1. There are three watermelons in Mitchell’s refrigerator. He is taking them to a picnic where there will be 18 people. If he wants to cut the watermelons into slices so each person gets the same amount, how much of the watermelon will each person get? Solution: Number model:

2. Four friends together bought 126 acres of land to share for farming. They decided to divide the land up equally among the four of them. How much of the land did each person get? Solution: Number model: Explain what you did with the remainder and why.

3. Write a division number story with an answer of $\frac{1}{3}$.

4. Use paper and pencil to solve the problem. Divide the number line below so that it shows sixths. Label the sixths on the number line.

\[\begin{array}{c}
0 & \quad 1 & \quad 2 \\
\end{array}\]
5. Use division, the Fraction Number Lines Poster, or fraction circle pieces to rename the fractions as mixed numbers. 
   a. $\frac{15}{6} =$  
   b. $\frac{16}{5} =$ 

6. Explain how you renamed $\frac{16}{5}$ as a mixed number.

7. Tatyanna said, "I added $\frac{3}{7} + \frac{1}{4}$ and got $\frac{4}{11}$." Does Tatyanna's answer make sense? Explain how you know without calculating an answer.

8. Write a fraction to make each number sentence true. Use your fraction circle pieces or the Fraction Number Lines Poster to help you. 
   a. $\underline{\quad} + \frac{1}{4} > 1$  
   b. $3 - \underline{\quad} > 2 \frac{1}{2}$  
   c. $2 + \underline{\quad} > 2 \frac{1}{2}$  
   d. $1 - \underline{\quad} > \frac{1}{4}$

9. A painter had $1 \frac{1}{4}$ gallons of paint. He used $\frac{3}{4}$ of a gallon to paint a room.
   How much paint does he have left? 
   Number model: Answer: ____ gallon of paint

? / 1 points
10. Zoe is measuring the loss of weight of water in a jar due to evaporation. On Monday she measured the weight of the water and found that it was $6 \frac{1}{4}$ ounces. On Friday she measured the weight of the water and found that it was $4 \frac{3}{4}$ ounces. Zoe told her teacher that the water lost $2 \frac{2}{4}$ ounces of weight between Monday and Friday.  
   a. What mistake did Zoe make?  
   b. How much did weight did the water actually lose from Monday to Friday?  
   Answer: The water lost ____ ounces from Monday to Friday.

11. Solve. Use your fraction circle pieces to help.  
   a. $\frac{1}{4} + \frac{2}{12} = ____$  
   b. $\frac{1}{5} + \frac{3}{10} = ____$

12. What is:  
   a. \( \frac{1}{3} \) of 15? ____  
   b. \( \frac{1}{4} \) of 12? ____  
   c. \( \frac{1}{6} \) of 19? ____  
   d. \( \frac{1}{2} \) of 7? ____

13. Vanessa bought 30 yards of fabric from the craft store. She gave \( \frac{1}{6} \) of the fabric to her cousin.  
   How much fabric did her cousin get?  
   Answer: ____ yards of fabric

14. Write another name for each mixed number that has the same denominator.  
   a. \(3 \frac{3}{4}\) ____  
   b. \(6 \frac{9}{4}\) ____
There will be problems similar to these on the Unit 3 test. Practice problems like these!

1. There are three watermelons in Mitchell's refrigerator. He is taking them to a picnic where there will be 18 people. If he wants to cut the watermelons into slices so each person gets the same amount, how much of the watermelon will each person get? Solution: Number model:

\[
\frac{3}{18} = \frac{3}{18} \text{ of a watermelon}
\]

or

\[
\frac{1}{6} \text{ of a watermelon}
\]

2. Four friends together bought 126 acres of land to share for farming. They decided to divide the land up equally among the four of them. How much of the land did each person get? Solution: Number model: Explain what you did with the remainder and why.

\[
\begin{array}{c}
45126 \\
\underline{-100} \\
\underline{24} \\
\underline{2} \\
\end{array}
\]

Each gets \(31 \frac{2}{4}\) acres (or \(31 \frac{1}{2}\)). Put the remainder as a fraction because you can divide land.

3. Write a division number story with an answer of \(\frac{1}{3}\).

Example: There is one cookie. Three people will share it equally. How much of the cookie will each person get?

4. Use paper and pencil to solve the problem. Divide the number line below so that it shows sixths. Label the sixths on the number line.

The students are only given the 0, 1, and 2 on the number line. Practice this with other fractions too—examples thirds, fourths, eighths, etc.
5. Use division, the Fraction Number Lines Poster, or fraction circle pieces to rename the fractions as mixed numbers. 
   a. \( \frac{15}{6} = \)  
   b. \( \frac{16}{5} = \) 

   a. \( 2 \frac{3}{6} = 2 \frac{1}{2} \)  
   b. \( 3 \frac{1}{5} \)

6. Explain how you renamed \( \frac{16}{5} \) as a mixed number.

   \( 16 \div 5 = 3 \text{ R} 1 \text{ so } 3 \frac{1}{5} \text{ or } \)

7. Tatyanna said, "I added \( \frac{3}{7} + \frac{1}{4} \) and got \( \frac{4}{11} \)." Does Tatyanna's answer make sense? Explain how you know without calculating an answer.

   \( \frac{3}{7} + \frac{1}{4} = \) 

   \( \frac{1}{4} \text{ or } \frac{3}{7} \text{ are about the size of } \frac{4}{11} \text{ already. If you add them, they will be bigger.} \)

8. Write a fraction to make each number sentence true. Use your fraction circle pieces or the Fraction Number Lines Poster to help you.
   a. \( \frac{5}{4} + \frac{1}{4} > 1 \)  
   b. \( 3 - \frac{1}{8} > 2 \frac{1}{2} \)  
   c. \( 2 + \frac{3}{4} > 2 \frac{1}{2} \)  
   d. \( 1 - \frac{1}{4} > \frac{1}{4} \)

9. A painter had \( 1 \frac{1}{4} \) gallons of paint. He used \( \frac{3}{4} \) of a gallon to paint a room.

   How much paint does he have left?  
   Number model:  
   Estimate:  
   Answer: ____ gallon of paint

   \( 1 \frac{1}{4} - \frac{3}{4} = \frac{2}{4} \text{ or } \frac{1}{2} \text{ gallons} \)
Zoe is measuring the loss of weight of water in a jar due to evaporation. On Monday she measured the weight of the water and found that it was $6\frac{1}{4}$ ounces. On Friday she measured the weight of the water and found that it was $4\frac{3}{4}$ ounces. Zoe told her teacher that the water lost $2\frac{2}{4}$ ounces of weight between Monday and Friday.  

a. What mistake did Zoe make?  
b. How much did weight did the water actually lose from Monday to Friday?

Answer: The water lost ___ ounces from Monday to Friday.

She did $\frac{1}{4} - \frac{3}{4} = \frac{2}{4}$ and it doesn't work. Can do $\frac{25}{4} - \frac{19}{4} = \frac{6}{4} = \frac{3}{2} = 1\frac{1}{2}$ or $1\frac{1}{2}$ or $1\frac{1}{4}$ or $\frac{3}{4}$.

Solve. Use your fraction circle pieces to help.  
a. $\frac{1}{4} + \frac{2}{12} =$  
b. $\frac{1}{5} + \frac{3}{10} =$

a) $\frac{1}{4} + \frac{2}{12} = \frac{5}{12}$

b) $\frac{1}{5} + \frac{3}{10} = \frac{5}{12} \times \frac{3}{3} = \frac{5}{10} \times 12$

What is:  
a. $\frac{1}{3}$ of 15?  
b. $\frac{1}{4}$ of 12?  
c. $\frac{1}{6}$ of 19?  
d. $\frac{1}{2}$ of 7?

Vanessa bought 30 yards of fabric from the craft store. She gave $\frac{1}{6}$ of the fabric to her cousin.  

How much fabric did her cousin get? Answer: ___ yards of fabric

$\frac{1}{6}$ of 30

$30 \div 6 = 5$

Write another name for each mixed number that has the same denominator.  
a. $3\frac{3}{4}$  
b. $6\frac{9}{4}$

Examples:  

$2\frac{7}{4}$  

or $1\frac{11}{4}$

$4\frac{17}{4}$

or $1\frac{5}{4}$

$5\frac{13}{4}$

or $3\frac{3}{4}$