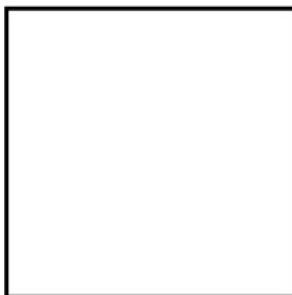


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1.G Make Your Own Puzzle

[Alignment 1: 1.G.A.2](#)

Give each student scissors, an envelope, and a square of colored paper (the colored paper should be of a wide spectrum to make it easier to keep puzzles apart).



Have the students cut the square into four pieces, then put those pieces in the envelope. The student can then trade puzzles as many times as they like and try to solve each others' puzzles by reassembling the shapes into a square.

Commentary:

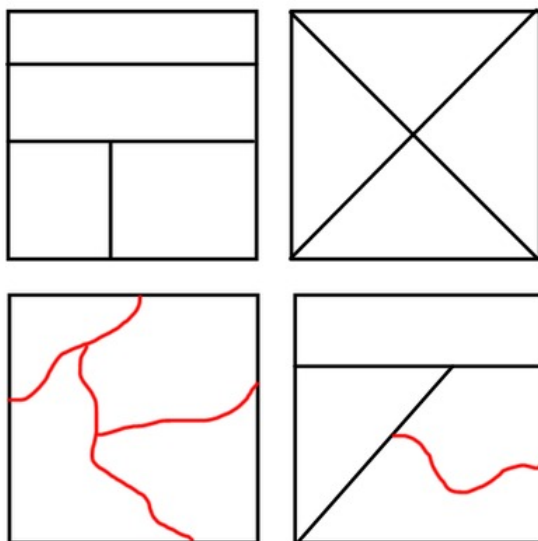
The purpose of this task is to give students a hands-on experience with composing and decomposing geometric figures and is meant as an instructional task. While the standard suggests particular figures, students should not be limited to the ones listed in the standard. Students will definitely benefit from this type of activity before they are asked to make more formal arguments related to composing and decomposing shapes in later grades. This task would also be appropriate for advanced kindergarten students (see K.G.6).

There are many ways to go about this task (see solution) so students should be encouraged to be creative when cutting their paper. They should also be encouraged to use language to describe each of the smaller pieces, both as they are making their own puzzle and as they are assembling each others'. This may be a mixture of informal and formal language; for example the last puzzle in the solutions might be described as "a rectangle, a triangle and two pieces with wiggly sides."

The count of four pieces should be considered a rough suggestion. If a limit of four pieces is not challenging enough for a group, puzzles with more pieces are possible. It is also possible a student will generate more than four pieces by accident when making their puzzle.

Solution: Possible cuts

Four of many possibilities:



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