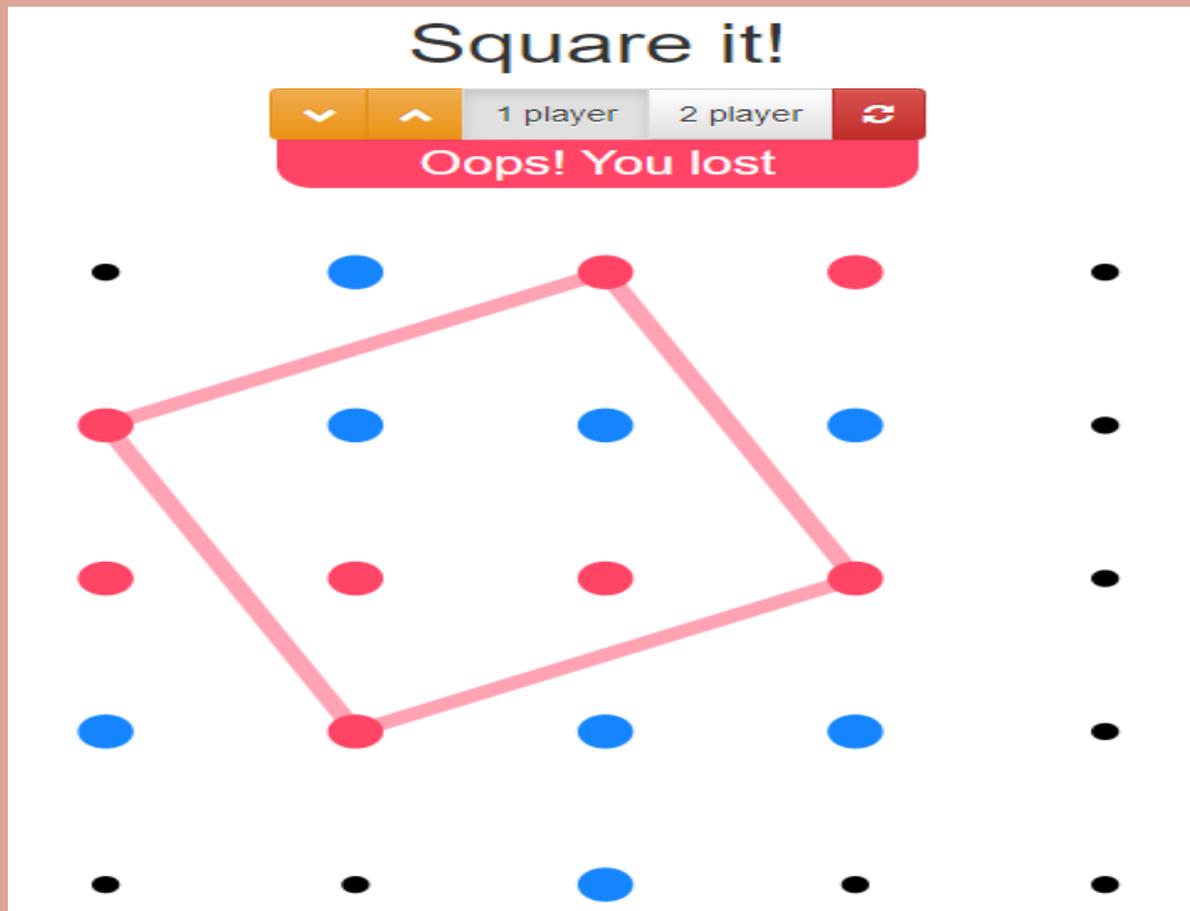


GEOMETRY- 2D SHAPES

Year 3



This game can be played against a friend or against the computer.

<https://nrich.maths.org/13125>

Players take it in turns to click on a dot on the grid - first player's dots will be blue and the second player's (or computer's) will be red.

The winner is the first to have four dots that are shown joined by straight lines to form a square.

Squares can be any size, anywhere and can be tilted.

**SEEING
SQUARES**

For this activity, you'll need:

- a piece of paper
- a pencil
- a ruler
- some coloured pencils or pens

Using your pencil and ruler, draw some straight lines on your piece of paper to make an interesting pattern. You can draw as many or as few as you like.

Can you describe what you see in your own pattern?

Can you find any shapes which have three sides?

How about any with four sides?

Which shape or shapes have the most sides?

Using your coloured pencils or pens, decorate all the three-sided shapes in some way. You could colour them all in using a particular colour or you could cover them with a special design or pattern.

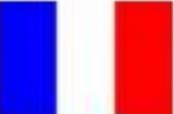
Can you decorate all the four-sided shapes in another, different, way?

How about the five-sided/six-sided ... shapes?

<https://nrich.maths.org/7009>



**SHAPELY
LINES**

 Argentina	 Australia	 Austria	 Brazil	 Bulgaria
 Canada	 Czech Republic	 Denmark	 England	 Finland
 France	 Germany	 Italy	 Mexico	 Netherlands
 New Zealand	 Norway	 Poland	 Portugal	 Russia
 South Africa	 South Korea	 Spain	 Sweden	 USA

During an Olympic Games many national flags are on display.

Here's a chance to investigate some of them.

Pick a flag and investigate some of the following:

What shapes can you see in it? Can you describe them and their angles?

Does the flag have any lines of reflective symmetry?

Can you find any pairs of parallel lines? If so mark them on your flag.

Are there any lines perpendicular to one another?

Can you find a way to classify the shapes in your flag?

Now try with another flag.

<https://nrich.maths.org/7749>

NATIONAL FLAGS

How to play

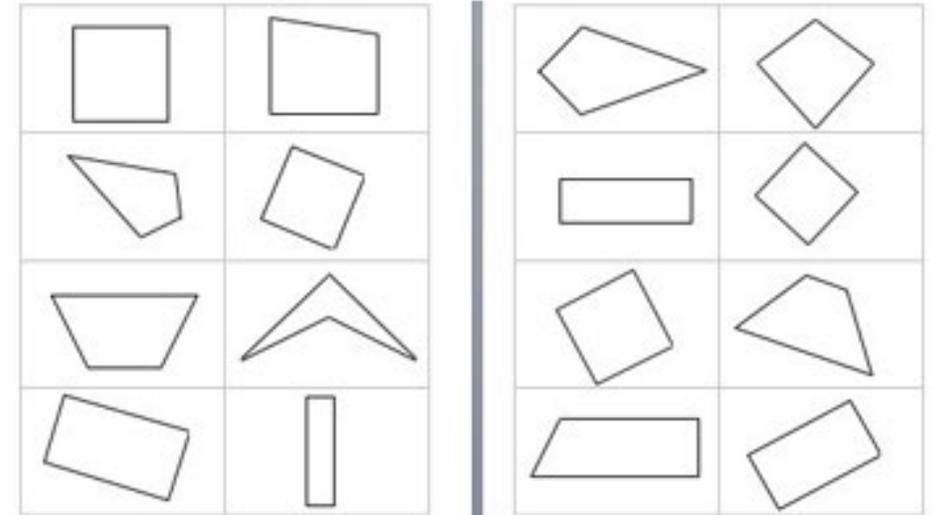
Distribute the [16 cards](#) randomly amongst the team (four cards each).

Players pass cards to other team members in order to help one another complete their set.

Rules

- No one can talk or give non-verbal signals to other members of the team.
- Each member of the team starts with four cards in front of them.
- The cards in front of each person should be visible to everyone.
- Team members can only give cards; they cannot take cards from someone else.
- Each team member must have at least two cards in front of them at all times.

<https://nrich.maths.org/6998>



**QUAD
MATCH**

You'll need to shape sheet that will need to be cut into twelve separate cards.

Share all the cards out amongst the group.

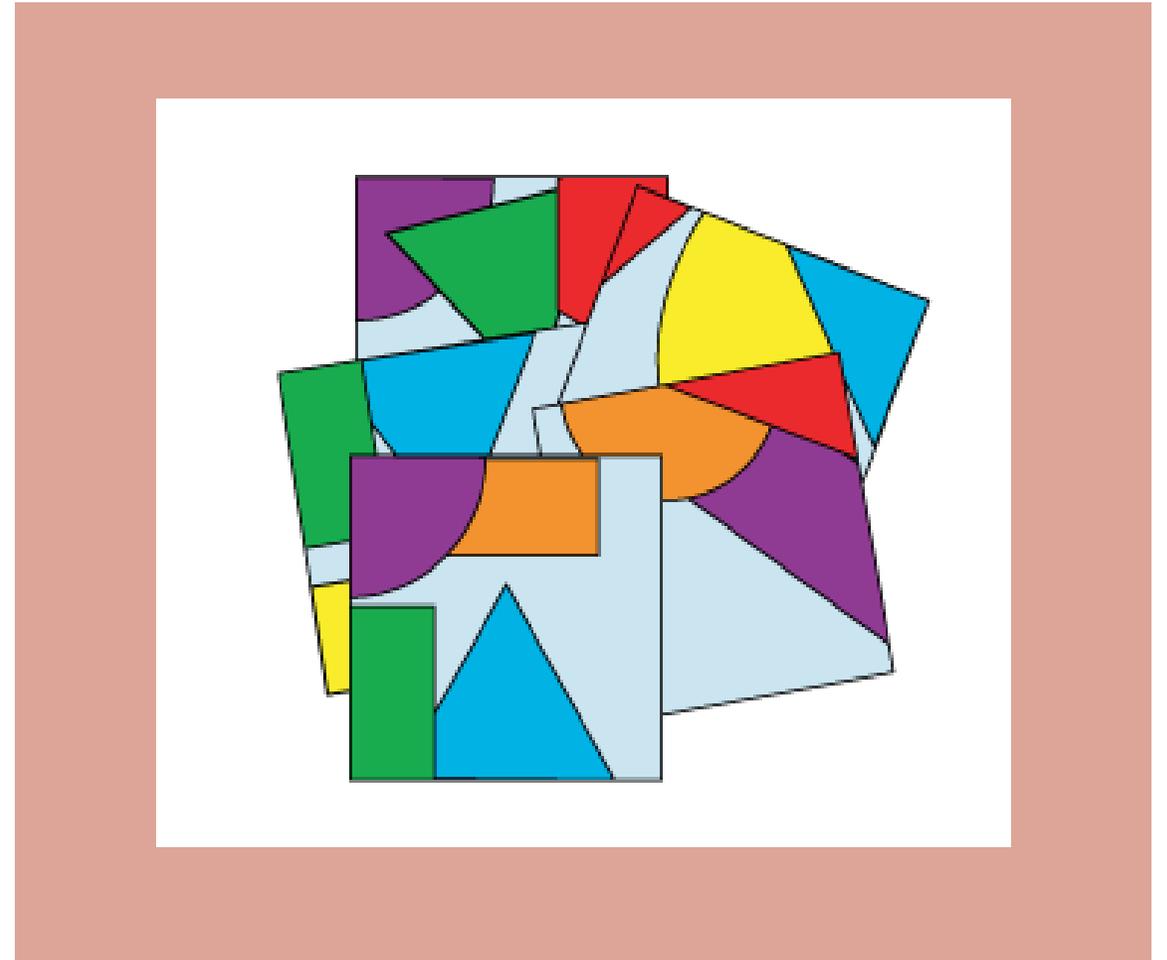
Can you each work out what shape or shapes you have part of on your card?

Can you describe the shapes without showing it to anyone else?

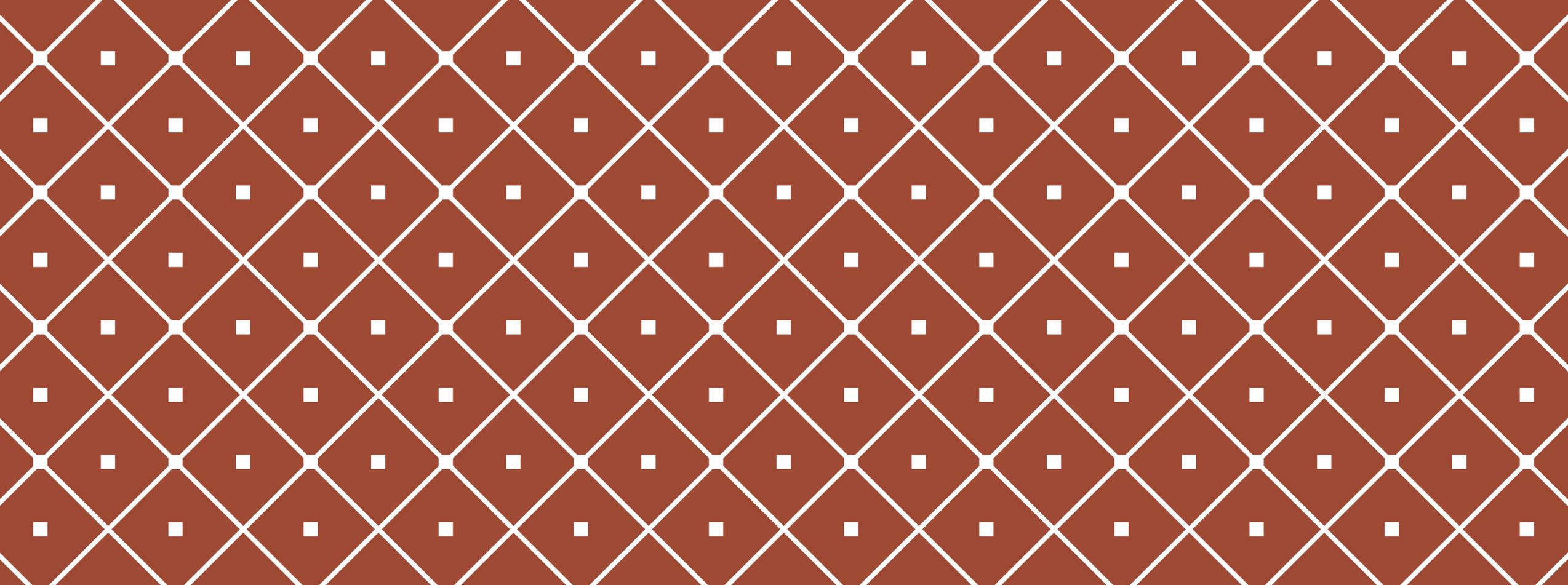
What will the rest of the shape or shapes look like do you think?

How could you sort the cards?

<https://nrich.maths.org/6886>



**JIG
SHAPES**



THE END

Ocean Maths