Oranges Are Appealing

Citrus is farmed commercially in states such as Florida, California, Arizona, and Texas. Oranges are one kind of citrus.

The first orange trees in the United States were most likely planted in the 1500s. This was done by the Spanish explorer Ponce de León, near St. Augustine, Florida.

The early settlers saw that Florida's climate and soil were ideal for growing citrus. Citrus has flourished there ever since.

Your Project Plan a Citrus Grove

Plan a citrus grove! Your grove will have 5 sections: oranges, lemons, grapefruits, limes, tangerines. You are going to estimate the number of trees in each section and the amount of fruit each tree will grow.

Toss 3 number cubes. After each toss, use the numbers to record a 3-digit number, in any order. Toss the cubes five times to record a total of five 3-digit numbers. Each 3-digit number represents the number of trees in one section of your citrus grove. Round each 3-digit number to estimate how many trees you need to plant in each section. Record your estimates.



Next, toss 2 number cubes. After each toss, use the numbers to record a 2-digit number, in any order. Toss the cubes five times to record a total of five 2-digit numbers. Assign one 2-digit number to each of your sections. Round each 2-digit number to estimate how much fruit will grow on each tree in a section. Record your estimates.

Create a poster. Show the estimate for the number of trees in each section and the estimate for the amount of fruit that will grow on each tree in each section. Make sure your labels are clear. What do you notice about the estimates?



Pick a Project

Project 8A

Road Trip

You may have heard the expression "road trip." A road trip is a long-distance journey taken on a road. Usually, road trips are done in a car, van, or camper.

Sometimes people take a road trip as part of a family vacation. Other times, a person may need to move for a new job and drive a long distance.

Pick a Project

Project 8B

Driving across the country takes organization and careful planning. You want to make sure you stop at interesting places along the way!

Your Project Create and Perform Skits

Suppose you plan a 2-day drive that will be 380 miles in all. You could drive 200 miles the first day and 180 miles the second day. Or you could drive 180 miles the first day and 200 miles the second day. This is a real-life example of the Commutative Property of Addition!

Make a list of 3 examples of how the Commutative Property of Addition can be used in real life. It can be how you pack your clothes in a suitcase. Or maybe it is a recipe for a meal you are making. Be creative!

Write a short skit for each of your 3 examples of using the Commutative Property of Addition

in real life. After you have written the skits, make sure you rehearse. Then perform the skits for your class!





• You Can Count on Me

You may use a calculator in your class or at home. But have you ever wondered what people used *before* the calculator was invented?

Many thousands of years ago, people used a device called an abacus to add and subtract numbers.

The abacus was designed with beads that you would slide along wires. Certain beads had greater values, so you could add or subtract

greater numbers with greater place values.



Mental Math

Your Project Make a Mental Math Game

Make a mental math game! Use number cubes. You make all the rules. In the game, you have to either add or subtract—or both—using mental math.

The rules might be like this: Find a partner. Toss 3 number cubes. After your toss, make a 3-digit number by writing the numbers in any order. Then toss 2 number cubes. After your toss, make a 2-digit number by writing the numbers in any order. Your partner has to add the 3-digit and the 2-digit numbers using mental math. Then your partner uses mental math to subtract the lesser number from the greater number. You decide the rules!

How do you score in the game? How do you win? Is there a way to get bonus points? You decide!



Project 8C

Making Sense of the Census

A census is an official count or survey of a population. In the United States, a national census takes place every 10 years.

A census records various details of a population. The data collected may be useful to help communities that need to build new schools or roads. A census is also important to see how families grow and how the population changes in certain areas.

It's Your America! HELP THE TEN-YEAR Roll CALL HELP THE Image: Coll Call HELP THE Image: Coll Call Image: Coll

Pick a Project

Project 8D

Your Project Design a Class Census and Give an Estimation Test

Conduct a class census and survey the students in your class. You should develop two categories, such as the number of days until each student's birthday and the number of pages read each week. Be creative!

After you collect the data, make a display. Label your data clearly.

Days Until Number of Next **Pages Read Birthdav Each Week** Martin 35 412 Vy 192 288 Yolanda 8 192 Sandra 59 188 Karl 348 96

Now it is test time! Ask a partner to look

at the data you collected. Then ask questions about your data, using estimation. For example, you might ask your partner to estimate the sum of a row, ask if the sum is greater or less than another number in the data set, or estimate differences among the data. Take turns, and make sure to have your partner explain how he or she found his or her answers.

