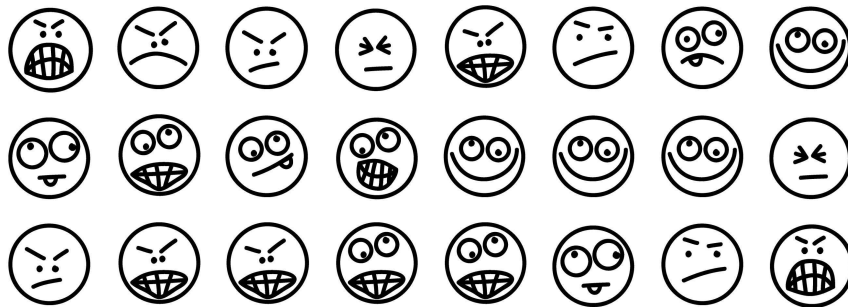# INTRO TO RATIOS

RATIO

- A ratio is a _____ comparison of two quantities, which describe the same attribute. They can be written several ways.

  Example: There are two dogs to every three cats

  Words: 2 dogs to 3 cats   Colon: 2:3   Fraction: $\frac{2}{3}$

- Ratios can also be written in simplest terms or _____.

Use the faces below to practice writing ratios.

Teeth to No teeth	Eyebrows to Total Faces	Tongues to Total Faces	Angry Faces to Eyebrows
Big Eyes to Teeth	Closed Eyes to Tongues	Big Eyes to Angry Faces	Tiny Eyes to No Smiles

a. Write the ratios below. Then, determine if the ratios are different. Justify your thinking.

Teeth to No Teeth _____   No Teeth to Teeth _____

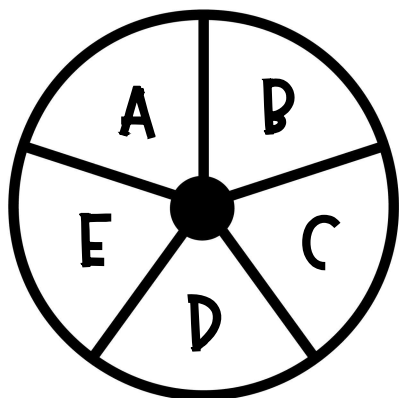**The order in which a ratio is written is _____ to the meaning.**

1. In the lunchroom, there were 100 milk cartons at lunch. When lunch was over, 80 cartons of milk had been purchased.

a. What is the ratio of the number of milk cartons purchased to the total number of milk cartons?

b. What is the ratio of the number of milk cartons remaining to the number of milk cartons purchased?

2. Using your pencil and a paper clip, spin the spinner 20 times below. Mark your results using tally marks in the chart below.

	TALLY	TOTAL SPINS
A		
B		
C		
D		
E		

a. What is the ratio of spins landing on B to spins landing on E?

b. Describe a ratio relationship based on your spinning in which the ratio is 1:4.

c. What would you need to spin in order to create a ratio of 3:1?

d. If you were asked to spin the spinner 100 times, what predictions could you make using your data?

Apply your understanding of ratios to answer the questions below.

3. Mrs. Johanson is decorating her classroom for fall. She has five red, seven yellow, and three orange leaves to hang from her ceiling. Record the ratios below.

a. red to yellow _____

b. orange to total _____

c. total to yellow _____

4. Number tiles marked 0-9 are placed on the table. What is the ratio of number tiles with a value less than 2 to the total number tiles?

5. Yvette looks at the picture at the right and says the ratio of triangles to hearts is 3:5. Explain whether Yvette is correct or not.

_____
_____

Summarize today's lesson:

Name _____

Date _____ Pd_____

INTRO TO RATIOS

Apply your understanding of ratios to complete the table below.

Pencils to Glue	Paper Clips to Erasers	Crayons to School Supplies	Erasers to Pencils
Writing Utensils to School Supplies	Glue to Paper Clips	Crayons to Erasers	Paper Clips to Pencils

Answer the following questions. Be sure to justify your response.

1. At the ice cream shop, there are 11 shakes sold for every 6 malts. What is the ratio of malts to shakes?	2. Seven out of ten dentists prefer Pearly White toothpaste. What is the ratio of dentists who do not prefer Pearly White to those who do?	3. An animal shelter currently only has 19 dogs and 13 cats. What is the ratio of cats to animals?

4. Amelia recorded the ratios shown below using the pictures. Unfortunately, her paper was torn and some of the shapes are missing. Use Amelia's answers below to sketch the missing shapes.

a. moons to squares ___3 : 7___

b. pentagons to total ___5 : 15___

c. squares to pentagons ___7 : 5___