

Battleships

Getting to grips with coordinates

Great for...

- **Mathematics** understanding of coordinates and problem solving
- **Links to other topics** could include food chains in science (for example, using different animals instead of ships) and battles through the ages for history

Activity

- 1 Outdoors, divide the children into pairs and ask them to mark out their grids on the ground with the coordinates across the x and y axis (if playing as a class you can use your 100 square painted on the ground if you have one).
- 2 Each player now takes it in turn to guess the position of a boat, as marked on their opponent's written grid (see 'Preparation' below). If they have guessed correctly and part of a ship is 'hit' they mark this with a stone or similar on their opponents grid on the ground (and their opponent marks the hit on their own written grid). When all of the squares of a ship have been correctly guessed the ship is sunk.
- 3 When all of one player's ships have been sunk the game ends and the other player wins.

What you need

- **Squared paper and pens** for writing (clipboards may be useful)
- **Chalk and metre sticks** for measuring the grid on the ground
- **Stones** or other objects for marking off the winning hits

Preparation

- To enable everyone to play independently you will need to ensure that everyone has a good understanding of coordinates and the rules of the game.
- On their squared paper each player needs to mark out a 10 x 10 grid, with coordinates and the position of their ships marked on the grid – either horizontally or vertically and not overlapping. Each player needs the same number of similar-sized ships, for example: aircraft carrier, 5 squares; battleship, 4 squares; destroyer, 3 squares; submarine, 3 squares; patrol boat, 2 squares.

Less challenging

- Play in larger groups or as a class.
- Reduce the size of the grid or increase the size of the ships.
- Use letters on one of the axes to help differentiate the x and y.
- Add in islands to remove the number of available coordinates.

More challenging

- Increase the size of the grids (ie 15 x 15 or 20 x 20) or reduce the size of the ships.
- Have two fleets – one above water and one below – to increase use of memory.

Your notes

Use this space to evaluate the activity



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