

## Learning Goals

This activity is designed to help children strengthen their equipartitioning skills as they:

- Divide and share a whole object equally
- Understand what it means to share equally
- Divide a collection of objects into equal groups
- Count a collection of objects
- Compare collections of objects, and identify which has more and by how many
- Compare the pieces in a collection and identify whether they are the same size

## Vocabulary

divide, too many or too few, add, subtract, equal, same, more, less, share, number names

## Materials

- Pizza Puzzle, (included)
- Cardstock or plain paper
- Envelopes, one for each pair of children

## Preparation

Print (on cardstock if possible) the Pizza Puzzle boards and pieces. Cut out the pizza board and the puzzle pieces (pizza slices) along the dotted lines. You will need a set of the 4 pizza puzzle boards and their corresponding pizza puzzle pieces for each pair of children. Laminate, if desired. Place a complete set of pizza boards and puzzle pieces in an envelope for each pair of children.

## Directions

This activity reinforces the math concept that a whole can be made up of or divided into equal-sized pieces and that those pieces can be shared equally.

1. Show the sets of pizza boards and puzzle pieces as you explain, *Four pizzas were divided into equal shares. Four pizzas were divided into equal shares. One was divided into 2 slices, another into 4 slices, another into 8 slices, and the last into 16 slices. The*

# Pizza Puzzle (cont.)

**Length of Play:** 10 min.    **Group Size:** Whole Class

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*slices are all mixed up, but we have the pizza puzzle board to help us put them back together again, like our other puzzles! You and a partner will have four pizza puzzles and all the pizza slices for each. You must work together to decide which pizza slice goes with which puzzle. Then put the pizza puzzles back together, so that they are whole and each pizza's slices are all the same size.*

2. Divide the class into pairs. Give each pair the four puzzle boards and the four sets of puzzle pieces. Have them put together the four pizza puzzles, helping as needed. They may spread out on the rug to work, or move to tables if needed.
3. After the children have completed the task, reinforce the concept of wholes made of equal parts. Say, *You made whole pizzas (circles) from equal-sized pizza slices. Ask, How many slices did it take to make each of your pizzas? How did you know which slice went with which pizza?*
4. Now have each pair of children share the pieces from each of their four pizzas equally, so that each partner has the same number of each size slice.

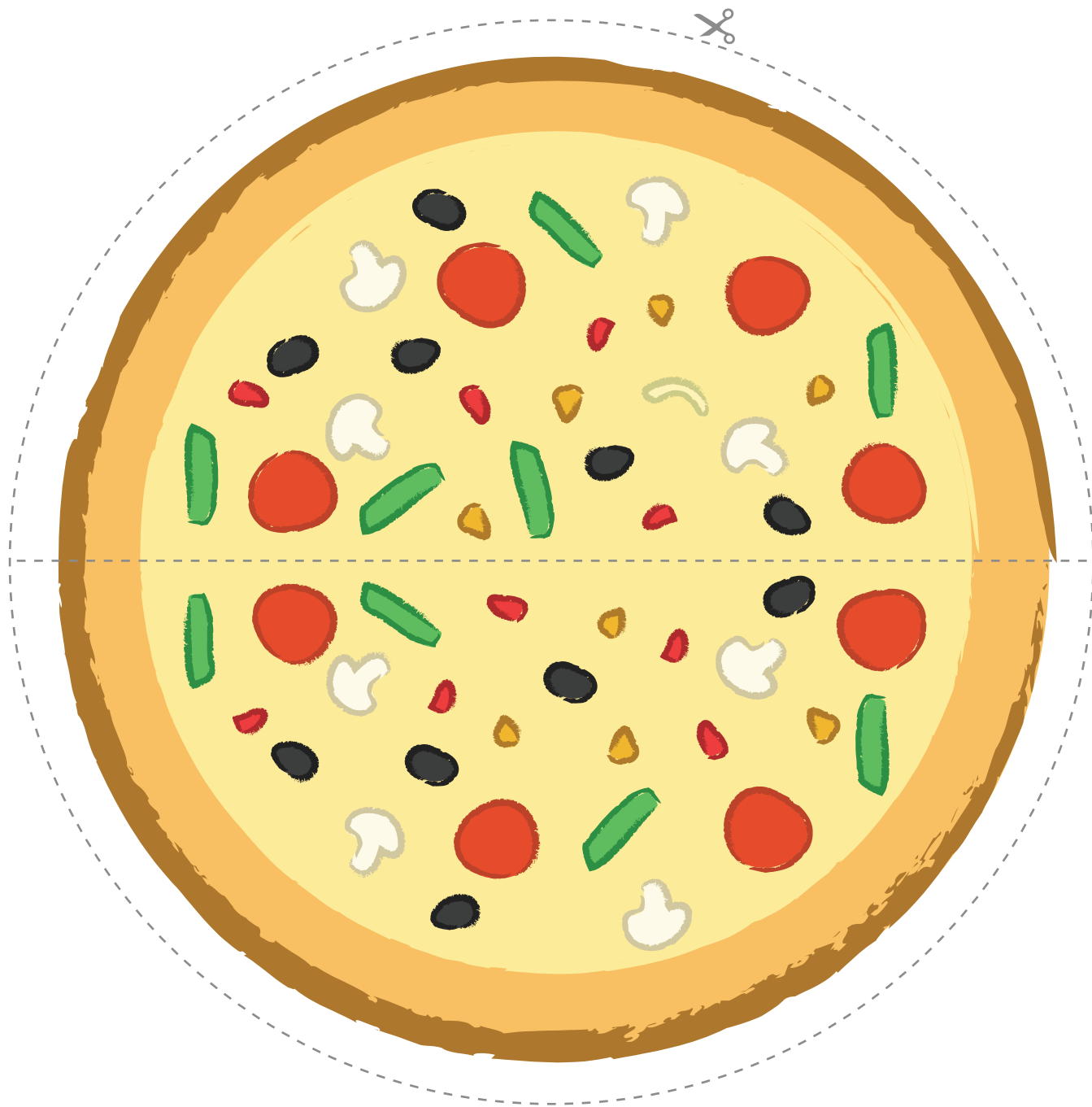
Note: Adjust the level of challenge by offering only the 2- and 4-piece puzzles or only the 8- and 16-piece puzzles.

For additional challenge, have the children complete the pizza puzzles without the puzzle boards.



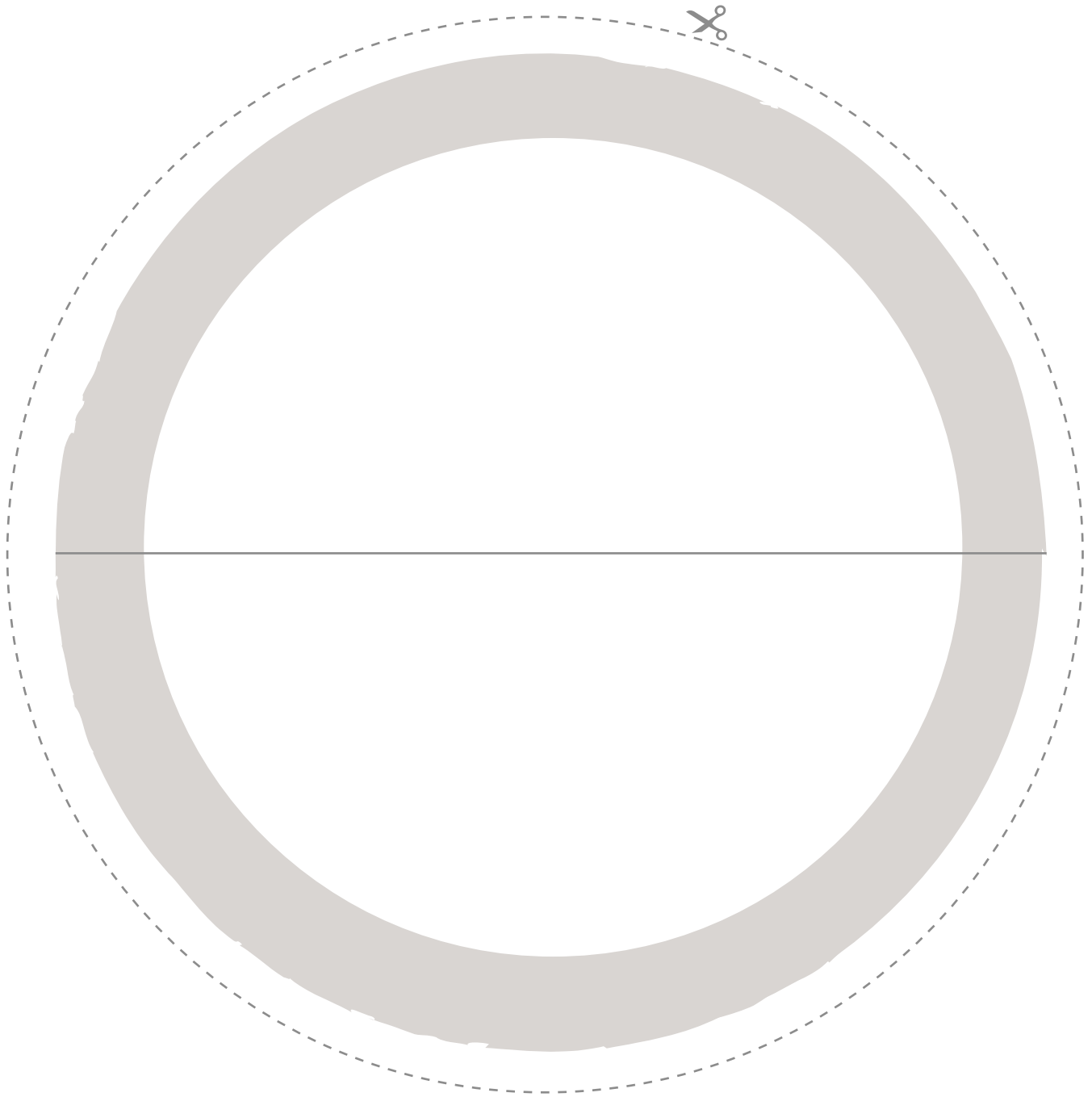
# Pizza Puzzle: Slices 1

**Instructions:** Print this page. Cut out the pizza circle along the outside cut lines then cut out the slices along the cut lines.



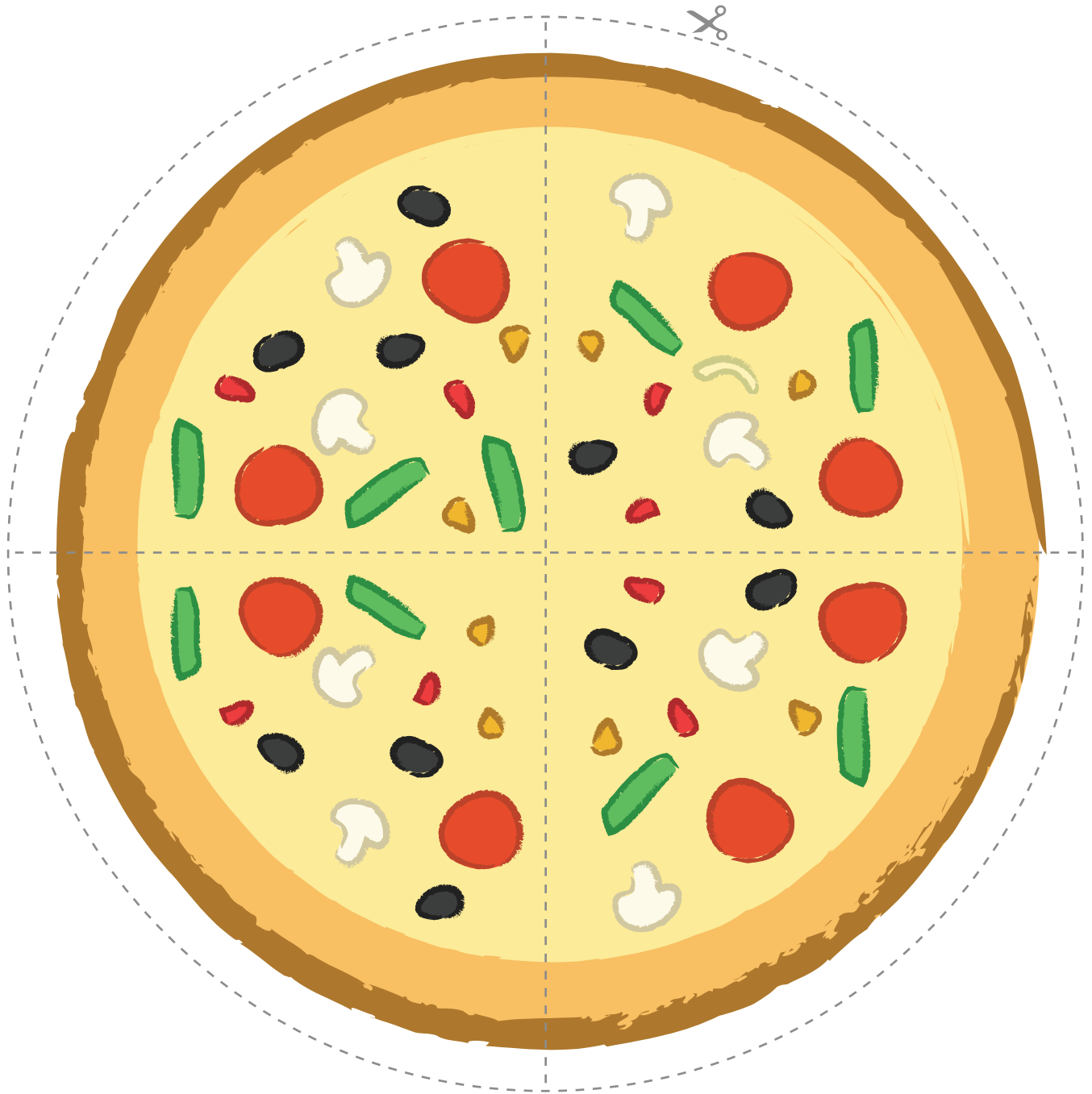
# Pizza Puzzle: Board 1

**Instructions:** Print this page. Cut out the pizza puzzle board along the outside cut lines.



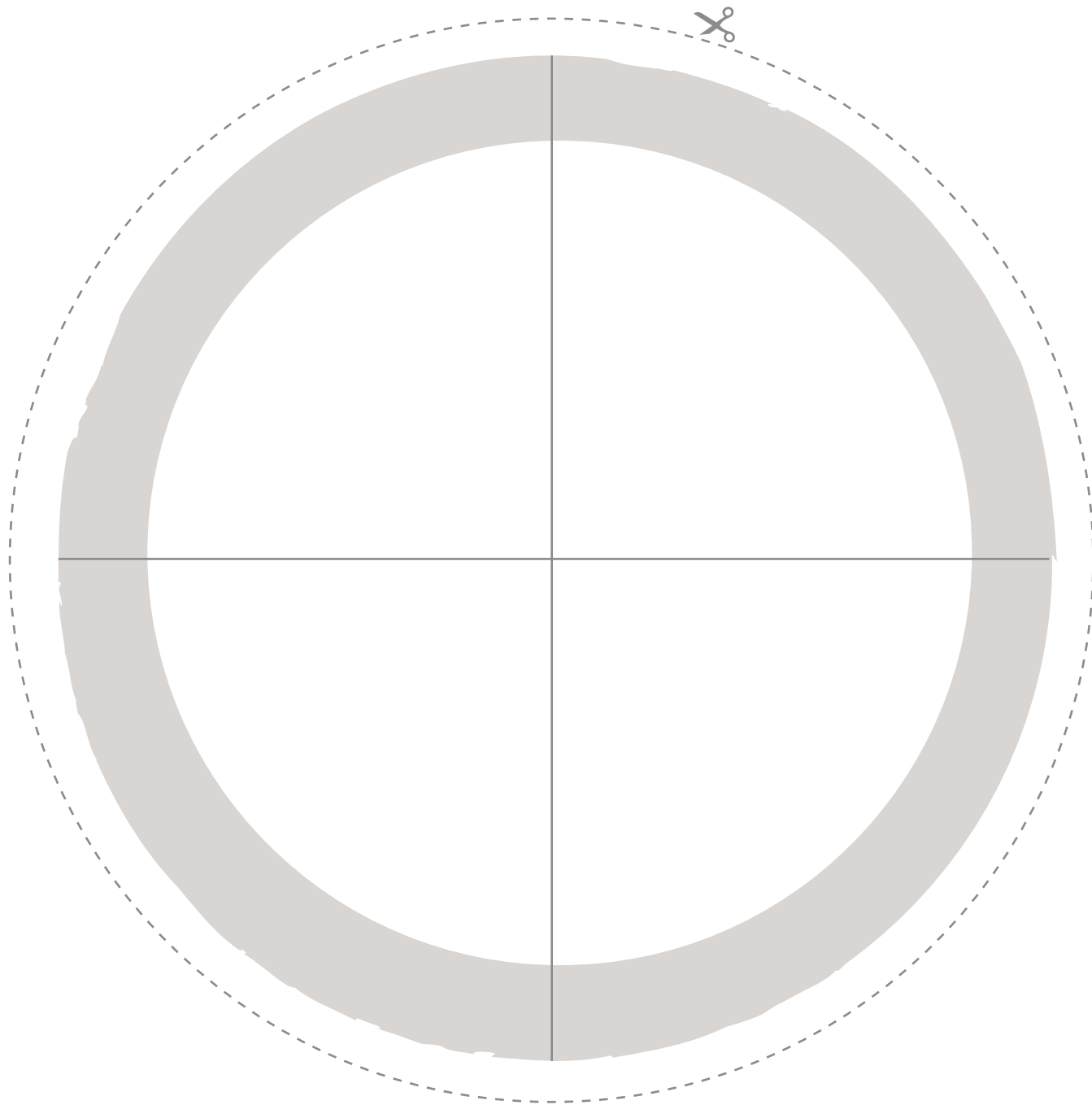
## Pizza Puzzle: Slices 2

**Instructions:** Print this page. Cut out the pizza circle along the outside cut lines then cut out the slices along the cut lines.



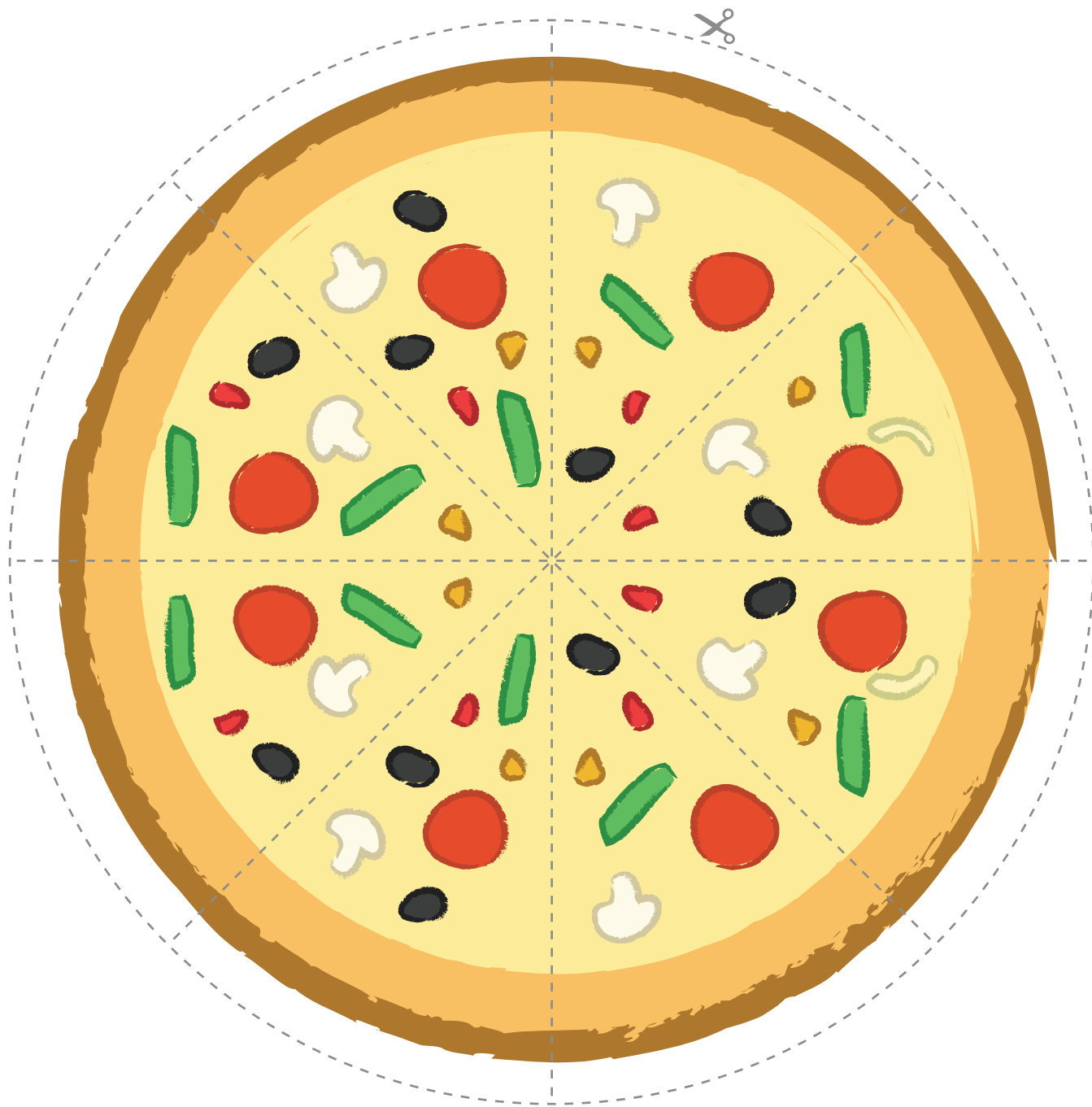
## Pizza Puzzle: Board 2

**Instructions:** Print this page. Cut out the pizza puzzle board along the outside cut lines.



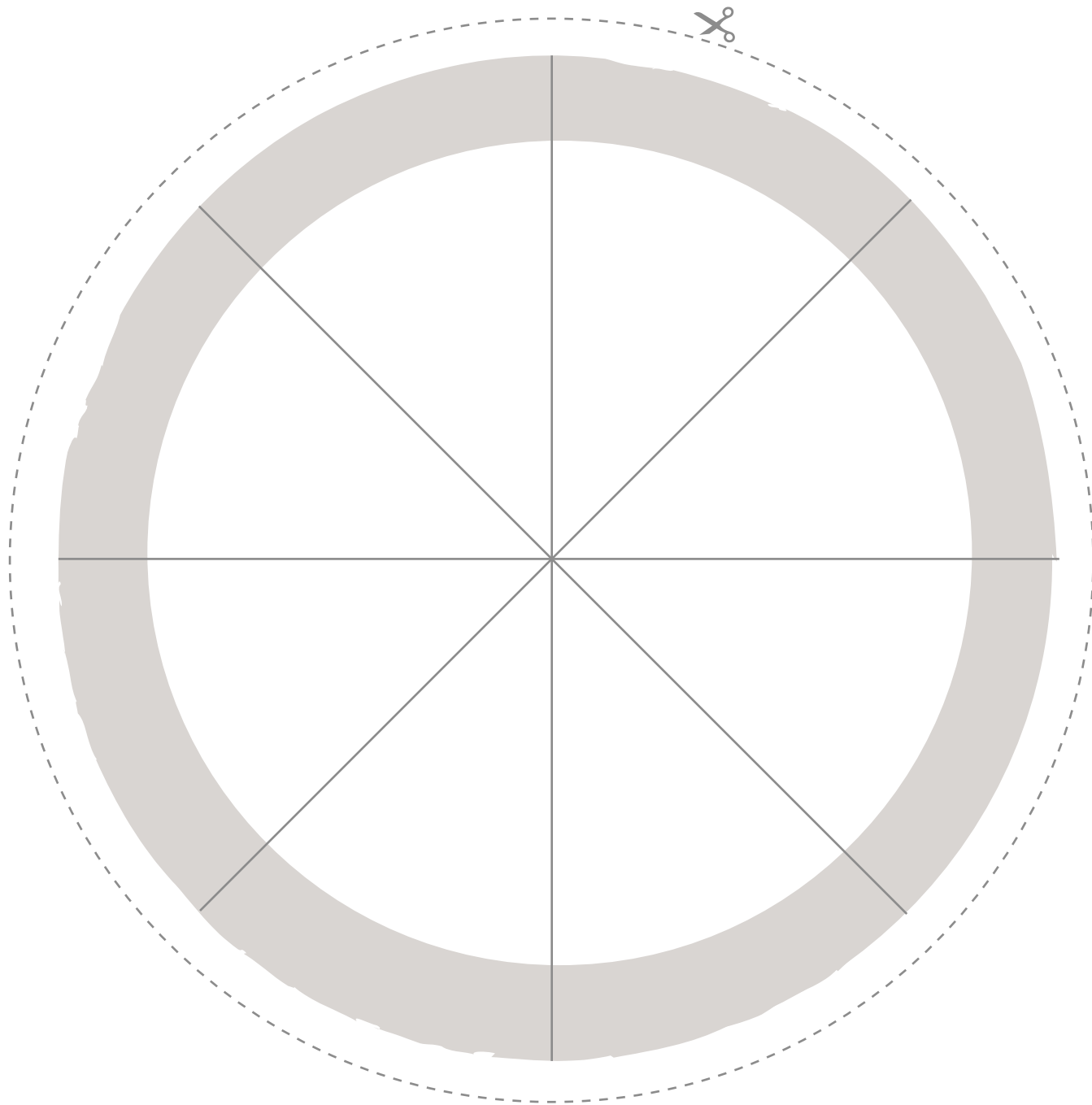
## Pizza Puzzle: Slices 3

**Instructions:** Print this page. Cut out the pizza circle along the outside cut lines then cut out the slices along the cut lines.



# Pizza Puzzle: Board 3

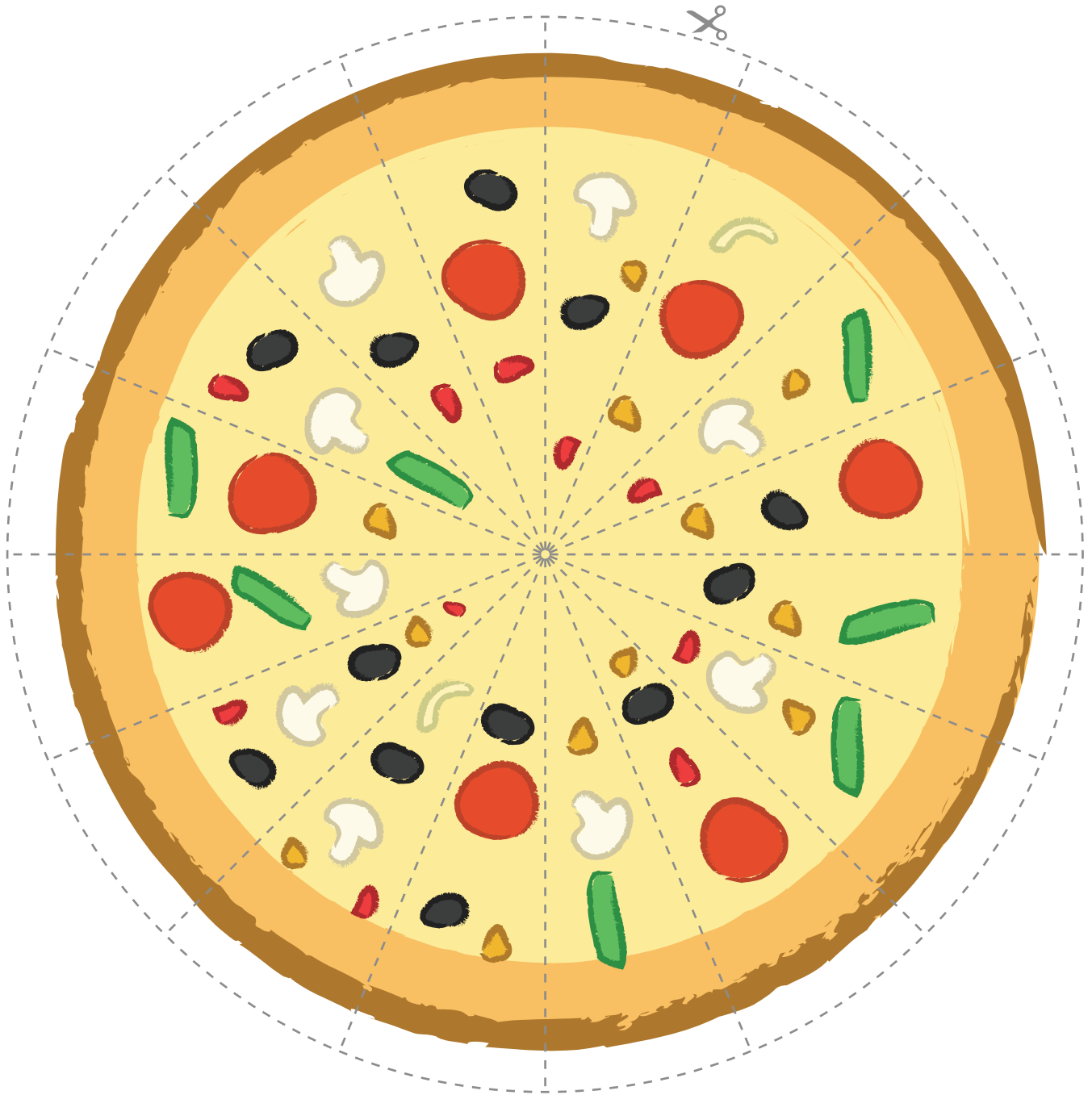
Instructions: Print this page. Cut out the pizza puzzle board along the outside cut lines.





## Pizza Puzzle: Slices 4

**Instructions:** Print this page. Cut out the pizza circle along the outside cut lines then cut out the slices along the cut lines.



# Pizza Puzzle: Board 4

Instructions: Print this page. Cut out the pizza puzzle board along the outside cut lines.

