Family Letter for Unit 6

Dear Family,

During the next few weeks, our math class will be learning about ratio, proportion, percent, and probability.

You can expect to see work in these areas:

- Using equivalent ratios to find how the measurements in a model relate to the actual measurements of the object.
- Using percent to calculate simple interest, sales tax, and discounts.
- Determining probabilities, using samples to predict, and discovering how disjoint, dependent, and independent events differ.

Vocabulary

ratio A comparison of two numbers by division.

proportion An equation showing that two ratios are equal.

rate A ratio that compares two quantities that use different units.

percent A ratio that compares a number to 100.

probability The ratio of the number of outcomes in an event to the total number of outcomes.

Using Percent

Here are two difference ways to find a percent of a number.

Way 1 Use a proportion.

Find 18% of 200.

part → $\frac{18}{100} = \frac{n}{200}$ ← unknown part
whole → ← whole

Find the cross products to write an equation.

$$\frac{18}{100} \times \frac{n}{200}$$

$$18 \times 200 = 100 \times n$$

$$3{,}600 = 100n$$

$$36 = n$$

So, 18% of 200 is 36.

Way 2 Write and solve an equation.

Think: $18\% = \frac{18}{100} = 0.18$

$n = 0.18 \times 200$ ← Multiply
$n = 36.00$

Check your answer.

Think: 18% is close to 20%.
$20\% = \frac{1}{5}$

$\frac{1}{5}$ of 200 is 40
36 is close to 40
The answer is reasonable.

Allow your child to help you calculate percents, such as finding the sale price of an item or estimating the tip on a restaurant bill.

Sincerely,

Technology

Check out *Education Place* at **eduplace.com/kids/mw/** for *e*•Glossary, *e*•Word Games, test prep practice, and more.