

1

Label the hoop before anything goes in

Put two hoops on the floor and say the rule for each one out loud, three sides in this one and four sides in that one, before any card is handed out. Give cards out one at a time and have the class count the sides before each one is placed.

"Count the sides. Which hoop does this one go in?"

"What is the same about every card in this hoop?"

The rule goes down first. A hoop filled before it has a rule gets sorted on what the shapes look like, and the rule is then written to fit.

2

The turned square and the long thin one

Hand over a square turned onto its corner and a long thin rectangle and let the class argue about where they go, then count the sides on each one in front of everybody.

"It looks different. How many sides has it got?"

"Does being long and thin change the number of sides?"

3

A sort that says nothing

Sort the cards into two hoops by colour, with mixed shapes in each, and say that you have sorted them by a rule. Ask whether the rule is about the shapes.

"Is my rule about the shapes? What is in this hoop?"

"Sort them again, so the rule is about the shapes."

Colour is a rule, but it is not a rule about shape. Naming what a sort is actually about is what the rest of the lesson rests on.

4

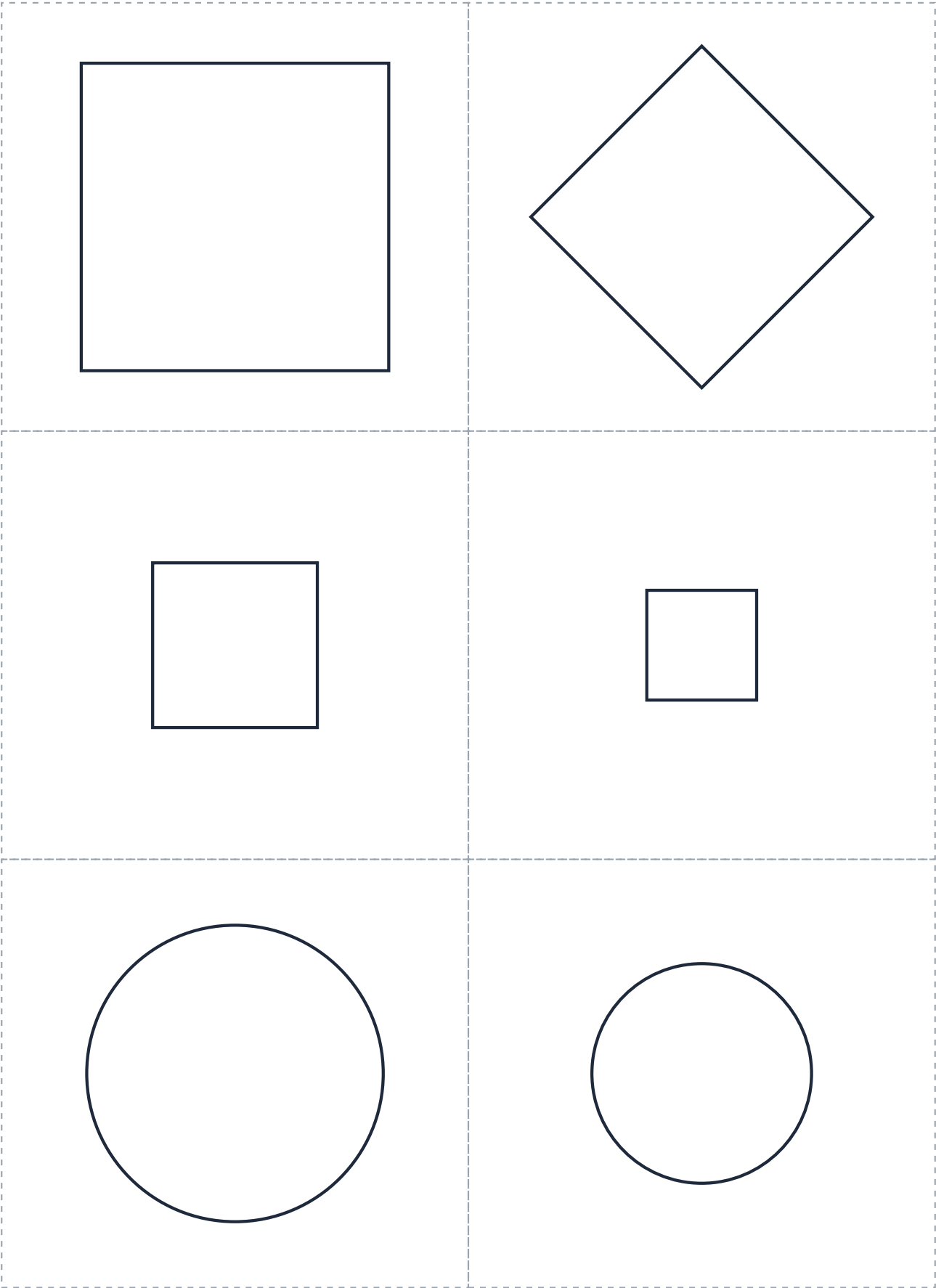
Where the hoops cross over

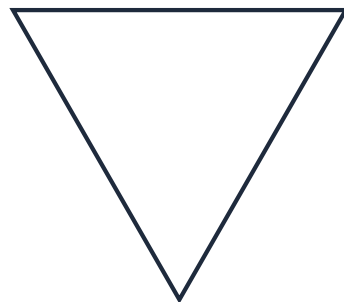
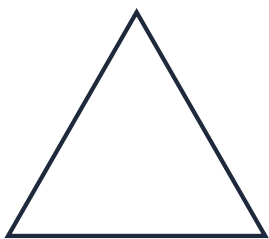
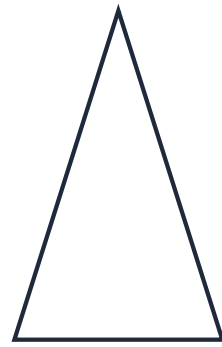
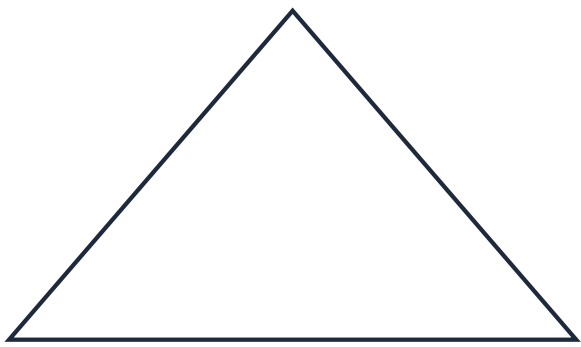
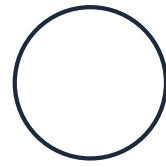
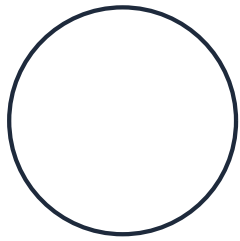
Overlap two hoops and label them straight sides and four corners. Hold up a square and ask where it goes, then a triangle, then a circle.

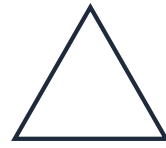
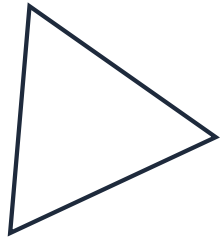
"Both rules are true for this one. Where does it go?"

"Why does the triangle not go in the middle?"

Print one set and cut along the dashed lines. Print each page on a different colour of paper, or colour the shapes in, so the same shape turns up in more than one colour.







Print one set and cut along the dashed lines. A label goes on the hoop before any card is sorted into it. The last page is blank labels for rules of your own.

three sides

four sides

straight sides

a curved side

no corners

four corners

only flat faces

has a curved surface

has a circle face
