Fifth Grade:
Benchmark 3

Parent Handbook

This handbook will help your child review material learned this quarter, and will help them prepare for their third Benchmark Test. Please allow your child to work independently through the material, and then you can check their work using the answer key in the back of the handbook. If you have any questions or concerns about this material, please contact your child's teacher. Thank you for your support.

Fifth Grade Math Essential Standards

**Learning Objective #1:**
  📌 **"I can describe the attributes of 2 dimensional figures."**

**Practice:**

1. Which type of quadrilateral has one pair of parallel sides and two right angles?

      a. a square
      b. a rectangle
      c. a right trapezoid
      d. a rhombus

2. Which description below correctly describes a rectangle?

      a. a quadrilateral with 4 right angles and 4 equal sides
      b. a quadrilateral with 4 equal sides, 2 obtuse angles, and 2 acute angles
      c. a quadrilateral with 4 right angles and 2 pairs of parallel sides
      d. a quadrilateral with 2 pairs of parallel sides and no right angles

3. Which triangle below has all three angles with a measurement of less than 90°?
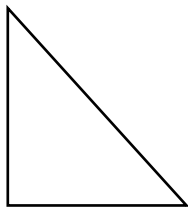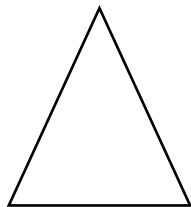
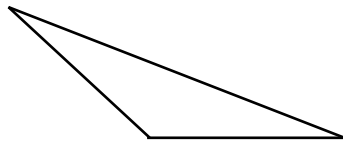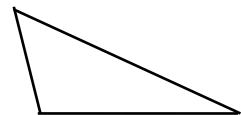a.   b.   c.   d.
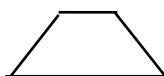
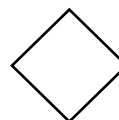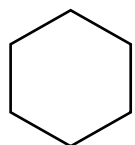4. Which shape below has two sets of parallel sides and four right angles?

a.   b.   c.   d.

5. Which of the following shapes is a *quadrilateral*?

a.   triangle

b.   rhombus

c.   pentagon

d.   heptagon

6. Which shape has only one pair of parallel sides?

a.   triangle

b.   rhombus

c.   parallelogram

d.   trapezoid

Learning Objective #2:
"I can classify 2D figures in a hierarchy."

Practice:

7. Which of the following is true?

a.   A square can be classified as a rectangle, but a rectangle can not be classified as a square.

b.   A rectangle can be classified as a rhombus, but not as a parallelogram.

c.   A rhombus can be classified as a trapezoid, but not as a quadrilateral.

d.   A rectangle can be classified as a trapezoid, but not as a square.

8. Which of the following is false?

a. A square can be classified as a rectangle, but a rectangle can not be classified as a square.

b. A rectangle can be classified as a quadrilateral, but not as a rhombus.

c. A rhombus can be classified as a quadrilateral, but not as a rectangle.

d. A rectangle can be classified as a trapezoid, but not as a square.

Learning Objective # 3:

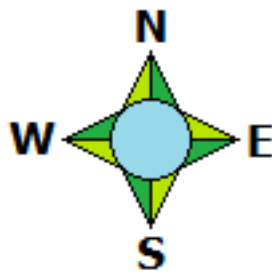**" I can graph points on a coordinate plane using real-world situations."**

Practice:
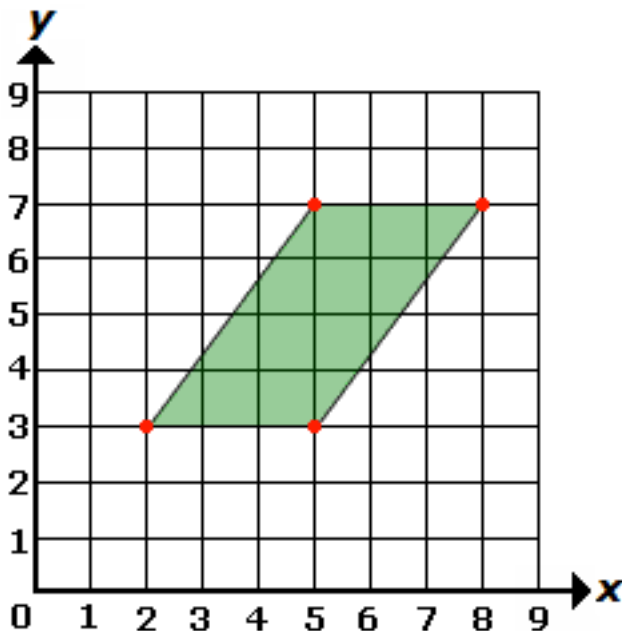
9. Which point is inside of the parallelogram:

a. (6,8)
b. (7,5)
c. (4,6)
d. (5,6)

10. The grid below shows the location of 3 places in a neighborhood:

If the hotel is 4 units directly east of the gym, which of the following ordered pairs best represent the hotel's location?
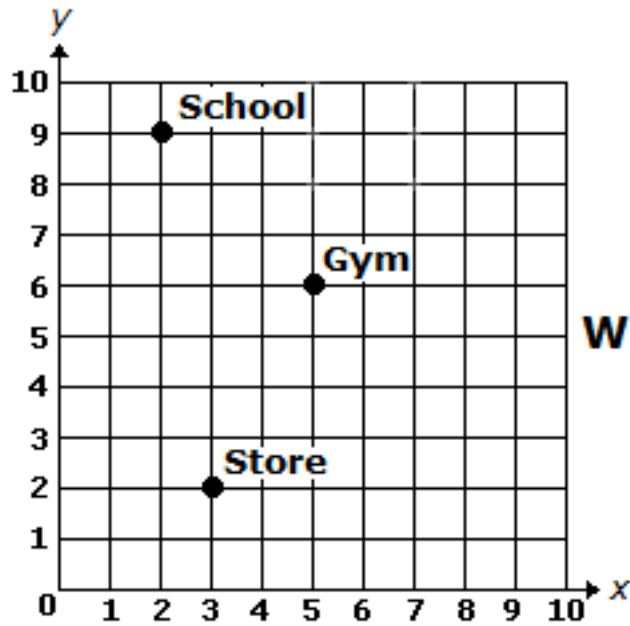
a. (9,6)

b. (5,2)

c. (1,6)

d. (5,10)

Learning Objective #4:

"I can identify and form new ordered pairs and graph them on a coordinate plane."

Practice:

Use the table below to answer the following question:

Sequence #1	0, 7, 14, 21, 28
Sequence #2	5, 8, 11, 14, 17

11. When comparing the two sequences above, which is true?

a.   Sequence #1 is 5 times larger than the sequence #2.

b.   Sequence #1 multiplies by 7 and sequence #2 adds 3.

c.   Sequence #1 adds 7 and sequence #2 adds 3.

d.   Sequence #1 adds 7 and sequence #2 subtracts 3.

12. Given the rule **add 2** with the starting number 0, and the given rule, **add 3** with the starting number 0, create two numerical sequences with 5 numbers each. Then, plot the **5 coordinates** on the graph below.

Sequence #1	0, ___, ___, ___, ___, ___
Sequence #2	0, ___, ___, ___, ___, ___
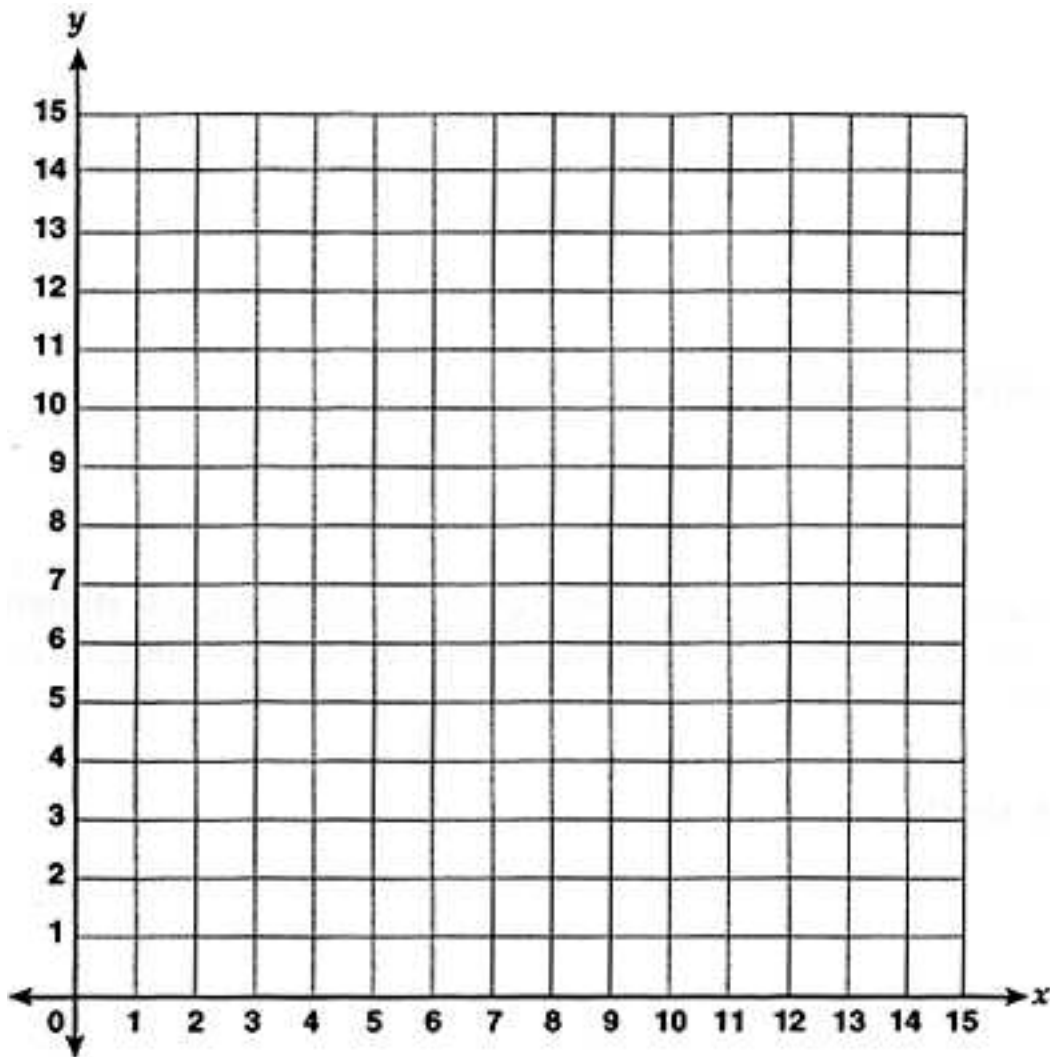
Learning Objective #5:

"I can multiply a fraction by a whole number."

13. Solve the following problem and simply to lowest terms.

$$2/9 \ x \ 17 =$$

a.   3 2/9

b.   2 7/9

c.   3 7/9

d.   2 5/9

14. Solve the following problem and simply to lowest terms.

$$5/6 \ x \ 19 =$$

a.   15 2/3

b.   15 5/6

c.   5/114

d.   15 5/19

15 . Each day Jack ran 2/3 of a mile for 22 days. How far did he run after 22 days?

a.   14 1/5 miles

b.   14 1/3 miles

c.   14 2/3 miles

d.   14 1/6 miles

Learning Objective #6:

📌 **"I can find the area of a rectangle with fractional sides using a model or algorithm."**

16. Find the area of the rectangle:

6 1/2 m

a.   78 4/5 square meters
b.   79 1/2 square meters
c.   78 1/2 square meters
d.   79 5/8 square meters

17. Find the area of the square:

7 1/3

a. 80 2/3 square inches

b. 53 7/9 square inches

c. 62 4/7 square inches

d. 55 1/3 square inches

18. Jeremy's yard measured 17 1/2 yards long and 8 1/4 yards wide. What is the area of Jeremy's yard?

a. 144 3/8 square yards

b. 124 3/7 square yards

c. 132 2/4   square yards

d. 147 1/2 square yards

Learning Objective #7:

📌 **"I can find the volume of a rectangle prism using a model or algorithm."**

19. Find the volume of the rectangular prism:
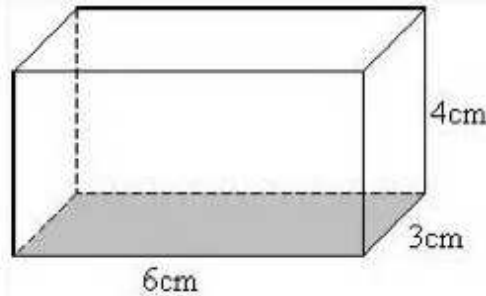
   a.   144 cubic centime

   b.   206 cubic centimeters

   c.   72 cubic centimeters

   d.   19 cubic centimeters

20. Find the volume of the rectangular prism:
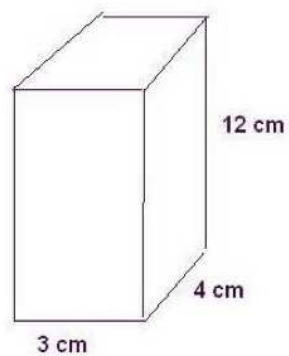
   a.   144 cubic   centimeters

   b.   206 cubic centimeters

   c.   72 cubic centimeters

   d.   19 cubic centimeters

Benchmark 3 Essential Math Vocabulary

✱ **product:** the answer to a multiplication problem

✱ **simplest form:** to reduce the numerator and denominator to the smallest number

✱ **mixed number:** a whole number and a fraction

✱ **improper fraction:** a fraction larger than a whole

✱ **partition:** to break a whole into equal parts

✱ **area:** the size of a surface and LxW

✱ **length:** how long a figure is

✱ **width:** how wide a figure is

✱ **height:** how tall a figure is

✱ **cubic unit:** a unit for measuring volume

✱ **square unit:** a unit for measuring area

✱ **rectangular prism:** a solid (3 dimensional) object with 6 rectangular faces

✱ **x axis:** the horizontal position on a graph (the first value listed in an ordered pair)

✱ **y axis:** the vertical position on a graph (the second value listed in an ordered pair)

✱ **scale:** the distance between the numerical values on an axis (ex: if the y-axis is numbered 0, 5, 10, 15, 20, the scale would be 5)

✱ **ordered pair:** two numbers written in a certain order, with parentheses

✻ **parallel:** lines that are the same distance apart and never touch

✻ **perpendicular:** two or more lines that intersect at a 90 degree angle

✻ **congruent:** equal size and shape

✻ **attributes:** a specific detail about a polygon referring to it's sides or angles

✻ **edges:** the side of a polygon or a line segment:

✻ **vertices:** a point where the adjacent sides of a polygon meet

✻ **sides:** one of the lines on a 2D shape

✻ **acute angle:** an angle measuring less than 90 degrees

✻ **obtuse angle:** an angle measuring more than 90 degrees

✻ **right angle:** an angle measuring exactly 90 degrees

✻ **intersecting:** two or more lines that meet at a point

✻ **2-dimensional shape:** a plane figure that has a length and width

✻ **hierarchy:** the relationship between 2D figures

✻ **isosceles:** a triangle with exactly two equal sides and angles

✻ **scalene:** a triangle with no equal angles or sides

✻ **equilateral:** a triangle with three equal sides and angles

✻ **quadrilateral:** a four sided figure

Math Answer Key

1. C
2. C
3. B
4. C
5. B
6. D
7. A
8. D
9. D
10. A
11. C
12.

Sequence #1	0, 2, 4, 6, 8, 10
Sequence #2	0, 3, 6, 9, 12, 15
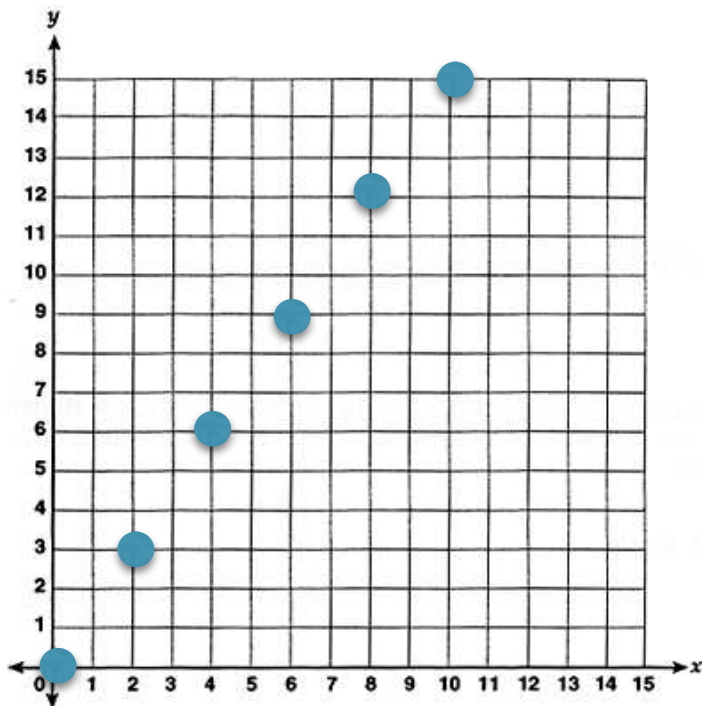
13. C
14. B
15. C
16. D
17. B
18. A
19. C
20. A

Fifth Grade Essential Reading Standards

Learning Objective # 1:

 "I can cite evidence to support an inference made from the text"

Practice:

Use the following passage to answer question 1 and 2.

<u>Keong Mas</u>

      Prince Raden Putra was married to a princess named Dewi Limaran. One day when Dewi Limaran was walking in the palace garden, she saw a snail among her lovely flowers and she had one of her servants pick it up and throw it away. The Snail was actually an old witch who had disguised herself as a snail. The witch was very angry, so she cursed Dewi Limaran and changed her into a golden snail and threw it into the river. The stream carried it far away from the palace.

      On the side of a big forest, there lived a poor widow. Her living was only fishing. One day it was a particularly bad day as she didn't catch any fish. Again and again she spread her net, but nothing got caught into it. At last she pulled up the net to go home. Suddenly she saw something shining at the bottom of it. It was only a snail. Nevertheless she picked it up and took it home. Its shell shone like gold the old woman had never seen such a snail before.

      At home she put it in an earthen pot. She then went to bed and soon was fast asleep as she was very tired. The next morning when she woke up, she found to her amazement that the floor had been swept clean and there was some food on the table. She wondered who had done all this. She thought she was dreaming, but she was not.

1. After the poor widow realized she wasn't dreaming, she thought and thought about who had been so kind and generous to her. **Who** do you think cleaned her home and **why** did they do such a generous deed?

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2. Explain your reasoning for your answer to Question 1. How do you know your answer is correct? Cite the text directly to support your answer.

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Learning Objective # 2:

"I can analyze multiple sources of the same event or topic, noting important similarities and differences in the point of view they represent."

Practice:

Story 1:

Evangeline sits at the head of the long, oak table. Traditionally, this is where the man of the house ought to sit. But Evangeline, though she considers herself very traditional, is not willing to cede control of the table to her husband, Steve. She sits very straight and surveys the steaming array of dishes with a smile: chateaubriand, scalloped potatoes, garlic green beans, honey-glazed carrots, and an orange and walnut salad.

Story 2:

Each evening as she prepares for dinner I think of her beautiful, wispy hair and how it glows in the evening light as she takes the place at the head of our dinner table. It has been this way since we married 45 years ago. Never once has she allowed me, or anyone else for that matter, to sit at the head of the table. She is so strong willed, untraditional, and stubborn, but those qualities are why I love her. Each night as she sits down for the first time, I love to see her first smile as she looks upon the delicious meal she prepared.

3. From which point of view is Story 1 written?

a.   first person

b.   second person

c.   third person limited

d.   third person omniscient

4. Explain your reasoning for your answer to Question 3. How do you know your answer is correct? Cite the text directly to support your answer.

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5. From which point of view is Story 2 written?

a. first person

b. second person

c. third person limited

d. third person omniscient

6. Explain your reasoning for your answer to Question 5. How do you know your answer is correct? Cite the text directly to support your answer.

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7. How are the events in Story 1 and Story 2 similar? Cite the text directly to support your answer.

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8. How are the events in Story 1 and Story 2 different? Cite the text directly to support your answer.

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Learning Objective # 3:

📌 **"I can describe cause and effect relationships between individuals, events, or ideas in informational text."**

Practice:

<u>Water Power</u>

chainreactionkids.org

Water is the ultimate coolant. From your body, to plants, to the engine of a car—water helps hot things chill out.

But water is a limited resource, especially in dry climates. Plants cool the environment, but they require watering. On the other hand, if your landscape heats up, you may use more electricity for air conditioning. Guess what? Producing electricity uses water!

Water is used to pump oil out of the ground, make the steam that turns turbines, remove pollutants and residue from power plants, and cool the power plant. In the U.S., burning fossil fuels for electricity uses more than 500 billion liters of water per day! Just keeping a 60-watt light bulb on for 12 hours uses up to 60 liters of water.

How can we stay cool without wasting water? Scientists at Arizona State University recommend a balanced approach. For instance, cities should focus on adding plants to neighborhoods that have the least green space. This is where they will have the biggest effect on temperatures.

There are also ways to lower temperatures without increasing water use. For example, we can use roof and pavement materials that absorb less heat. We can also increase the density of our desert cities. People grouped closer together use less water than people who are spread out.

The average American uses 80-100 gallons (300-380 liters) of water per day for drinking, washing and watering. This doesn't include hidden water use for things like growing food or generating electricity.

In Arizona, 77 percent of all the water used by humans goes to farming. In Phoenix, about 67 percent of water goes to outdoor uses like parks, golf courses, lawns and keeping pools full.

How Can You Conserve?

* Adjust your sprinklers so you aren't watering the sidewalk and street.

* Only run the dishwasher and washing machine when they are full.

* Avoid flushing the toilet too often.

* Refrain from running the garbage disposal. Compost when possible.

* Insulate your hot water pipes for quick hot water at the faucet.

* Fix leaky faucets and toilets promptly.

9. According to Water Power, what is one positive effect of planting trees in neighborhoods?

a.   Planting trees will cause homes to heat up and use more electricity.

b.   Planting trees will increase water usage because trees need water to thrive.

c.   Planting trees will cost money and trees often shed their leaves creating messy sidewalks and yards.

d.   Planting trees will provide shade to homes and will cool the environment.

Learning Objective # 4:

" I can explain how an author uses reasons and evidence to support a particular view in a text."

Practice:

An 8:00 p.m. curfew is just what the children in our town need. Every morning I see them drag themselves to school. They look bleary-eyed from lack of sleep, and they drift off during their morning classes. If we had them all home and in bed by eight o'clock, just think how much better they would be in class.

10. What is the author's perspective in the above passage?

a.   A curfew is not necessary.

b.   Children do not need a set bedtime.

c.   A curfew is needed to ensure children get a good night's sleep.

d.   Children can do fine in school even if they don't get sleep.

11. Which detail from the above passage supports the author's position?

a.   Children look bleary-eyed from lack of sleep.

b.   Every morning children are early to school.

c.   Children are wide awake at school.

d.   Children do well in class, despite a lack of sleep.

Benchmark 3 Essential Reading Vocabulary

✱ <u>**inference**</u> **-** an educated guess or conclusion reached based on evidence from the passage.

✱ <u>**evidence**</u> **-** a direct quote from the passage that explains your answer.

✱ <u>**quote -**</u> to use exact words from the text or passage to explain your answer

✱ <u>**cause and effect -**</u> a cause is why an event happens and effect an event that happens because of a cause. A cause is WHY something happens and an effect is WHAT happens

✱ <u>**interactions -**</u> the influence characters have on one another by how they behave or speak when around one another.

✱ <u>**opinion -**</u> a belief or conclusion not supported by evidence or facts

✱ <u>**author's position -**</u> an author's opinion about an issue. An author's position can be positive, negative or neutral.

✱ <u>**compare and contrast -**</u> to explain the similarities and differences between two people, places, events, stories, etc.

✱ <u>**citation -**</u> a quote or reference to a text

Answer Key

1. The golden snail cleaned her home. *Why* answers may vary. Example: The golden snail cleaned her home because she was the only person to pick up the golden snail and give her a home. Perhaps other fishermen had seen the golden snail before and had thrown her back into the water (just as Dewi had done) time after time.

2. Answers will vary, however text must be explicitly cited.

3. C

4. Story 1 only references Evangeline and her thoughts and feelings. It is not told from Evangeline's perspective as it uses her name and key words "she" and "her." Her husband is referenced, but the story never explains his thoughts or feelings. Students will choose various sentences with "third person limited" key words to prove their answer.

5. A

6. The story is told from the husband's point of view or first person. He tells the reader how he feels about his wife sitting at the head of the table using key words "I" and "me." The story does reference his wife, but only from the husband's perspective. Students will choose various sentences with first person key words to prove their answer.

7. Students will use various sentences in the story to prove their answer. Their answer should include that both stories have following similarities:

    The woman sits at the head of the table for every meal

The woman is untraditional and does not feel a man should sit at the head of the table

She always smiles as she is pleased with her meals

8. Students will use various sentences in the story to prove their answer. Their answer should include that both stories have following differences:

The first story is told from the point of view of a narrator who seems to be watching from a far. The first story does not include the husband or his perspective.

The second story includes the husband's perspective and shines light on how stubborn and strong-willed his wife is. Her husband includes details of their long marriage and his love for her. He conveys that he loves her smile each evening as she overlooks the meal she made.

9. B

10. C

11. A