

Grade 7 Smartie Math

This is a cross strand, multiple outcome formative assessment that would be used at any time in the year as a review or as a great substitute teacher activity.

Outcomes Measured

7.N.1 . Determine and explain why a number is divisible by 2, 3, 4, 5, 6, 8, 9 or 10, and why a number cannot be divided by 0.

7.N.3 Solve problems involving percents from 1% to 100%.

7.N.5 Demonstrate an understanding of adding and subtracting positive fractions and mixed numbers, with like and unlike denominators, concretely, pictorially and symbolically (limited to positive sums and differences).

7.SP.3 Construct, label and interpret circle graphs to solve problems.

7.SS.1 Demonstrate an understanding of circles by:

- describing the relationships among radius, diameter and circumference
- relating circumference to pi
- determining the sum of the central angles
- constructing circles with a given radius or diameter
- solving problems involving the radii, diameters and circumferences of circles.

7.SS.2 Develop and apply a formula for determining the area of:

- triangles
- parallelograms
- circles.

Grade 7 Smartie Math

Name: _____

1. What are the dimensions of your box in cm.
Length:
Width:
Height:
2. Calculate the area of each surface of your box. Make sure to include units of measure.
 - Top
 - Bottom
 - Right side
 - Left side
 - Front
 - back
3. Open your box of Smarties, count them and record the total. DO NOT EAT YOUR SMARTIES YET, YOU WILL NEED THEM STILL.
4. What numbers is your total numbers of Smarties divisible by?
5. Sort your Smarties by color and record each color.
 - Green
 - Yellow
 - Red
 - Blue
 - Pink
 - Brown
 - Purple
6. Create a bar graph to show the number of each color of Smarties in your box. Use the graph paper attached.
7. What fraction of the total Smarties does each color represent?
 - Green
 - Yellow
 - Red

- Blue
- Pink
- Brown
- Purple

8. What percent does each color represent?

- Green
- Yellow
- Red
- Blue
- Pink
- Brown
- Purple

11. If red, pink and purple are positive, and the rest of the colors are negative, what is your total number of Smarties?

9. Use a compass to draw a circle graph to represent your Smarties.

10. Measure the diameter of one Smartie in cm.

11. What is the circumference of one Smartie?

12. What is the area of the top of one Smartie?

YOU CAN NOW EAT YOUR SMARTIES!