SNOWFLAKE BENTLEY

for grades 3-5

Mentor Sentence Lesson
Interactive Activity
Reading Activities
Writing Prompt
Vocabulary

Snowflake Bentley
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Mentor Sentence Focus Standard: L.5 (simile)

Reading Lesson Ideas
R.1: Students can infer about Wilson Bentley and use evidence from the text to support their inferences.

R.2: Have students summarize Wilson Bentley's life from the text.

R.4: Students use context clues to determine the meaning of higher-level words (for example: intricate) from the book.

R.6: Students describe one of Wilson Bentley's snowflakes from their point of view (click here for an image gallery)

R.7: Students integrate information from the book with the video about Snowflake Bentley (http://safesharetv/vt/TDLcYITT)

R.9: Students combine information from the text with information from the sidebars to tell about Wilson Bentley's life.

Writing Lesson Ideas
W.3: Students write about a time they never gave up. How are they like Wilson Bentley in this way?

He said snow was as beautiful as butterflies, or apple blossoms.

~Snowflake Bentley

Monday - possibilities of things to notice
*simile
compares snow to two things
alliteration - beautiful, butterflies, blossoms
declarative
comma
simple sentence
plural nouns

Tuesday - label the sentence
He – pronoun
said – verb
was – linking verb
snow, butterflies, blossoms – nouns
as – preposition
beautiful, apple – adjectives
or – conjunction

He said snow was as beautiful as butterflies, or apple blossoms.
complete subject: He
simple subject: He
complete predicate: said snow was as beautiful as butterflies, or apple blossoms.
simple predicate: said

Wednesday - possibility of revised sentence

He believed snow was as beautiful as butterflies, or apple blossoms.
(changed to vivid verb)

Thursday - possibility of imitation sentence

She thought the clouds were as fluffy as cotton, or her teddy bear.

Name: Answer Key Date:

Editing Assessment

he said snow was as beautiful like butterflies, or apple blossoms

1. Circle 3 mistakes in the sentence. Rewrite the sentence correctly:

He said snow was as beautiful as butterflies, or apple blossoms.

What two things are being compared in these similes?

2. Snow is as common as dirt.
a. snow and common b. snow and dirt c. common and dirt

3. The wind was like ice on my face.
a. wind and face b. face and ice c. wind and ice

4. The snowflake was as pointy as a star.
a. snowflake and star b. snowflake and pointy c. pointy and star

Write your own similes about this snowflake:

5. answers will vary
6.

Name: Date:

Snowflake Bentley

Draw and describe one of Wilson Bentley's photographs.

Draw

WINTER SIMILES

Similes compare two things using the words "like" or "as." The two things being compared are different from each other, but help the reader form an image in their mind. Write similes under the flaps about the winter weather items on the outside of the flaps.

Similes

snowflake

snow boots

wool hat and mittens

TWO LEVELS OF PAIRED TEXTS AND QUESTIONS

How Snowflakes Form

1. The sun heats the water in our oceans, lakes, rivers, and other bodies of water. Water becomes a gas called vapor.
2. As the vapor rises, it cools. It turns back into tiny water droplets.

Bentley's Snow Crystals

In 1885, Wilson Bentley was a 20-year-old farmer in Vermont who surprised the world with the first photograph of a snow crystal. In the next 46 years of his life, he took over 5,000 photographs of snow crystals. Fifteen of his photographs were published in articles in the magazine *National Geographic*. Snowflakes fascinated Bentley. He often said that no two snowflakes were alike. He was fifteen when his mother bought him a microscope. He was excited to look at snowflakes up close, only to be disappointed when it would melt. When he was seventeen, he combined his microscope with his camera. He took several more pictures of snowflakes. He captured each crystal. He was the way a snow crystal's his photographs. His goal was

Name: Use both texts to answer the following questions.

1. In **How Snowflakes Form**, when does water vapor turn back into tiny water droplets?
a. Evaporation
b. Condensation
c. Precipitation
d. Snowflakes
R1 R15

2. In **How Snowflakes Form**, what does the word *vapor* mean?
a. snowflake
b. crystal
c. only one of a kind
d. similar
R14

3. In **How Snowflakes Form**, happen in order for snow to me?
a. The temperature must freezing.
b. The droplets must be
c. The clouds get too hea
d. Two drops must freeze before they fall.

5. How does the photograph **Snow Crystals** help the read
a. It gives the reader a d
b. The reader can see a p Bentley's work.
c. It explains the parts of
d. all of the above

7. Which of the following sta
a. Many crystals can com
b. Temperature will not a
c. Dendrites are the lines
d. Wilson Bentley is a wor

Snowflakes

The water cycle is never-ending. Evaporation happens when the sun heats the water in our oceans, lakes, rivers, and other bodies of water. Water takes the form of a gas called vapor, and rises into the atmosphere. As the vapor rises, it begins cooling. When the vapor cools, it turns back into tiny water droplets. This process is called condensation. For those water droplets to form though, they need something to stick to. There are dust particles in our atmosphere, and those pieces of dust actually

come together to form
droplets, ice crystals fo
heavy, precipitation oc
ice crystals.

Snowflakes are
molecules that form th
wings. Snowflake forms
are similar, you will nev

Name: answer key Date:

Support your answer to the question with evidence from both texts.

How were these two texts different?

R9

The respo [illegible] ed to
onse may include, but is not limited to:

How Snowflakes Form is about the water cycle. It gives details about what must happen for snow to fall. It describes the different shapes a snowflake can be.

Bentley's Snow Crystals is about the photographer, Wilson Bentley and how he took pictures of snowflakes. It also shows a snowflake up close.

Bentley's Snow Crystals

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Name: Date:

Use both texts to answer the following questions.

1. How are the ideas in paragraph 1 of **Snowflakes** mostly organized?
a. in chronological order to tell the steps of the water cycle
b. through compare and contrast to show the differences between rain and snow
c. with descriptions that give the

2. Which phrase from **Snowflakes** best supports the idea that snowflakes are unique?
a. "ice crystals form on specks of dust"
b. "snowflakes can be made of as many as 200 ice crystals"
c. "it will melt if the ground temperature is above freezing"
d. "you will never find two snowflakes that are exactly alike"
R.8

4. How old was Wilson Bentley when he took his first photograph of a snow crystal?
a. 1885
b. 20
c. 46
d. 15
R.1

6. How does the photograph in Bentley's **Snow Crystals** help the reader?
a. It gives the reader a close-up view.
b. The reader can see a piece of Bentley's work.
c. It defines the parts of a snow crystal.
d. all of the above
R.7

an example of condensation?
ans, lakes, rivers, and other bodies of
d vapor, and rises into the atmosphere."
into tiny water droplets."
precipitation occurs."
R.3

Support your answer to the question with evidence from both texts.

Why are snowflakes unique?

R.9

No two flakes are alike. Every snowflake has
are symmetrical. Snowflakes are different
information is dependent on temperature and humidity.

Name: Date:

Snowflake Bentley

When in your life have you been like Wilson Bentley?

Name: ANSWER KEY Date:

WHAT DO YOU THINK?

Use the text and picture clues to help you infer the meaning of these words.

WORD	PART OF SPEECH	BOOK CLUES	YOUR DEFINITION
pelted	verb	The kids throw snowballs at crows	throw hard or attacked
intricate	adjective	the crystals were all different in patterns	complex or sophisticated
etching	verb	He cut away the negative to see the flake better	scratching or scraping
jumbled	adjective	he caught flakes and wouldn't keep broken ones	mixed up or messy
molecules	noun	snowflakes start off as a speck	smallest particles
delicate	adjective	the snowflake	

Name: ANSWER KEY Date:

WHAT DID THEY SAY?

Imagine these people are speaking using the vocabulary words. What could they say?

this is meant to be VERY open-ended

could say he pelted her with water balloons

could say he is looking at molecules under the microscope or at intricate details

could say her desk is a jumbled mess

could say they are looking at delicate animals

Name: ANSWER KEY Date:

ANALOGIES

Analogies show relationships between two words. Think of how the words are related on one side to solve the other side of the analogy.

Example: snow : crystal :: rain : droplet *Snow is to crystal as rain is to droplet*
(Snow is shaped as a crystal and rain is shaped as a droplet.)

intricate : detailed :: simple : answers will vary - should be synonym of simple, like plain

jumbled : messy :: tidy : orderly

particles : molecules :: dust : speck

etching : knife :: drawing : answers will vary - should be something you draw with, like a crayon

toss : fling :: pelted : threw

rough : fragile :: tough : delicate

Create your own analogies using vocabulary words.

answers will vary

pelted

intricate

etching

jumbled

molecules

delicate

Name: ANSWER KEY Date:

SHOW WHAT YOU KNOW

1. How should you handle something that is delicate?
accept reasonable answers, such as carefully

2. What makes a snowflake intricate?
accept reasonable answers, such as different patterns

3. Jannah got in trouble for _____ her initials on her desk.
a. pelting b. etching c. jumbled

4. Which picture shows a tool that can help someone see molecules?

5. Would you like to be pelted with a snowball? Why or why not?
accept reasonable answers, such as yes because I like snowball fights

6. Write a jumbled version of your name.
accept reasonable answers, such as written out of order