Dear Family,

During the next few weeks, our math class will be learning about fractions. We will learn to identify, read, and write fractions as part of a whole and as part of a group.

You can expect to see homework that provides practice with fractions.

Here is a sample of how your child will be taught to use unit fractions to find a fractional part of a group.

**MODEL** Find How Many in a Fractional Part of a Group

This is how we will be finding how many are in a fractional part of a group.

**STEP 1**
Find $\frac{1}{3}$ of 9.
Put 9 counters on your MathBoard.

**STEP 2**
Since you want to find $\frac{1}{3}$ of the group, there should be 3 equal groups.

**STEP 3**
Circle one of the groups to show $\frac{1}{3}$. Then count the number of counters in that group.

There are 3 counters in 1 group.

So, $\frac{1}{3}$ of 9 = 3.

**Activity**

Display a group of 12 objects, such as crayons. Have your child find fractional parts of the group by counting objects in equal groups. Ask your child to find these fractional groups of 12: $\frac{1}{2}$ (6), $\frac{1}{3}$ (4), $\frac{1}{4}$ (3), $\frac{1}{6}$ (2).
Querida familia,

Durante las próximas semanas, en la clase de matemáticas aprenderemos sobre las fracciones. Aprenderemos a identificar, leer y escribir fracciones como parte de un todo y como parte de un grupo.

Llevaré a la casa tareas que sirven para practicar las fracciones.

Este es un ejemplo de la manera como aprenderemos a usar fracciones para hallar una parte fraccionaria de un grupo.

MODELO Hallar cuántos hay en una parte fraccionaria de un grupo

Así es como hallaremos cuántos hay en una parte fraccionaria de un grupo.

PASO 1
Halla $\frac{1}{3}$ de 9.
Coloca 9 fichas en el MathBoard.

PASO 2
Como quieres hallar $\frac{1}{3}$ del grupo, debe haber 3 grupos iguales.

PASO 3
Encierra en un círculo uno de los grupos para mostrar $\frac{1}{3}$. Luego cuenta la cantidad de fichas en el grupo.

Hay 3 fichas en 1 grupo. Por lo tanto, $\frac{1}{3}$ de 9 = 3.

Actividad

Muestre un grupo de 12 objetos, como crayolas. Pida a su hijo que halle las partes fraccionarias del grupo contando objetos en grupos iguales. Luego, pídale que halle estos grupos fraccionarios de 12: $\frac{1}{2}$ (6), $\frac{1}{3}$ (4), $\frac{1}{4}$ (3), $\frac{1}{6}$ (2).

Vocabulario

denominador: La parte de una fracción que está debajo de la barra y que indica cuántas partes iguales hay en el entero o en el grupo

partes iguales: Las partes que son exactamente del mismo tamaño

fracción: Un número que representa una parte de un todo o una parte de un grupo

numerador: La parte de una fracción que está arriba de la barra y que indica cuántas partes iguales del entero se están tomando en cuenta

fracción unitaria: Una fracción que se refiere a 1 parte igual de un entero. Tiene un 1 en la parte de arriba o numerador.
Equal Parts of a Whole

Write the number of equal parts. Then write the name for the parts.

1. $\bigcirc$
   
   $\underline{4}$ equal parts
   
   fourths

2. $\square$
   
   $\underline{3}$ equal parts
   

3. $\square$
   
   $\underline{4}$ equal parts
   

4. $\square$
   
   $\underline{6}$ equal parts

Write whether the shape is divided into equal parts or unequal parts.

5. $\triangle$
   
   $\underline{3}$ parts

6. $\triangle$
   
   $\underline{6}$ parts

Problem Solving

7. Diego cuts a round pizza into eight equal slices. What is the name for the parts?
   
   _______________

8. Madison is making a place mat. She divides it into 6 equal parts to color. What is the name for the parts?
   
   _______________
Lesson Check (MACC.3.NF.1.1)

1. How many equal parts are in this shape?

   ![Shape]

   A 3
   B 4
   C 5
   D 6

2. What is the name for the equal parts of the whole?

   ![Shape]

   A fourths
   B sixths
   C eighths
   D thirds

Spiral Review (MACC.3.OA.1.3, MACC.3.OA.3.7)

3. Use a related multiplication fact to find the quotient. (Lesson 6.8)

   \[49 \div 7 = \_\_\_\_\_\_\_\]

   A 6
   B 7
   C 8
   D 9

4. Find the unknown factor and quotient. (Lesson 6.8)

   \[9 \times \_\_\_\_ = 45\]

   \[45 \div 9 = \_\_\_\_\_\]

   A 4
   B 5
   C 6
   D 7

5. There are 5 pairs of socks in one package. Matt buys 3 packages of socks. How many pairs of socks in all does Matt buy? (Lesson 4.2)

   A 30
   B 15
   C 10
   D 8

6. Mrs. McCarr buys 9 packages of markers for an art project. Each package has 10 markers. How many markers in all does Mrs. McCarr buy? (Lesson 4.2)

   A 10
   B 19
   C 81
   D 90
Equal Shares

For 1–2, draw lines to show how much each person gets. Write the answer.

1. 6 friends share 3 sandwiches equally.

   ![Diagram of six sandwiches divided into six equal parts]

   3 sixths of a sandwich

2. 8 classmates share 4 pizzas equally.

   ![Diagram of four pizzas divided into eight equal parts]

3. 4 teammates share 5 granola bars equally.
   Draw to show how much each person gets. Shade the amount that one person gets. Write the answer.

   ![Diagram of five granola bars divided into four equal parts]

Problem Solving

4. Three brothers share 2 sandwiches equally. How much of a sandwich does each brother get?

5. Six neighbors share 4 pies equally. How much of a pie does each neighbor get?
Lesson Check  (MACC.3.NF.1.1)
1. Two friends share 3 fruit bars equally. How much does each friend get?
   
   A 1 half  
   B 2 thirds  
   C 2 halves  
   D 3 halves

2. Four brothers share 3 pizzas equally. How much of a pizza does each brother get?
   
   A 3 halves  
   B 4 thirds  
   C 3 fourths  
   D 2 fourths

Spiral Review  (MACC.3.OA.1.3, MACC.3.OA.3.7, MACC.3.NBT.1.2)
3. Find the quotient. (Lesson 7.4)
   
   $3\overline{)27}$
   
   A 6  
   B 7  
   C 8  
   D 9

4. Tyrice put 4 cookies in each of 7 bags. How many cookies in all did he put in the bags? (Lesson 4.5)
   
   A 11  
   B 28  
   C 32  
   D 40

5. Ryan earns $5 per hour raking leaves. He earned $35. How many hours did he rake leaves? (Lesson 7.3)
   
   A 5 hours  
   B 6 hours  
   C 7 hours  
   D 35 hours

6. Hannah has 229 horse stickers and 164 kitten stickers. How many more horse stickers than kitten stickers does Hannah have? (Lesson 1.10)
   
   A 45  
   B 65  
   C 145  
   D 293
Write the number of equal parts in the whole. Then write the fraction that names the shaded part.

1. [Diagram of 6 equal parts]
   - 6 equal parts
   - \( \frac{1}{6} \)

2. [Diagram of 3 equal parts]
   - ______ equal parts

3. [Diagram of 4 equal parts]
   - ______ equal parts

4. [Diagram of 2 equal parts]
   - ______ equal parts

Draw a picture of the whole.

5. \( \frac{1}{3} \) is [Diagram of a triangle divided into 3 parts with one part shaded]

6. \( \frac{1}{8} \) is [Diagram of a square divided into 8 parts with one part shaded]

Problem Solving

7. Tyler made a pan of cornbread. He cut it into 8 equal pieces and ate 1 piece. What fraction of the cornbread did Tyler eat?
   - ______

8. Anna cut an apple into 4 equal pieces. She gave 1 piece to her sister. What fraction of the apple did Anna give to her sister?
   - ______
Lesson Check (MACC.3.NF.1.1)

1. What fraction names the shaded part?

- A $\frac{1}{3}$
- B $\frac{1}{4}$
- C $\frac{1}{6}$
- D $\frac{1}{8}$

2. Tasha cut a fruit bar into 3 equal parts. She ate 1 part. What fraction of the fruit bar did Tasha eat?

- A $\frac{1}{2}$
- B $\frac{1}{3}$
- C $\frac{1}{4}$
- D $\frac{1}{6}$

Spiral Review (MACC.3.OA.1.3, MACC.3.OA.2.5, MACC.3.MD.2.3)

3. Alex has 5 lizards. He divides them equally among 5 cages. How many lizards does Alex put in each cage? (Lesson 6.9)

- A 0
- B 1
- C 5
- D 10

4. Find the product. (Lesson 3.7)

$8 \times 1 = \underline{}$

- A 0
- B 1
- C 8
- D 9

5. Leo bought 6 chew toys for his new puppy. Each chew toy cost $4. How much did Leo spend in all for the chew toys? (Lesson 4.1)

- A $10$
- B $12$
- C $18$
- D $24$

6. Lilly is making a picture graph. Each picture of a star is equal to two books she has read. The row for the month of December has 3 stars. How many books did Lilly read during the month of December? (Lesson 2.2)

- A 3
- B 5
- C 6
- D 9
Fractions of a Whole

Write the fraction that names each part. Write a fraction in words and in numbers to name the shaded part.

1. Each part is \( \frac{1}{6} \).

   \( \frac{3}{6} \)

   \( \text{three sixthths} \)

2. Each part is \( \frac{1}{8} \).

3. Each part is \( \frac{1}{3} \).

4. Each part is \( \frac{1}{4} \).

Shade the fraction circle to model the fraction. Then write the fraction in numbers.

5. four out of six

   \( \frac{4}{6} \)

6. eight out of eight

   \( \frac{8}{8} \)

Problem Solving

7. Emma makes a poster for the school’s spring concert. She divides the poster into 8 equal parts. She uses two of the parts for the title. What fraction of the poster does Emma use for the title?

   \( \frac{2}{8} \)

8. Lucas makes a flag. It has 6 equal parts. Five of the parts are red. What fraction of the flag is red?

   \( \frac{5}{6} \)
Lesson Check  (MACC.3.NF.1.1)

1. What fraction names the shaded part?

   A $\frac{4}{6}$  
   B $\frac{2}{4}$  
   C $\frac{4}{8}$  
   D $\frac{2}{6}$

2. What fraction names the shaded part?

   A one fourth  
   B one third  
   C three fourths  
   D four thirds

Spiral Review  (MACC.3.OA.3.7, MACC.3.NBT.1.2, MACC.3.MD.2.3)

3. Sarah biked for 115 minutes last week. Jennie biked for 89 minutes last week. How many minutes in all did the girls bike? (Lesson 1.7)

   A 26 minutes  
   B 194 minutes  
   C 204 minutes  
   D 294 minutes

4. Harrison made a building using 124 blocks. Greyson made a building using 78 blocks. How many more blocks did Harrison use than Greyson did? (Lesson 1.10)

   A 46  
   B 56  
   C 154  
   D 202

5. Von bought a bag of 24 dog treats. He gives his puppy 3 treats a day. How many days will the bag of dog treats last? (Lesson 7.4)

   A 3 days  
   B 6 days  
   C 8 days  
   D 21 days

6. How many students chose swimming? (Lesson 2.2)

   A 5  
   B 10  
   C 20  
   D 25

Favorite Activity

<table>
<thead>
<tr>
<th>Activity</th>
<th>Votes</th>
</tr>
</thead>
<tbody>
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<td>Skating</td>
<td>10</td>
</tr>
<tr>
<td>Swimming</td>
<td>20</td>
</tr>
<tr>
<td>Biking</td>
<td>25</td>
</tr>
</tbody>
</table>

Key: Each ☺ = 5 votes.
Fractions on a Number Line

Use fraction strips to help you complete the number line. Then locate and draw a point for the fraction.

1. $\frac{1}{3}$

   - [Diagram of a number line with $\frac{1}{3}$ marked between 0 and $\frac{2}{3}$]

2. $\frac{3}{4}$

   - [Diagram of a number line with $\frac{1}{4}$ marked between 0 and $\frac{3}{4}$]

Write the fraction that names the point.

3. point A
4. point B
5. point C

Problem Solving

6. Jade ran 6 times around her neighborhood to complete a total of 1 mile. How many times will she need to run to complete $\frac{5}{6}$ of a mile?

7. A missing fraction on a number line is located exactly halfway between $\frac{3}{6}$ and $\frac{5}{6}$. What is the missing fraction?
Lesson Check  (MACC.3.NF.1.2a, MACC.3.NF.1.2b)

1. Which fraction names point $G$ on the number line?

   $0 \quad |\quad 1$

   $0 \quad \frac{4}{4} \quad \frac{5}{4} \quad \frac{6}{4} \quad 1$

   (A) $\frac{4}{4}$  (C) $\frac{5}{4}$
   (B) $\frac{1}{4}$  (D) $\frac{2}{4}$

2. Which fraction names point $R$ on the number line?

   $0 \quad |\quad 1$

   $0 \quad \frac{3}{3} \quad \frac{4}{3} \quad \frac{5}{3} \quad 1$

   (A) $\frac{1}{3}$  (C) $\frac{3}{3}$
   (B) $\frac{2}{3}$  (D) $\frac{2}{2}$

Spiral Review  (MACC.3.OA.2.5, MACC.3.OA.3.7, MACC.3.NF.1.1)

3. Each table in the cafeteria can seat 10 students. How many tables are needed to seat 40 students? (Lesson 7.2)

   (A) 10  (C) 5
   (B) 8  (D) 4

4. Which is an example of the Commutative Property of Multiplication? (Lesson 3.6)

   (A) $6 \times 1 = 6 \times 1$
   (B) $4 + 9 = 4 \times 9$
   (C) $4 \times 9 = 9 \times 4$
   (D) $6 \times 3 = 2 \times 9$

5. Pedro shaded part of a circle. Which fraction names the shaded part? (Lesson 8.4)

   (A) $\frac{1}{8}$  (C) $\frac{7}{8}$
   (B) $\frac{1}{7}$  (D) $\frac{8}{7}$

6. Which is true? (Lesson 6.9)

   (A) $8 \div 1 = 8$
   (B) $8 \div 8 = 8$
   (C) $8 \times 0 = 8$
   (D) $1 = 8 \times 1$
Relate Fractions and Whole Numbers

Use the number line to find whether the two numbers are equal. Write equal or not equal.

1. $\frac{0}{6}$ and $1$

2. $1$ and $\frac{6}{6}$

3. $\frac{1}{6}$ and $\frac{6}{6}$

Each shape is 1 whole. Write a fraction greater than 1 for the parts that are shaded.

4. 

5. 

6. 

7. 

Problem Solving

8. Rachel jogged along a trail that was $\frac{1}{4}$ of a mile long. She jogged along the trail 8 times. How many miles did Rachel jog in all?

9. Jon ran around a track that was $\frac{1}{8}$ of a mile long. He ran around the track 24 times. How many miles did Jon run in all?
Lesson Check  (MACC.3.NF.1.3c)

1. Each shape is 1 whole. Which fraction greater than 1 names the parts that are shaded?

- [Image of three shaded circles]
  - A $\frac{6}{18}$
  - B $\frac{3}{6}$
  - C $\frac{6}{3}$
  - D $\frac{18}{6}$

2. Each shape is 1 whole. Which fraction greater than 1 names the parts that are shaded?

- [Image of three shaded circles]
  - A $\frac{8}{2}$
  - B $\frac{16}{8}$
  - C $\frac{8}{16}$
  - D $\frac{2}{8}$


3. Tara has 598 pennies and 231 nickels. How many pennies and nickels does she have in all? (Lesson 1.7)

\[
\begin{array}{c}
598 \\
+ 231 \\
\hline
\end{array}
\]

- A 719
- B 729
- C 819
- D 829

4. Dylan read 6 books. Kylie read double the number of books that Dylan read. How many books did Kylie read? (Lesson 4.1)

- A 4
- B 8
- C 12
- D 14

5. Alyssa divides a granola bar into halves. How many equal parts are there? (Lesson 8.1)

- A 2
- B 3
- C 4
- D 6

6. There are 4 students in each small reading group. If there are 24 students in all, how many reading groups are there? (Lesson 7.5)

- A 5
- B 6
- C 7
- D 8
Fractions of a Group

Write a fraction to name the shaded part of each group.

1. \[
\begin{array}{c c c c c c c}
\text{△} & \text{△} & \text{△} & \text{△} & \text{△} & \text{△} & \text{△} \\
\end{array}
\]
\[
\frac{6}{8}
\]

2. \[
\begin{array}{c c c c c c}
\text{★} & \text{★} & \text{★} & \text{★} & \text{★}
\end{array}
\]

Write a whole number and a fraction greater than 1 to name the part filled. Think: 1 container = 1

3. \[
\begin{array}{c c c c c c c c c c c c}
\text{.Circle} & \text{.Circle} & \text{.Circle} & \text{.Circle} & \text{.Circle} & \text{.Circle} & \text{.Circle} & \text{.Circle} & \text{.Circle} & \text{.Circle} & \text{.Circle} & \text{.Circle}
\end{array}
\]

4. \[
\begin{array}{c c c}
\text{Container} & \text{Container} & \text{Container}
\end{array}
\]

Draw a quick picture. Then, write a fraction to name the shaded part of the group.

5. Draw 4 circles.
   Shade 2 circles.

6. Draw 6 circles.
   Make 3 groups.
   Shade 1 group.

Problem Solving

7. Brian has 3 basketball cards and 5 baseball cards. What fraction of Brian’s cards are baseball cards?

8. Sophia has 3 pink tulips and 3 white tulips. What fraction of Sophia’s tulips are pink?
Lesson Check (MACC.3.NF.1.1)

1. What fraction of the group is shaded?

A \( \frac{5}{3} \)  
B \( \frac{5}{8} \)  
C \( \frac{3}{5} \)  
D \( \frac{3}{8} \)

2. What fraction of the group is shaded?

A \( \frac{1}{4} \)  
B \( \frac{1}{2} \)  
C \( \frac{2}{4} \)  
D \( \frac{4}{1} \)

Spiral Review (MACC.3.OA.1.3, MACC.3.OA.3.7, MACC.3.NBT.1.2)

3. Which number sentence does the array represent? (Lesson 4.5)

A \( 4 \times 7 = 28 \)  
B \( 3 \times 8 = 24 \)  
C \( 3 \times 7 = 21 \)  
D \( 3 \times 6 = 18 \)

4. Juan has 436 baseball cards and 189 football cards. How many more baseball cards than football cards does Juan have? (Lesson 1.10)

A 625  
B 353  
C 347  
D 247

5. Sydney bought 3 bottles of glitter. Each bottle of glitter cost $6. How much did Sydney spend in all on the bottles of glitter? (Lesson 4.3)

A $24  
B $18  
C $12  
D $9

6. Add. (Lesson 1.7)

\[
\begin{align*}
262 & \quad + \quad 119 \\
\hline
\end{align*}
\]

A 143  
B 371  
C 381  
D 481
Find Part of a Group
Using Unit Fractions

Circle equal groups to solve. Count the number of items in 1 group.

1. \( \frac{1}{4} \) of 12 = 3

2. \( \frac{1}{8} \) of 16 =

3. \( \frac{1}{3} \) of 12 =

4. \( \frac{1}{3} \) of 9 =

5. \( \frac{1}{6} \) of 18 =

6. \( \frac{1}{2} \) of 4 =

7. Marco drew 24 pictures. He drew \( \frac{1}{6} \) of them in art class. How many pictures did Marco draw in art class?

8. Caroline has 16 marbles. One eighth of them are blue. How many of Caroline’s marbles are blue?
Lesson Check  (MACC.3.NF.1.1)

1. Ms. Davis made 12 blankets for her grandchildren. One third of the blankets are blue. How many blue blankets did she make?

A 3  C 9  
B 4  D 12

2. Jackson mowed 16 lawns. One fourth of the lawns are on Main Street. How many lawns on Main Street did Jackson mow?

A 4  C 8  
B 6  D 12

Spiral Review  (MACC.3.OA.3.7, MACC.3.NBT.1.1, MACC.3.NBT.1.2)

3. Find the difference. (Lesson 1.10)

509
-175

A 334  
B 374  
C 434  
D 474

4. Find the quotient. (Lesson 7.6)

6)54

A 6  
B 7  
C 8  
D 9

5. There are 226 pets entered in the pet show. What is 226 rounded to the nearest hundred? (Lesson 1.2)

A 200  C 300  
B 220  D 400

6. Ladonne made 36 muffins. She put the same number of muffins on each of 4 plates. How many muffins did she put on each plate? (Lesson 7.5)

A 3  C 9  
B 6  D 12
Problem Solving • Find the Whole Group Using Unit Fractions

Draw a quick picture to solve.

1. Katrina has 2 blue ribbons for her hair. One fourth of all her ribbons are blue. How many ribbons does Katrina have in all?

2. One eighth of Tony’s books are mystery books. He has 3 mystery books. How many books does Tony have in all?

3. Brianna has 4 pink bracelets. One third of all her bracelets are pink. How many bracelets does Brianna have?

4. Ramal filled 3 pages in a stamp album. This is one sixth of the pages in the album. How many pages are there in Ramal’s stamp album?

5. Jeff helped repair one half of the bicycles in a bike shop last week. If Jeff worked on 5 bicycles, how many bicycles did the shop repair in all last week?

6. Layla collects postcards. She has 7 postcards from Europe. Her postcards from Europe are one third of her total collection. How many postcards in all does Layla have?
Lesson Check (MACC.3.NF.1.1)

1. A zoo has 2 male lions. One sixth of the lions are male lions. How many lions are there at the zoo?
   - A 4
   - B 6
   - C 8
   - D 12

2. Max has 5 red model cars. One third of his model cars are red. How many model cars does Max have?
   - A 15
   - B 12
   - C 10
   - D 8

Spiral Review (MACC.3.OA.1.3, MACC.3.NBT.1.1, MACC.3.NBT.1.2, MACC.3.NF.1.1)

3. There are 382 trees in the local park. What is the number of trees rounded to the nearest hundred?
   - A 300
   - B 380
   - C 400
   - D 500

4. The Jones family is driving 458 miles on their vacation. So far, they have driven 267 miles. How many miles do they have left to drive?
   - A 191 miles
   - B 201 miles
   - C 211 miles
   - D 291 miles

5. Ken has 6 different colors of marbles. He has 9 marbles of each color. How many marbles does Ken have in all? (Lesson 4.3)
   - A 15
   - B 45
   - C 54
   - D 63

6. Eight friends share two pizzas equally. How much of a pizza does each friend get? (Lesson 8.2)
   - A 8 halves
   - B 4 eighths
   - C 2 sixths
   - D 2 eighths
Chapter 8 Extra Practice

Lesson 8.1
Write the number of equal parts. Then write the name for the parts.

1. 

___ equal parts

2. 

___ equal parts

3. 

___ equal parts

Lesson 8.2
Draw lines to show how much each person gets. Write the answer.

1. 4 friends share 3 oranges equally.

2. 6 sisters share 4 sandwiches equally.

Lessons 8.3–8.4
Write the number of equal parts in the whole. Write a fraction in words and in numbers to name the shaded part.

1. 

___ equal parts

______ eighthths

2. 

___ equal parts

______ thirds
Lesson 8.5
Write the fraction that names the point.

\[ \begin{array}{cccccc}
0 & \quad & A & \quad & B & \quad & C \\
0 & \quad & \frac{1}{6} & \quad & \frac{2}{6} & \quad & \frac{4}{6} & \quad & \frac{6}{6}
\end{array} \]

1. point A ___  
2. point B ___  
3. point C ___

Lesson 8.6
Each shape is 1 whole. Write a fraction greater than 1 for the parts that are shaded.

1. \[ \quad \]
   \[ \quad \]
   \[ \quad \]
2. \[ \quad \]
   \[ \quad \]
   \[ \quad \]

2 = ___  
3 = _____

Lesson 8.7
Write a fraction to name the shaded part of each group.

1. \[ \quad \]
   \[ \quad \]
   \[ \quad \]
2. \[ \quad \]
   \[ \quad \]
   \[ \quad \]

Lessons 8.8 - 8.9
Draw a quick picture to solve.

1. Charlotte has 12 T-shirts. One fourth of her T-shirts are green. How many of Charlotte’s T-shirts are green?  
2. Josh walks 18 dogs each week. Today, he is walking \( \frac{1}{3} \) of the dogs. How many dogs is he walking today?