

1. What is the length and width of the original candy wrapper in inches?
2. What is the perimeter of the original candy wrapper in inches?
3. What is the area of the original candy wrapper in inches?
4. If the candy bar had a height of 2 in., what would be the volume of the original candy bar in inches?
5. What is the scale factor being used?
6. What is the new length and width of the scaled candy wrapper in inches?
7. What is the new perimeter of the scaled candy wrapper in inches?
8. What is the new area of the scaled candy wrapper in inches?
9. What is the new volume of the scaled candy bar if the original candy bar had a height of 2 in.?
10. Explain the relationship scaling has on perimeter, area and volume of figures. Why do you think this relationship exists? Be detailed and give examples if necessary. You may need an additional paper to explain this fully.

Rubric:

Questions 1 – 9 (4 points each)	_____ / 36
Question 10	_____ / 14
Neatness of Candy Wrapper	_____ / 10
Candy Wrapper is Colored Completely	_____ / 20
Calculations and Scale Factor are accurate	_____ / 20
Extra Credit	_____ / 0
Total	_____ / 100

Due Date: March 15th

Name _____

Term 3 Project

Standard 8.G.1-5:

- Mathematical Practice:
 1. Reason abstractly and quantitatively
 2. Model with mathematics
 3. Use appropriate tools strategically

Purpose:

- Solve problems involving scale drawings of geometric figures, including computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale.

Overview:

- For this project, you will enlarge a candy bar wrapper in order to determine the scale factor between the original candy bar and the enlarged candy bar.

Procedure:

- Tape your empty candy bar wrapper on the grid paper provided.
- After taping the wrapper, trace the grid on top of your empty wrapper. Use a ruler to help you make straight lines.
- You are required to have a scale factor of 5. Any scale factor greater than 5 will be given extra credit.
- Next, draw grid lines (lightly in pencil) for your enlarged wrapper on grid paper. 1 square on your wrapper will be equal to a 5x5 square on your dilated image. You will need to tape several pieces of grid paper together to fit your image.
- Copy each square of the original picture onto your enlargement paper.
- Color the wrapper to match the original. You may use markers, crayons, colored pencils or paint. You are being graded on neatness so take your time.
- Complete the questions on the following page.
- You will turn this packet in with your completed project.