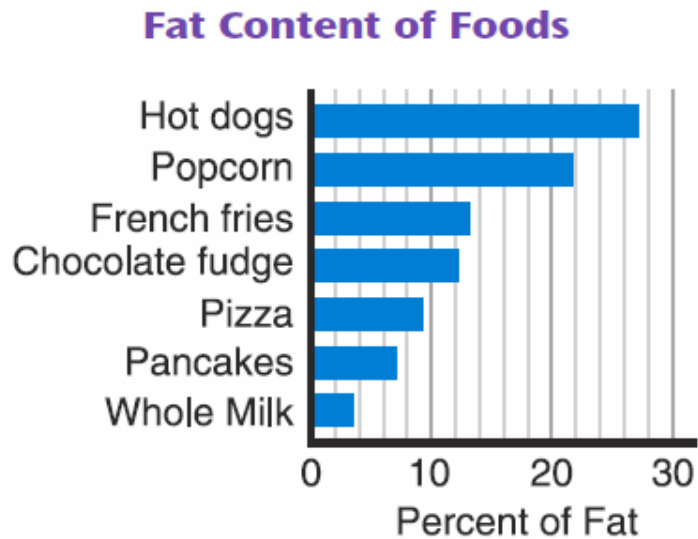
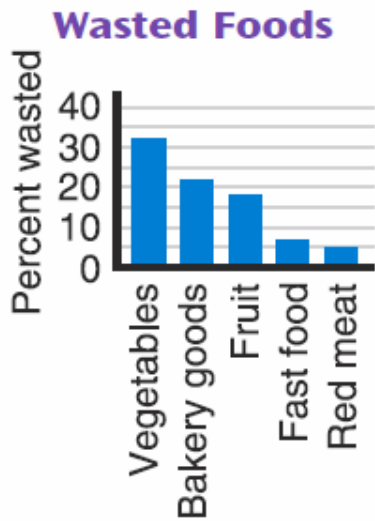
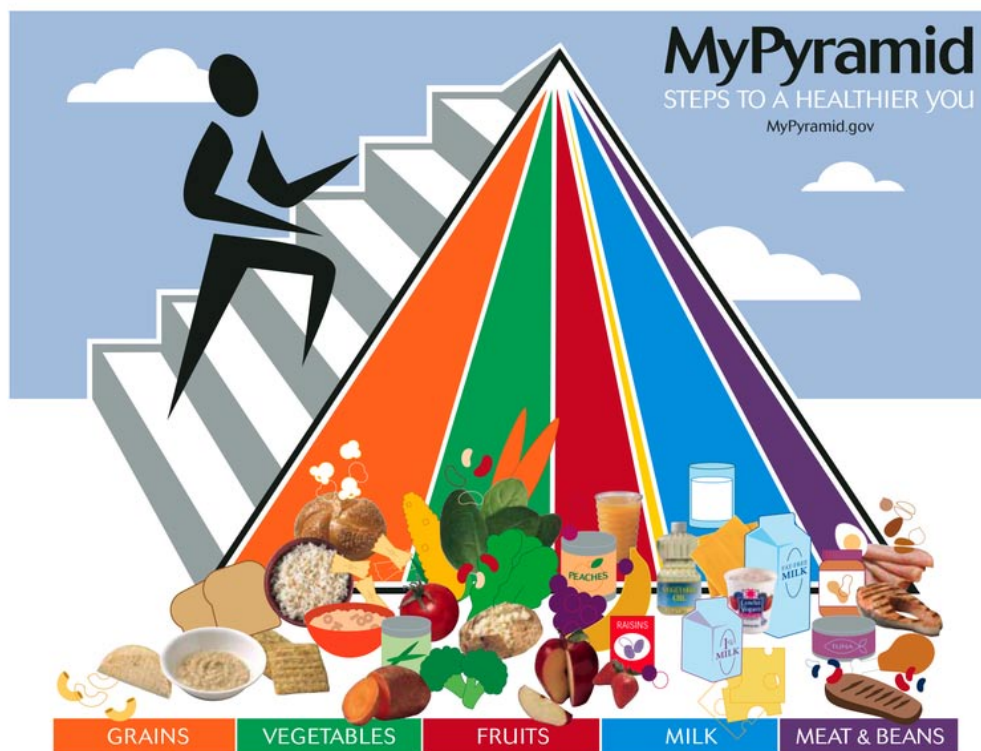


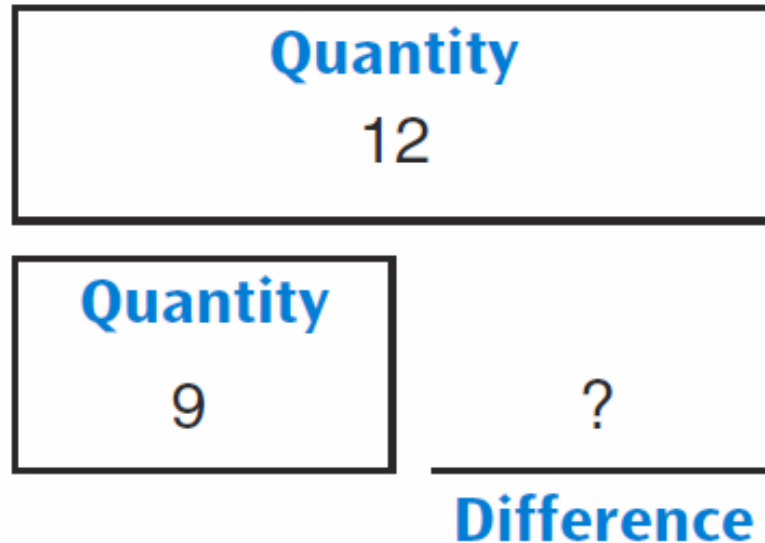
Bar Graph – a graph with horizontal or vertical bars that represent data



Basic Food Groups – 5 basic food groups from which people need to eat in order to stay healthy; these groups are Fruits, Vegetables, Grains, Meat & Beans, and Milk; http://kidshealth.org/kid/stay_healthy/food/pyramid.html



Comparison Diagram – a diagram used to model situation in which two quantities are compared by addition or subtraction



Comparison Number Stories – story problems that involve finding the difference between two separate quantities

What is the difference between the high and low temperature from yesterday?

Data Table – an organized way to show data, or information, in a table

fruit/ vegetables	bread/cereal/ rice/pasta	dairy products	meat/poultry/fish/ beans/eggs/nuts
###	###	### ### ###	

Difference – the result of subtracting one number from another

$$12 - 5 = 7$$

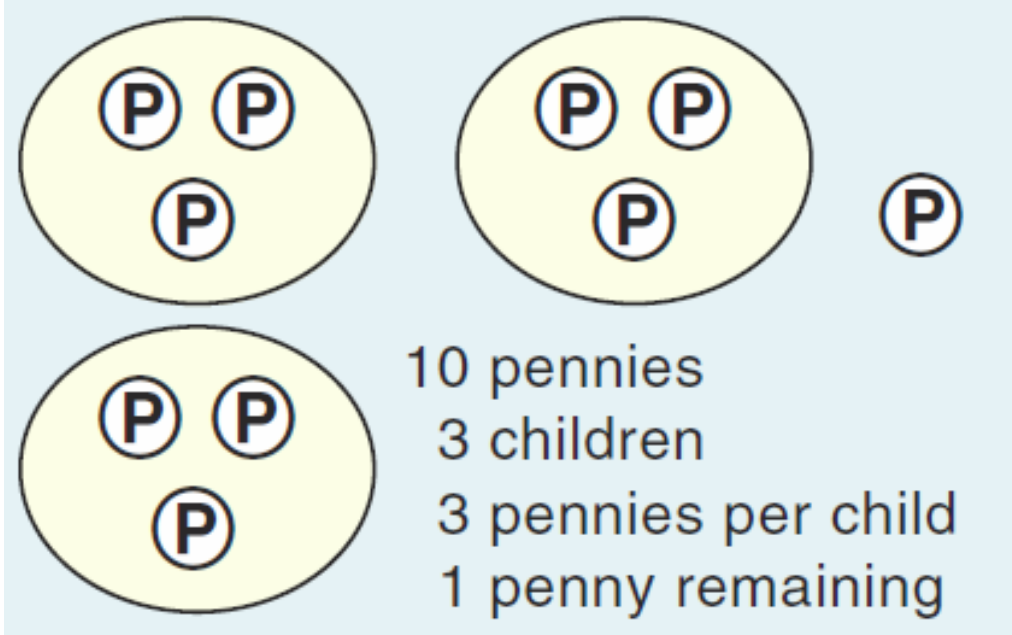
↑

Differences

$$\begin{array}{r} 9 \\ - 6 \\ \hline 3 \end{array}$$

Division – a mathematic operation used to divide objects or numbers among a specific group or number

Divide 10 pennies among 3 children

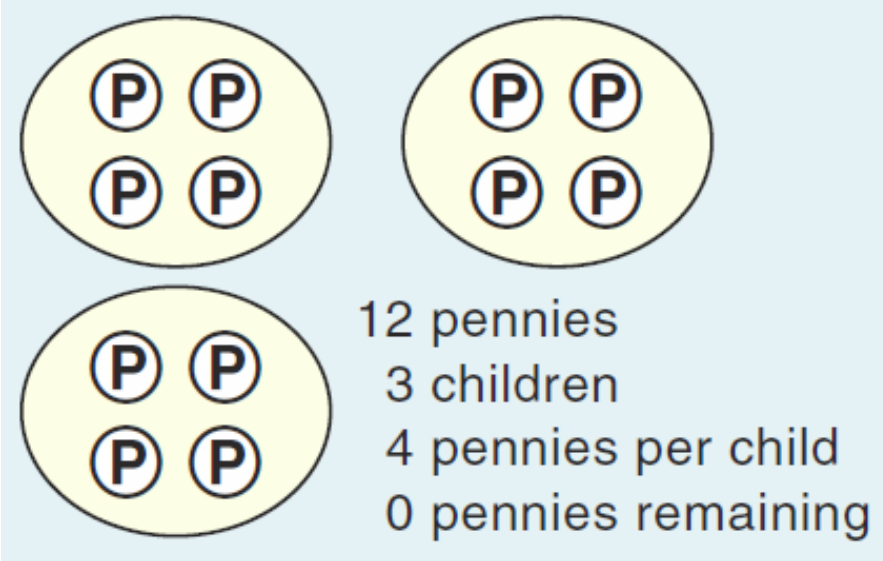


The diagram illustrates the division of 10 pennies among 3 children. It shows three large yellow circles, each containing three pennies (represented by smaller circles with the letter 'P'). A fourth penny is shown outside the circles to the right. To the right of the circles, the following text is displayed:

10 pennies
3 children
3 pennies per child
1 penny remaining

Equal Grouping/Equal Groups/Equal Sharing – dividing a number or a number of objects evenly, without anything left over

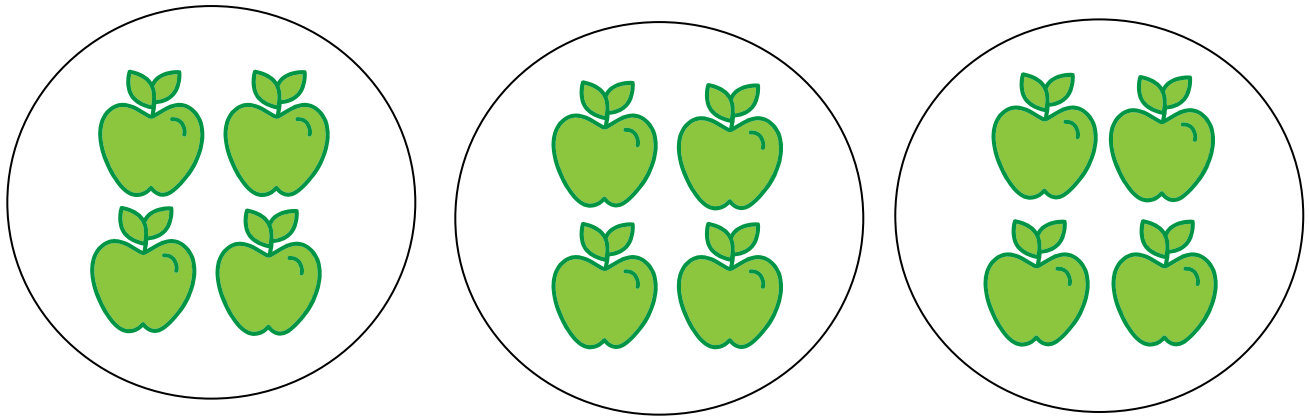
Divide 12 pennies among 3 children



The diagram illustrates the division of 12 pennies among 3 children. It shows three large yellow circles, each containing four pennies (represented by smaller circles with the letter 'P'). To the right of the circles, the following text is displayed:

12 pennies
3 children
4 pennies per child
0 pennies remaining

Multiplication – a method of finding the total number of objects in several equal groups



3 groups of 4 apples = 12 apples

Multiplication/Division Diagram – a diagram used to model situations in which a total number is made up of equal-size groups

rows	chairs per row	chairs in all
15	25	?

Multiplied By/Times – the factor (number) by which a quantity or amount is being multiplied

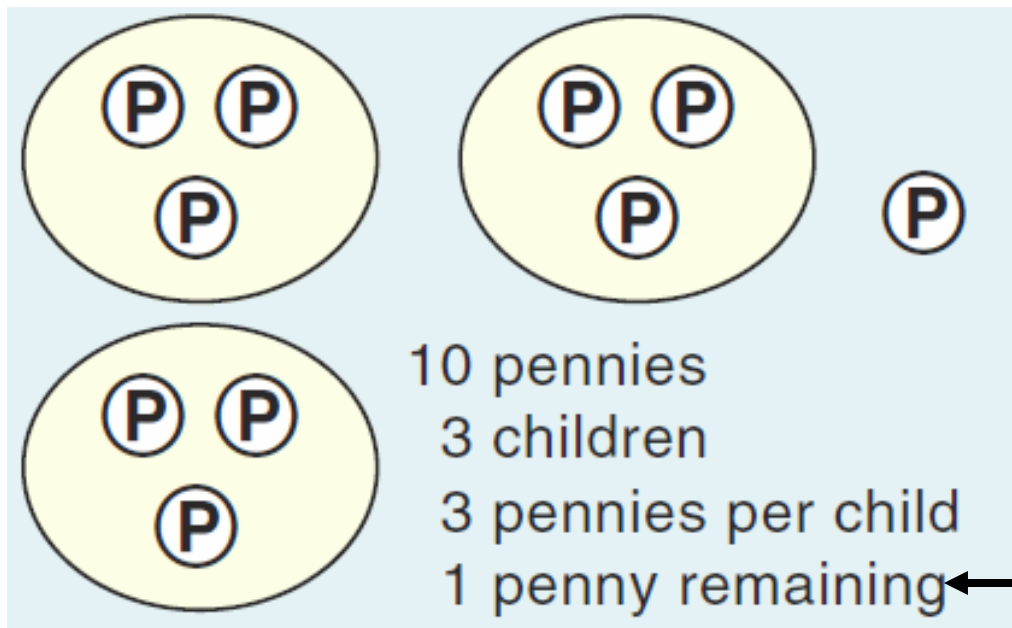
$$5 \times 6 = 30$$

Is read, “*5 times 6 equals 30*”

Or “*5 multiplied by 6 equals 30*”

Remainder – the amount left over when one number is divided by another number.

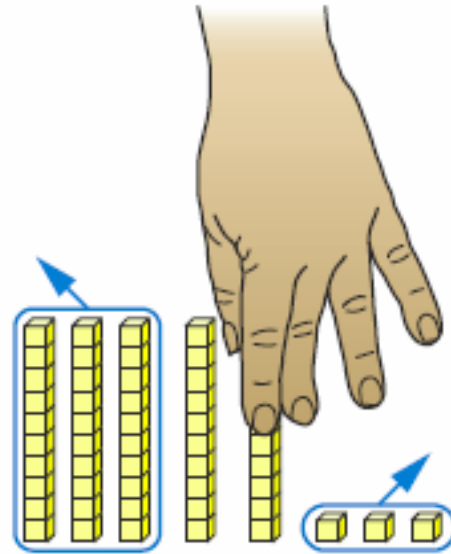
Divide 10 pennies among 3 children



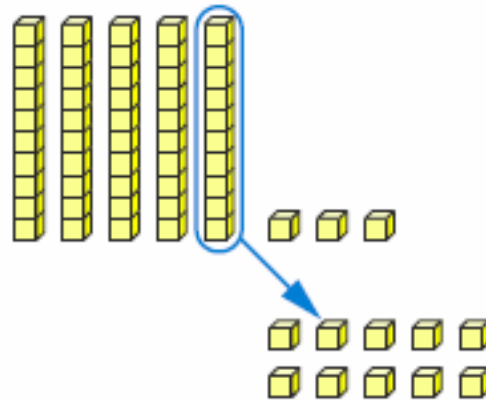
Trade (a base 10 long for 10 cubes) - in subtraction, if there are not enough ones to take away, we need to trade in a base 10 long for 10 cubes

$$\begin{array}{r} 53 \\ -38 \\ \hline ? \end{array}$$

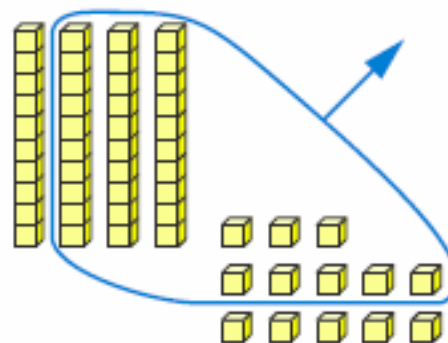
There are only 3 ones, and we need to take away 8.



Trade one long 10 for ten long cubes.



Now, there are 4 long 10s left and 13 ones. We can take away 38 (3 long 10s and 8 cubes).



X-by-Y Array – an arrangement of objects or numbers in a regular pattern of rows and columns

**A telephone has 4 rows of keys, 3 keys in a row.
It makes a 4 by 3 array.**

