Home Connections
Math Activities

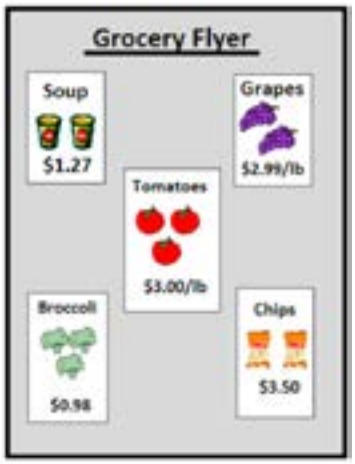
Grade 5

Number Sense and Numeration

Adding and Subtracting Money Amounts
Packages
Sharing Pennies
Finding Equivalent Fractions
Money Amounts As Decimal Numbers

Adding and Subtracting Money Amounts

1. Together choose two items in a catalogue or grocery flyer that each cost between $5 and $10.
2. Have your child determine the total cost of the two items mentally and record the total.
3. Have your child figure out mentally how much money he or she would get back if $20 was used to purchase the two items and record the amount.
4. Ask your child to determine a different way to solve the problem and show you on paper his or her thinking



Mental calculations are calculations that are done in your head. Mental strategies usually involve working with numbers that one is comfortable operating with.

Let's Talk About It

- Explain how you mentally solved the problem.
- How did this strategy compare with your other strategy?

Packages

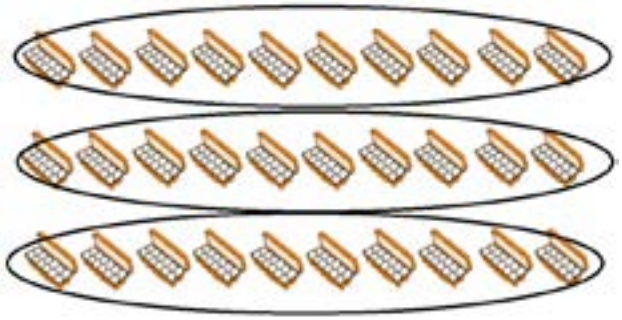
1. Have your child find packages in your home that contain between 10 and 50 items. (For example; bottles of water in a case, eggs in a carton, tea bags in a box)
2. Have your child imagine that you have 30 packages for each of these items and have him or her find the total number in all 30 packages combined.

Example: There are 12 eggs in each of these cartons. There are 30 cartons of eggs.

$10 \times 30 = 300$
$2 \times 30 = 60$
$300 + 60 = 360$

Therefore the total number of eggs in all the cartons combined is 360

$12 \times 10 = 120$
$120 \times 3 = 360$



One strategy for multiplying is to multiply in parts. In this example 30 is thought of as 10 x 3. 12 x 30 is the same as 12 x 10 x 3 or
12 x 10 + 12 x 10 + 12 x 10

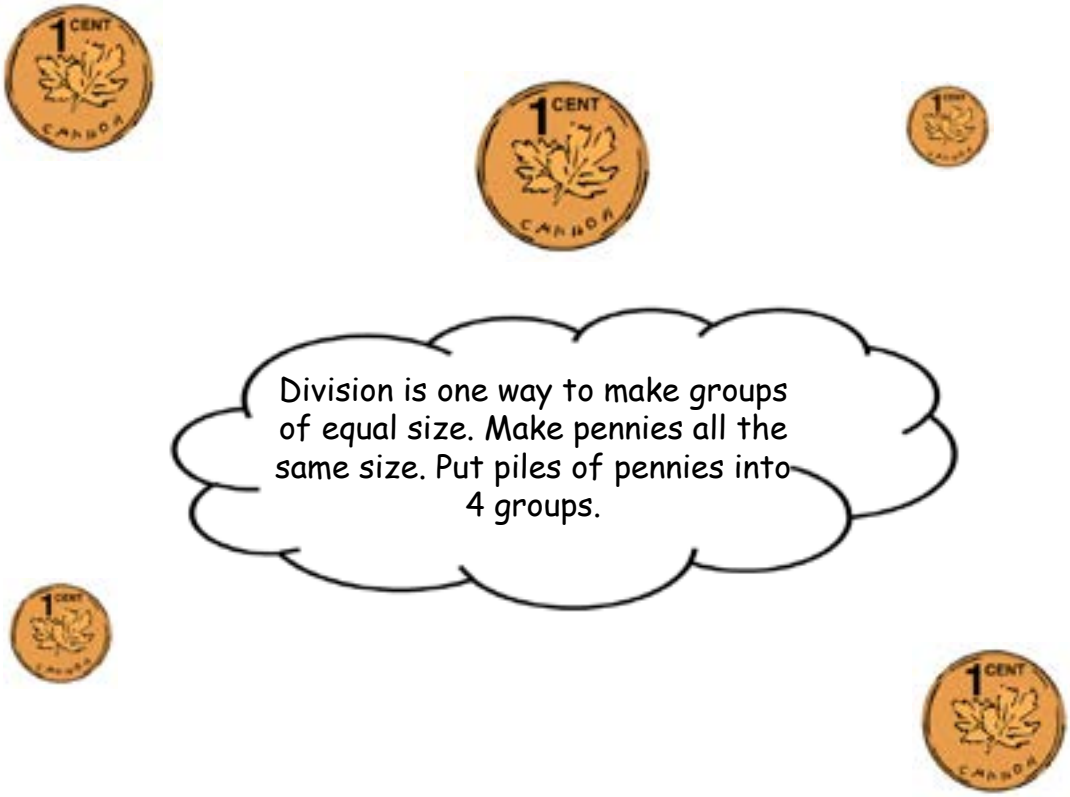
Let's Talk About It

- How did you find the total items for 30 packages?
- Did your strategy to find the total change based on the number of items you had in one package?

Sharing Pennies

Four children collected 627 pennies. They want to share the pennies equally.

1. How many pennies will each child get?
2. How many pennies will be left over?
3. How many more pennies will they need to collect so that they all have the same number and no pennies are left over?



Division is one way to make groups of equal size. Make pennies all the same size. Put piles of pennies into 4 groups.

Let's Talk About It

- How did you solve the problem?
- How else could you have solved the problem?

Finding Equivalent Fractions

1. Have your child find examples of fractions in your home. For example, use the apple example below.
2. Ask your child to name an equivalent fraction to the fraction they found.

For example:

Apples are 6/12 or 1/2

There are 12 pieces of fruit and of those 12; there are 6 apples, so the fraction is six-twelfths written also as 6/12 . This is also $\frac{1}{2}$ because half of the fruit is apples and the other half is made up of different fruit.

Equivalent fractions describe the relationship of the same whole and are expressed with different units. For example 6/12 the unit is twelfths and 1/2 the unit is halves.

Let's Talk About It

- What makes fractions equivalent?

Money Amounts as Decimal

Materials:

- Dice (2 different colours) 
- Dimes
- Pennies

Number of Players: 2

Rules:

1. Decide which colour die is the number of dimes and which is the number of pennies. (e.g. red die – dimes, blue die – pennies)
2. Players take turns rolling both dice at the same time.
3. On the paper attached, players record their money amounts as a decimal number. (e.g. By rolling a 3 red and a 5 blue, a player has 3 dimes and 5 pennies, and records $0.35.)
4. Repeat for 10 rolls.

The player with the largest total amount of money at the end of the game wins.

1 penny can be represented as $0.01
10 pennies is $0.10
23 pennies is $0.23

Let's Talk About It

- How can you double check to see if you have added up the money correctly?

Money Amounts as Decimal

Player 1:

Roll	Number of Dimes	Number of Pennies	Money Amount in $
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
Total			

Money Amounts as Decimal

Player 2:

Roll	Number of Dimes	Number of Pennies	Money Amount in $
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
Total			