Fractional Parts of a Number
Family Activity

M&Ms and the Double Number Line
This activity uses M&Ms and a double number line to learn about fractions.

Materials:
- 36 M&Ms (12 brown, 6 red, 2 green, 9 yellow, 3 orange, and 4 blue)
- Pencil
- Copy of pages 2 and 3

Directions for Parents: (Use with pages 2 and 3)

1. Have your child separate the M&Ms by color and record the number of each color on page 2.

2. Have your child determine the fraction of M&Ms represented by each color and record his or her answers on the double number line on page 2.

3. Have your child determine the answers to problem 3 by using the double number line from problem 2.

4. Place all of the M&Ms in a container. Tell your child that you are going to eat six of the M&Ms, but do not tell how many of each color you eat. (Eat 2 brown M&Ms, 1 red M&M, and 3 yellow M&Ms.) Have your child determine the number of remaining M&Ms for each color using the fraction clues and double number line on page 3. Have your child count the M&Ms to check his or her answers.

5. Have your child determine the answers to problem 5 by using the double number line from problem 4.

6. Place all of the M&Ms in a container. Tell your child that you are going to eat more M&Ms, but do not tell how many or which colors. (Eat 2 brown and 4 red M&Ms.) Have your child determine the total number of M&Ms by using the clues and double number line on page 3. Have your child count the M&Ms to check his or her answer.

7. See pages 4 and 5 for answers and explanations to the problems from pages 2 and 3.

8. Start with a new package of M&Ms and create problems for your family to solve using a double number line.

M&Ms and the Double Number Line

1. How many M&Ms do you have of each color? Record your answers below.

_____ brown _____ red _____ green _____ yellow _____ orange _____ blue

2. What fraction of the M&Ms is each color? Use the double number line below to help you. Record your answers on the double number line.

3. Use your double number line to help you answer the following questions.

How many M&Ms would you have if you were given $\frac{2}{3}$ of them? _____

How many M&Ms would you have if you were given $\frac{5}{6}$ of them? _____

How many M&Ms would you have if you were given $\frac{7}{36}$ of them? _____

How many M&Ms would you have if you were given $\frac{1}{2}$ of them? _____

4. Someone eats six M&Ms, but you do not know which colors have been eaten. You do know that there are now 30 M&Ms (36 – 6 = 30). The fraction that represents each color of the remaining M&Ms is given below. Use the double number line to determine how many M&Ms of each color remains.

$\frac{1}{3}$ brown $\frac{1}{6}$ red $\frac{1}{15}$ green $\frac{1}{5}$ yellow $\frac{1}{10}$ orange $\frac{4}{30}$ blue

How many of the M&Ms of each color do you have? Record your answers below. Count the M&Ms to check your answers.

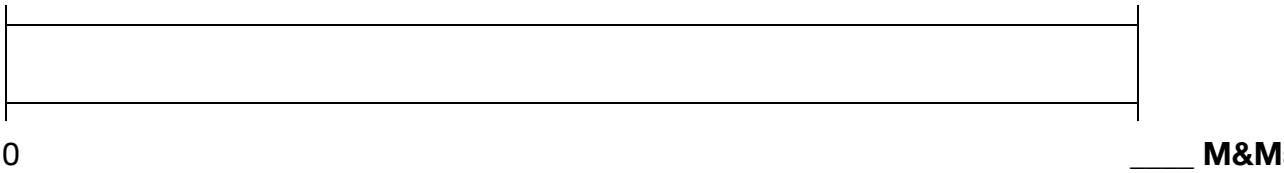
_____ brown _____ red _____ green _____ yellow _____ orange _____ blue

5. Use your double number line to help you answer the following questions.

You are given 18 M&Ms. What fraction of all the M&Ms is that? _____

You are given 21 M&Ms. What fraction of all the M&Ms is that? _____

6. Someone eats more M&Ms, but you do not know how many. You know that there are now 8 brown M&Ms and that $\frac{1}{3}$ of the remaining M&Ms are brown. Use the double number line below to determine how many M&Ms remain in the container. Count the M&Ms to check your answer.

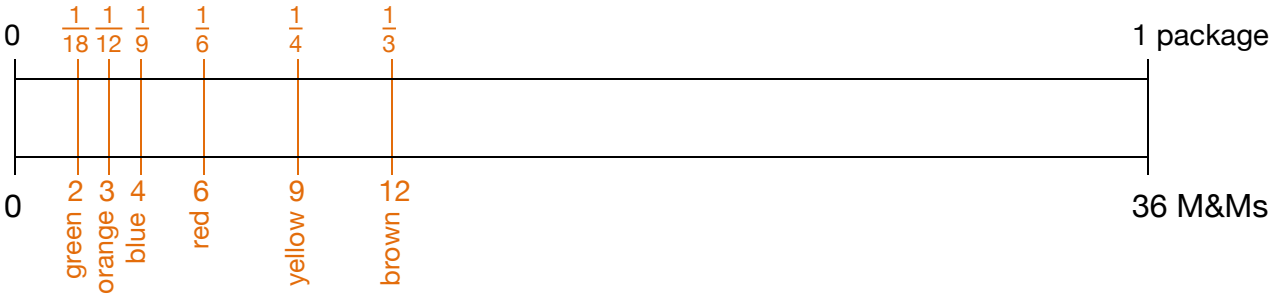


M&Ms and the Double Number Line
Answers and Explanations

1. How many M&Ms do you have of each color? Record your answers below.

12 brown 6 red 2 green 9 yellow 3 orange 4 blue

2. What fraction of the M&Ms is each color? Use the double number line below to help you. Record your answers on the double number line.



3. Use your double number line to help you answer the following questions.

How many M&Ms would you have if you were given $\frac{2}{3}$ of them? 24

Two thirds of the M&Ms is twice as many as $\frac{1}{3}$ of the M&Ms. 12 x 2 = 24

How many M&Ms would you have if you were given $\frac{5}{6}$ of them? 30

Five sixths of the M&Ms is 5 times as many as $\frac{1}{6}$ of the M&Ms. 5 x 6 = 30

How many M&Ms would you have if you were given $\frac{7}{36}$ of them? 7

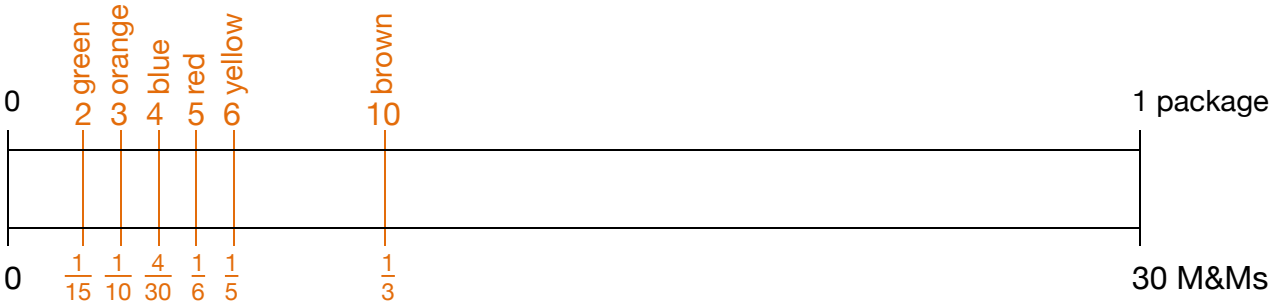
Seven thirty-sixths of the M&Ms is 7 M&Ms out of 36 M&Ms.

How many M&Ms would you have if you were given $\frac{1}{2}$ of them? 18

One half of the M&Ms is half of 36 M&Ms. 36 ÷ 2 = 18

4. Someone eats six M&Ms, but you do not know which colors have been eaten. You do know that there are now 30 M&Ms (36 – 6 = 30). The fraction that represents each color of M&M is given below. Use the double number line to determine how many M&Ms of each color remains.

$\frac{1}{3}$ brown $\frac{1}{6}$ red $\frac{1}{15}$ green $\frac{1}{5}$ yellow $\frac{1}{10}$ orange $\frac{4}{30}$ blue



How many of the M&Ms of each color do you have? Record your answers below. Count the M&Ms to check your answers.

10 brown 5 red 2 green 6 yellow 3 orange 4 blue

5. Use your double number line to help you answer the following questions.

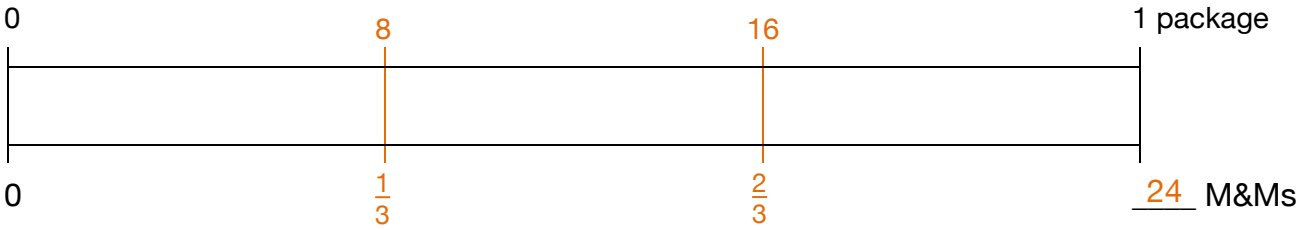
You are given 18 M&Ms. What fraction of all the M&Ms is that? $\frac{3}{5}$

Six M&Ms equal $\frac{1}{5}$. Eighteen is 3 times as much, so 18 M&Ms is equal to $\frac{3}{5}$.

You are given 21 M&Ms. What fraction of all the M&Ms is that? $\frac{7}{10}$

Three M&Ms equal $\frac{1}{10}$. Twenty-one is 7 times as much, so 21 M&Ms is equal to $\frac{7}{10}$.

6. Someone eats more M&Ms, but you do not know how many. You know that there are now 8 brown M&Ms and $\frac{1}{3}$ of the remaining M&Ms are brown. Use the double number line below to determine how many M&Ms remain in the container. Count the M&Ms to check your answer.



If 8 are equal to $\frac{1}{3}$ of the M&Ms, $\frac{3}{3}$ is three times as many or 24 M&Ms.