

Name _____

Model Division with Remainders**Essential Question** How can you use counters to model division with remainders?**UNLOCK the Problem** REAL WORLD

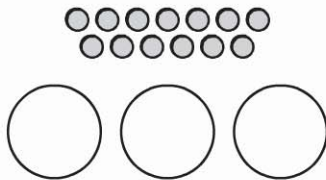
Madison has 13 seeds. She wants to put the same number of seeds in each of 3 pots. How many seeds can Madison put into each pot? How many seeds are left over?

- How do you know how many groups to make?

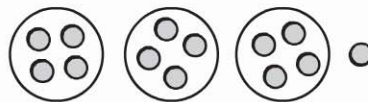
Activity Materials ■ counters

Use counters to find $13 \div 3$.

STEP 1 Use 13 counters. Draw 3 circles for the 3 pots.



STEP 2 Place one counter in each group until there are not enough to put 1 more in each of the groups.



There are _____ counters in each circle.

There is _____ counter left over.

$13 \div 3$ is 4 with 1 left over.

The quotient is 4.

The remainder is 1.

So, Madison can put 4 seeds in each pot. There is 1 seed left over.

After dividing a group of objects into equal groups as large as possible, there may be some left over. The amount left over is called the **remainder**.

Math Talk Explain why you cannot have a remainder of 3 when you divide by 3.

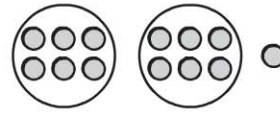
Try This! What if Madison wants to put 4 seeds in each pot. How many pots will Madison need? How many seeds will be left over?

Share and Show



1. Divide 13 counters into 2 equal groups.

There are _____ counters in each group,
and _____ counter left over.



Complete.

2. April divided 17 counters into 4 equal groups.

There were _____ counters in each
group and _____ counter left over.

3. Divide 20 counters into groups of 6.

There are _____ groups and _____
counters left over.

On Your Own

Complete.

4. Divide 14 pencils into 3 equal groups.

There are _____ pencils in each
group and _____ pencils left over.

5. Divide 60 pieces of chalk into groups of 8.

There are _____ groups and _____
pieces of chalk left over.

Find the total number of objects.

6. There are 2 shoes in each of 6 groups and 1 shoe left over.

There are _____ shoes in all.

7. There are 4 apples in each of 3 groups and 2 apples left over.

There are _____ apples in all.

Problem Solving



Use the bar graph for 8.

8. If Hector divides the oak leaves evenly into 4 display boxes, how many leaves will be in each box? How many leaves will be left over?

