

Board Block

You can play this game for two players on the interactive pegboard, or on a printed sheet.

How to play:

Firstly, choose the number of pegs on your board. Six might be a good choice to start with and you could print off [this sheet](#) of pegboards with six pegs if you are not using the interactivity.

Take it in turns to add a band to the board (draw your bands on).

Bands must fit round three pegs, in other words, each must make a triangle.

A band can share a peg with other bands, but the triangles must not overlap (except along the edges and pegs).

A player loses when they cannot make a triangle on their turn.

What are the winning strategies?

Once you've mastered this game, why not play to lose?

Perhaps you can invent some of your own games using the pegboard? You'll need to think about the rules of the game and what players need to do to win. If you'd like to share your ideas by emailing primary.nrich@maths.org.

Possible approach

It might be worth simplifying the game to start with so that you have just four pegs on your circular board. Introduce the class to the rules of the game, then challenge them to play against you. Allow time for several games to take place so that everyone really gets to grips with how to play.

Next, invite children to play in pairs. Their aim is to try to beat their partner.

After a suitable length of time, bring everyone together to discuss progress. Has anyone found a good way of winning? Is it better to go first or second in this game? Encourage learners to explore the game more so that they try to come up with a fool-proof strategy.

In the plenary you could challenge a pair or group to beat you and then articulate how they knew they were going to win.

Key questions

What triangle could you make first?

What could you do next?

Could you have done something different to start with?

Could you have done something different then?

Is it better to go first or second? Why?