



AUSTRALIAN RESEARCH COUNCIL CENTRE OF EXCELLENCE FOR
MATHEMATICAL AND STATISTICAL FRONTIERS

GRAVITY GRID

USE GRAVITY TO FIND YOUR TEAMMATES AND CLEAR THE GRID

MATHS:

- A live version of the [Gravity Grid](#) game that requires thinking ahead and the formulation of logical strategies. Children also need to reflect on ways to describe or 'code' moves.

NEEDED:

- Coloured hats, gloves, and/or headbands.
- Teams of 3, wearing the same colour.

RULES:

- Everyone stands on the grid in a random starting pattern, facing the same way. People take turns to yell a direction (left, right, forward or backward), and 'gravity' acts to move everyone in that direction. You must always end up standing one to a square, and you can't fall off the grid.
- The first team to be standing next to each other (either in a row, or in an L-shape) wins, and then leave the grid. The game continues until everyone is gone.

VARIATIONS:

- Introduce a new colour for someone to act as a 'block': They never leave the board and so they act as an obstacle for the other teams.
- Experiment with who decides on which direction to go: is it better if people take turns to decide, or is it better to discuss it with your teammates first?
- Try teams of four instead of three.
- Take note of your starting position, then work together to try to get everyone off the board in the smallest number of moves.