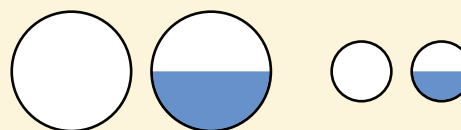


**1.G.3** Partition circles and rectangles into two and four equal shares, describe the shares using the words *halves*, *fourths*, and *quarters*, and use the phrases *half of*, *fourth of*, and *quarter of*. Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares.

### Mechanics

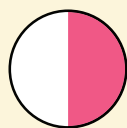
*Teacher Notes: Students need to practice identifying halves and fourths of circles and rectangles of all different sizes. They should discover that one-half of a circle is less than the whole original, and one-fourth is less than one-half of the original. This is true for circles and rectangles of all sizes. However, if one circle is larger than another, its half will be larger than the other circle's half.*



### Example:

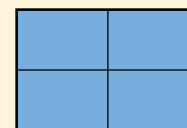
How much of the circle is shaded?

Answer: **half, one-half, a half**

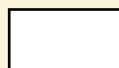


The entire rectangle is shaded. How many fourths are shaded?

Answer: **4 fourths (4 quarters)**



Color one-half of the rectangle.



Possible answers:

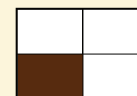


*Students should discover that dividing an object into 4 parts results in smaller shares than dividing it into 2 parts.*

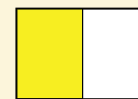
*Think of an object, such as a candy bar or a cake. If 2 children share a cake, they each get a piece that is this big:*



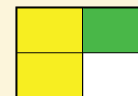
*If 4 children share the same cake, they each get a piece that is this big:*



**Examples:** Fold your paper in half. How many halves are there?  
Color one-half of the paper yellow.



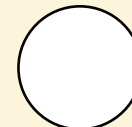
Fold the paper in half the other way. How many fourths are there?  
Color one-fourth of the paper green.



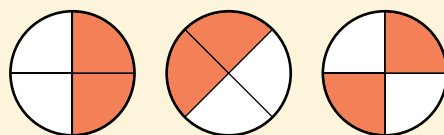
Which is smaller, one-half or one-fourth? Why is it smaller?

Possible Answer: **One-fourth is smaller than one-half because there are more fourths than halves.**

Use lines to divide the circle into quarters. Shade two quarters.



Possible answers:



Which is smaller, a half or a quarter?

Answer: **A quarter is smaller than a half.**

Which is bigger, a fourth or a half?

Answer: **A half is bigger than a fourth.**

Which two mean the same? a half **a quarter** **a fourth**

If we cut the rope in half, will each half be bigger or smaller than the whole rope? What if we cut the rope into fourths? Will each fourth be bigger, smaller, or the same as one-half of the rope?



Answer: **A half is smaller than a whole; a fourth is smaller than a half.**

## Concept Mastery

- ✓ Students are able to show by drawing or using models that a circle or rectangle can be divided into two equal parts (called halves) or four equal parts (called fourths or quarters).
- ✓ Students understand that a whole circle or whole rectangle is the same as 2 halves or 4 fourths or 4 quarters.
- ✓ Students are able to identify and name equal shares, specifically halves and fourths (quarters).
- ✓ Students understand that the more parts a shape is broken into, the smaller the parts will be.

**A link to helpful web resources  
can be found on page 71 of the  
full Level 1 document.**

