PLAY THE GAME

This card game uses logical thinking, and is about properties and matching. Mathematical questions can be asked around the design of the game, so the game could also form the basis for an investigation task.

Shape cards

The game is centred around the five shapes featured below. Each of the five shapes has a **different style** (dashed edges, filled-in etc).
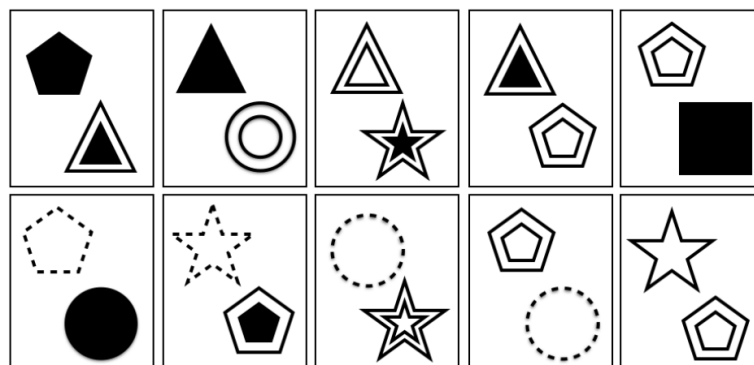

The **Shapes Cards Sheet** (with the grey background) needs to be printed out and the five shape cards cut out. These cards need to be kept separate from the game cards.

Game cards

The **Game Cards Sheets (Page 1 to 5)** (with the white background) need to be printed and the ten game cards on each sheet cut out. Shuffle the game cards before playing.

Playing the game

The game cards are stacked face down.

The game starts when the top game card is turned face up so all the players can see it. Each game card features two different shapes and all game cards are unique.
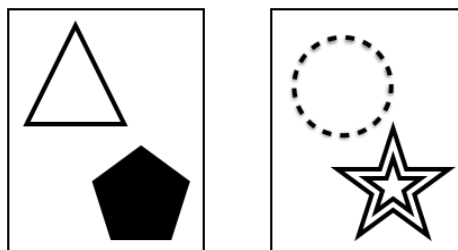
Players then try to identify which of the five shapes 'matches up' with the game card that is shown.

This depends on which of the two types the game card is.

Type 1:

Neither of the two shapes on the game card is in its correct style.

Here are two examples.

In this case, then the shape that is not represented at all on the game card is the one that 'matches up'. That is, the shape that has neither its shape not its styling featured on the game card.

In the example on the left above, the pentagon and triangle shapes are featured, as are the styles of the star (filled-in) and the square (no-fill). But neither the circle shape nor the circle style are featured. Therefore, the circle is the shape that 'matches up'.

In the example on the right, the circle and star shapes are featured, as are the styles of the triangle (dashed edges) and the pentagon (two empty shapes, one inside the other). Therefore, the square is the shape that 'matches up'.

In a **type 1 card** there is always just one shape that is not featured - the properties featured are always taken one from each of four different shapes.

Type 2: One of the two shapes on the game card is in the correct style.

Here is an example.
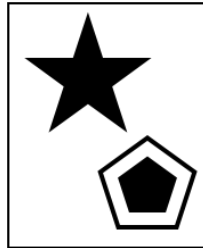
In this case, the shape in the correct style is the one that 'matches up' with the card. In the example above the star on the game card is in the correct style, so the star 'matches up' with that card.

In a **type 2 card** neither of the two styles are the same, and neither of the two shapes are the same.

How to win

When players have worked out which of the five shapes 'matches up' with the card, they need to grab that shape's cut out card. The winner of that round is the first player to do this.

The winner of the round takes the game card that has just been played, and the game continues with the next game card being turned face up. The aim of the game is to be the player who has collected the most game cards when all the game cards have been played.

An additional rule can be added that if a player guesses incorrectly they must give one of their collected game cards (if they have any) to the player who is the winner of that round. This discourages random guessing!

Maths of the Game

Read the 'Maths of the Game' document to learn about the mathematics behind the design of this game, and for ideas of questions for students.