence that correctly uses a comma after the introductory phrase.

As it happens I have the treasure map right here in my pocket.

- As it happens I have the treasure map, right here in my pocket.
- As, it happens I have the treasure map right here in my pocket.
- As it happens I have, the treasure map right here in my pocket.
- As it happens, I have the treasure map right here in my pocket.
- none of the above

AME: _____ Day 12 WEEK 22

DAILY MATH PRACTICE

MONDAY

1. Write the decimals in order from least to greatest.

4.2 4.4 5.1 4.6

2. Write the number below as a numeral.

Two million, four hundred thousand, three hundred one

5. Mr. Hernandez had h of a pizza left over after his family ate dinner. The next day his son, Micah, ate ¼ of the leftovers. How much pizza did Micah eat?

3. Marco made 124 free throws this season. Ryan made 132. If each free throw is worth 2 points, how many points did the boys score together?

4. Use a ruler to measure and find the perimeter to the nearest inch.

TUESDAY

1. Write the decimals in order from greatest to least.

3.7 2.8 2.1 2.5

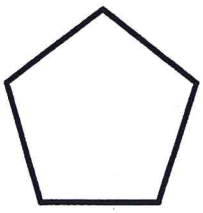
2. Write the number below as a numeral.

1,000,000 + 500,000 + 60,000 + 1,000 + 30

5. Jaden spent $20 at Wal-Mart. Four-fifths of that was spent on a cake for his mother's birthday. How much did the cake cost?

3. At the pie eating contest, Leslie took 165 bites of pie. Rebecca ate 99 bites. If each pie took 33 bites to eat, how many pies did the girls eat in all?

4. Use a ruler to measure and find the perimeter to the nearest inch.



WEDNESDAY

1. Write the decimals in order from least to greatest.

0.7 0.02 0.8 0.06

2. Write the number below as a numeral.

Seventy-five million, two hundred twelve thousand, ninety

5. Antonia needs 1 ¼ cups flour for a batch of brownies. If she wants to make 8 batches of brownies, how many cups of flour will she need?

3. Mae has 8 nickels. Valerie has 6 dimes. If the girls plan to share the money equally, how much does each have to spend?

4. Use a ruler to measure and find the perimeter to the nearest inch.

WEEK 22

THURSDAY

1. Write the decimals in order from greatest to least.

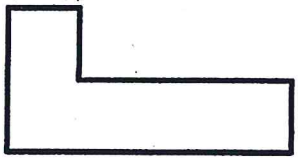
2.1 2.01 1.02 1.1

2. Write the number below as a numeral.

8,000,000 + 500,000 + 5,000 + 400 + 5

3. An office got 435 phone calls in May and 279 calls in June. If the 2 office workers took an equal share of calls, how many calls did each take during that time?

4. Use a ruler to measure and find the perimeter to the nearest inch.



5. Fabrice and Margot went to pick strawberries. Fabrice picked 6/8 of a pound of berries. Margot picked half as much. How many pounds of strawberries did Margot pick?

FRIDAY

1. Write the decimals in order from greatest to least.

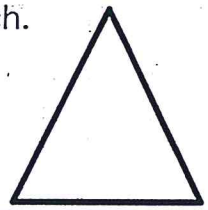
4.01 4.1 4.04 4.4

2. Write the number below as a numeral.

Nine hundred two million, one hundred three thousand, twenty-nine

3. Lance earned $546 in April and $354 in June. If he plans to save half of his money, how much will he have saved across these two months?

4. Use a ruler to measure and find the perimeter to the nearest inch.



5. Tracy went to the store to buy half a pound of candy. If ¼ of the candy she bought was gummy bears, how many pounds of gummy bears did she buy?

REFLECT & GROW

CORRECTION #1

REFLECT: Which question was easiest this week? Why do you think it was so simple for you?

CORRECTION #2

TEACHER NOTES:

GRADE:

Day 12

All Operations (C)

Find each sum, difference, product, or quotient.

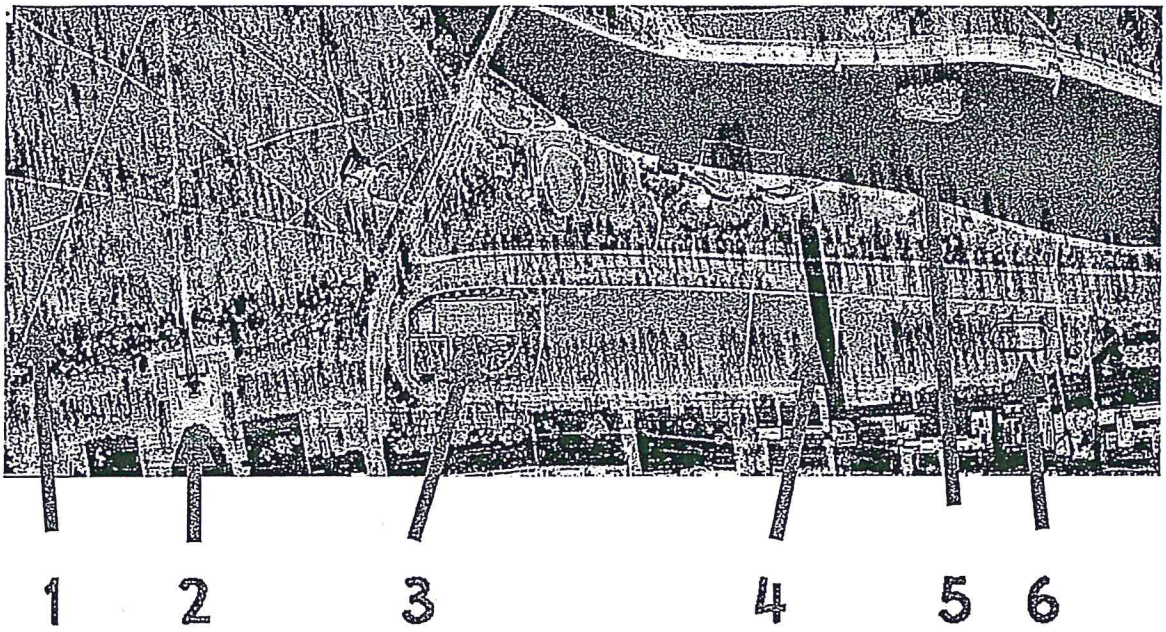
50 ÷ 5	10 - 1	16 ÷ 2	45 ÷ 5	11 + 3	7 × 3	14 - 5	1 × 3	1 × 1	4 × 12
10 × 1	15 - 11	22 ÷ 11	4 × 6	3 × 10	11 + 4	3 × 8	18 - 12	7 + 8	24 ÷ 4
19 - 12	16 - 6	16 - 11	21 - 9	84 ÷ 12	9 - 7	10 - 9	8 × 10	14 - 4	33 ÷ 11
10 - 5	1 × 10	5 + 5	4 × 9	5 - 3	4 + 2	11 × 5	4 × 3	7 × 8	8 × 2
8 - 5	7 - 5	11 - 4	5 - 2	2 + 4	12 × 11	1 × 7	11 + 8	3 + 8	42 ÷ 6
42 ÷ 7	1 + 4	12 ÷ 2	11 + 11	8 × 4	84 ÷ 7	13 - 6	45 ÷ 9	12 × 4	8 × 3
11 × 8	5 ÷ 1	9 × 2	77 ÷ 7	7 × 12	6 × 8	80 ÷ 10	13 - 6	8 - 2	60 ÷ 5
1 × 12	12 × 1	10 ÷ 2	3 × 8	15 ÷ 5	12 + 4	3 + 5	3 × 8	17 - 9	33 ÷ 3
11 × 7	7 + 1	11 × 9	10 - 2	1 × 12	9 ÷ 1	8 × 12	8 + 2	14 ÷ 2	5 × 6
11 - 7	90 ÷ 9	2 × 6	8 - 1	21 ÷ 7	10 + 6	1 × 4	9 + 11	20 - 9	14 - 4

Day 12

Homework

Identify features on Aerial photos

An aerial photograph of Hyde Park, London



1 What do you think these long white lines in the park are?

_____

2 What do you think is in the centre of this square?

_____

3 What sport can you play here?

_____

4 There is a long shadow here? What do you think can create it?

_____

5 What do you think this is in the middle of the lake?

_____

6 There is a shape with round edges here? What do you think it is?

_____