

Fold and Cut

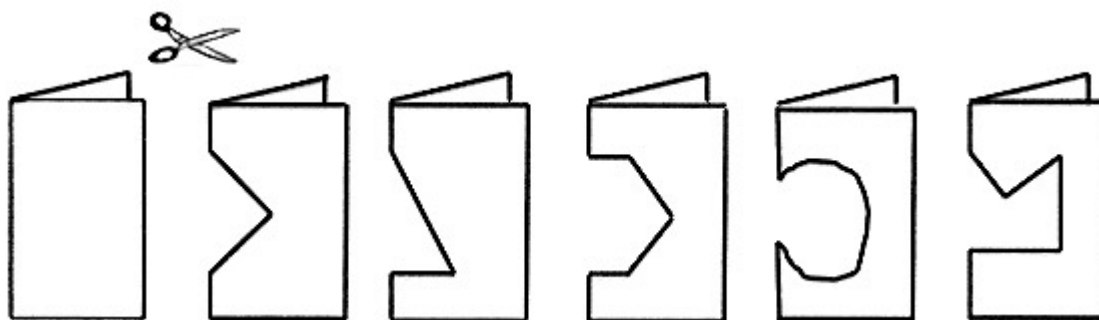
Annotation

Rachel is able to predict the shape of some of the cut out pieces based on their overall appearance. She has some understanding of reflection and uses her own words to describe this. She knows the geometric names of the shapes: triangle, square and circle. She describes an unknown shape by its overall appearance.

Problem: Fold and Cut

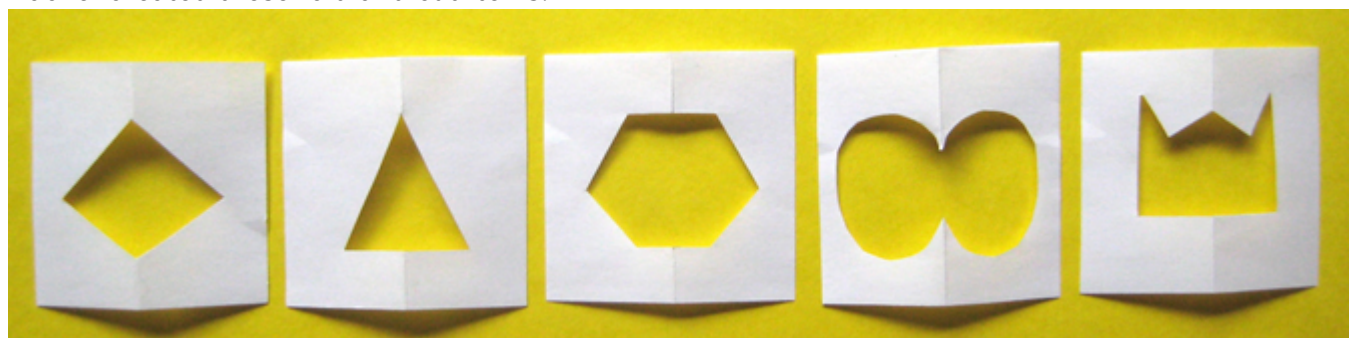
The teacher provides the student with paper and scissors and poses this problem:

Can you fold a square piece of paper in half, cut out the middle of the fold and tell me what shape you think will be in the centre of the square when it is unfolded?



Student response

Rachel created these fold and cut items.



Teacher: Tell me how you did those.

I cut out the first one with the scissors, and thought I would get a triangle but it was a diamond.

Rachel: That made me think. I guessed a triangle for the next one and I was right. I wasn't sure about the next one. It was kind of like a square but I knew it wasn't. I don't know that one's name.

Teacher: What about the next one?

To start with I thought the round one would be a circle but then I thought some more. If you fold a circle in half you get a half circle and that is what you would see, that's the cut out bit before you unfold. It's a bit more than half a circle so it won't be a proper circle but it will be like a circle. I cut it out and I got some butterfly wings. I didn't know what the last one would be; it turned out to be a crown.