Halves and Quarters

Split circles and rectangles into equal shares

Name: _____ Date: _____

Part 1: Make Halves

Listen while your teacher reads a short reminder. Then do the work.

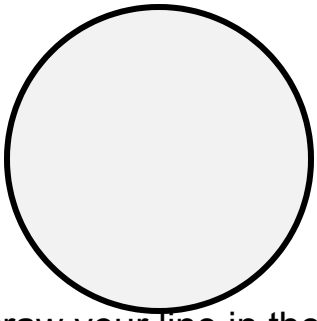


A B C

1. Look at A, B, and C. Write E if the two shares are equal. Write N if they are not equal.

A	B	C

2. Draw one straight line through the center of the circle to make 2 equal shares. Each share is a half.



Draw your line in the circle.

3. The whole circle has _____ equal halves.

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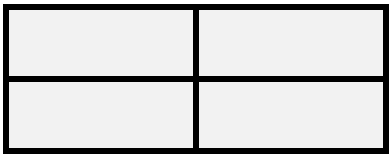
Name: _____ Date: _____

Part 2: Make Quarters

Fourths and quarters are two names for 4 equal shares.



2 equal shares



4 equal shares

4. Draw lines in the rectangle to make 4 equal shares. Write quarter or fourth in each share.



5. Look only at the two equal-sized example rectangles at the top of this page. Circle the word: A half is **larger** / **smaller** than a quarter.

6. Complete the sentences.

One whole is _____ halves.

One whole is _____ quarters.

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Answer Key and Teaching Notes

Materials supplied: equal/unequal partition examples, a blank circle, a blank rectangle, and writing space. **Additionally needed:** pencils and, if desired, a straightedge for students who need help making a straight line.

Setup: Print and supply all student pages, keeping teacher-key pages separate. Give each student a pencil. Display or point to the shapes on Part 1 and Part 2. Do not pre-draw lines in either blank student shape.

Teacher-read script: “A whole is one complete shape. Equal shares are the same size. When a whole is split into 2 equal shares, each share is a half. When a whole is split into 4 equal shares, each share is a fourth, also called a quarter. If the wholes are the same size, more equal shares means smaller shares.”

Observation method: While students work, check whether each student draws a partition that reaches the boundaries of the shape, creates shares that appear equal in area, and uses the words half, fourth, or quarter correctly. Ask one student at a time: “How do you know these shares are equal?” Record: independent, prompted, or not yet.

Answers and rubric:

Item	Correct answer or scoring guidance
1	A = E; B = N; C = E. A and C have two same-size regions. In B, the left region is smaller than the right region.
2	A line through the circle's center that makes two equal areas. A vertical, horizontal, or diagonal diameter is correct. Accept a clearly equal freehand partition.
3	2. The whole circle has 2 equal halves.
4	Any clear partition into 4 equal-area shares is correct. Each share should be labeled quarter or fourth. A vertical and horizontal line through the rectangle's center is one correct solution. Four equal triangles formed with diagonals are also correct.
5	larger. In the two equal-sized example rectangles at the top of Part 2, one half is larger than one quarter.
6	2; 4. A whole is two halves or four quarters.

Quick support: If a student makes unequal parts, place a finger over one share and ask, “Would this cover the other share?” Invite the student to revise. Do not tell the student where to draw the line before the student tries.

Source credit: New York Next Generation Mathematics Learning Standards, NY-1.G.3, “Reason with shapes and their attributes.” https://lessonmakerpro.com/standards/ny-nextgen-math/ny-1-g-3