NAME_____

Module 4   **Fractions, Decimals, Percents, and Factors**
Lesson 1   **Concepts of Fractions, Ratios, and Percents**

Lesson Objectives

- Use models and visual representations to develop the concepts of the following *fractions*: parts of unit wholes, parts of a collection, locations on number lines, locations on rulers (*benchmark fractions),* division of whole numbers.
- Use models and visual representations to develop the concepts of the following *ratios*: part-to-part (two boys to three girls) and part-to-whole (two boys to five people).
- Use models and visual representations to develop the concepts of *percents*: part to -100.

Subtopic 1   Fractions

- A _____ is a number that is the result of a division.
- A fraction is a _____ that names equal parts of a whole or equal parts of a group.
- In the fraction $\frac{3}{4}$, the _____ 4 (bottom number) tells the total number of equal parts in the whole.
- In the fraction $\frac{3}{4}$, the _____ 3 (top number) tells how many equal parts are named.
- In a _____ fraction, the numerator is less than the denominator.
- A proper fraction is less than _____.
- In an _____ fraction, the numerator is greater than or equal to the denominator.
- An improper fraction is greater than or equal to _____.
- $\frac{1}{4}, \frac{1}{3}, \frac{1}{2}, \frac{2}{3}, \frac{3}{4}$ are commonly used _____.

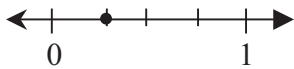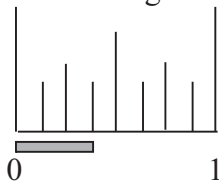**1**   Name the fraction shown by the shaded region.

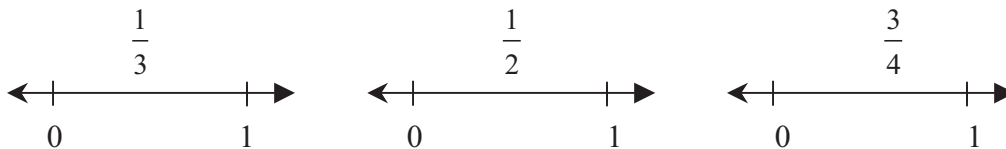**2**   Name the fraction of moons that is blue.

3   What fraction does the point on the number line represent?

0   1

4   What is the length of the yellow rectangle?

0   1

5   Locate each benchmark fraction on the number line.

$\dfrac{1}{3}$ $\dfrac{1}{2}$ $\dfrac{3}{4}$

0   1   0   1   0   1

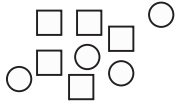**Subtopic 2**   **Ratios: Part-to-Whole**

- A _____ is a comparison of two quantities.
- Ratios may be part-to-_____ or part-to-_____.

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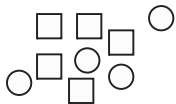
6   What is the ratio of circles to all shapes?

7   What is the ratio of girls to people?

Subtopic 3   **Ratios: Part-to-Part**

8   What is the ratio of circles to squares?

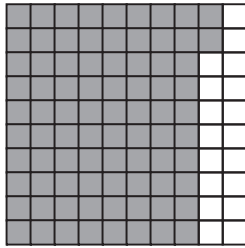**9**   What is the ratio of boys to girls?

- _____ means "for every one hundred."
- _____ is the percent sign.
- 3% means _____ out of _____.

10 What percent is shaded?

11 What fraction is shaded?
What is the ratio of shaded squares to total squares?
What percent is shaded?