

Helping Your Child with Maps, Grids and Coordinates

Space • Foundation to Year 6 • Australian Curriculum Mathematics

Reading maps, following directions and finding locations on a grid are skills your child builds on every year of primary school. You don't need to know all the maths — just knowing where your child is on this journey helps you ask the right questions and practise together at home.

	Year level	What your child is learning	What this looks like
	Foundation	Position words — Using words like inside, outside, on top of, underneath, next to, behind and in front of to describe where things are.	<i>"The scissors are in the red box on the bottom shelf."</i>
	Year 1	Giving directions — Following and giving step-by-step directions to move themselves or objects from one place to another.	<i>"Go forward 3 steps. Turn left. Stop at the door."</i>
	Year 2	Reading simple maps — Finding places on a 2D map of a familiar space like a classroom or playground. Following a path on the map.	<i>Using a seating plan to find their desk, or following a map of the school to find the library.</i>
	Year 3	Drawing maps — Making their own maps of familiar places from a bird's-eye view (looking down from above). Locating key places relative to each other.	<i>Sketching a map of their bedroom or the backyard and marking where things are.</i>
	Year 4	Grid references — Using a grid with letters across the top and numbers down the side to name a square. Grid references have a letter AND a number (e.g. B3).	<i>Finding a street on a street directory or locating a tent at a show or festival using a map.</i>
	Year 5	Coordinates — first quadrant — Using two numbers in brackets (x, y) to pinpoint an exact point on a grid. The first number goes across, the second goes up.	<i>Plotting (3, 4) means: go 3 across, then 4 up. Like giving GPS coordinates for a treasure hunt.</i>
	Year 6	All 4 sections of the grid — Extending to negative numbers on both axes, giving 4 sections (quadrants). A point can now be to the left or below the centre.	<i>Plotting (-2, 3) means: go 2 to the LEFT of centre, then 3 up. Used in science, maps and computer graphics.</i>

Key words your child may use

position	where something is	direction	which way to go (left, right, forward, back)
map	a picture showing a place from above	grid	lines that cross to make squares
grid reference	a letter + number that names a square (e.g. B3)	coordinates	two numbers that find an exact point, e.g. (3, 4)
x-axis	the number line going across (left-right)	y-axis	the number line going up-down

Helping at Home — Maps, Grids and Coordinates

Space • Foundation to Year 6 • Worked examples and questions to ask

How it works — worked examples

Foundation & Year 1 — Position and directions

"Where is the dog?"

The dog is **under** the table, **next to** the red chair, and **in front of** the window.

Year 1 adds: "Take 2 steps forward. Turn right. Walk to the door."

Year 2 & Year 3 — Simple maps

A map of a bedroom (from above):

Window	Bed	
		Door
Chair	Bookshelf	

Year 3: Children make their own maps and explain where things are relative to each other.

Year 4 — Grid references

A grid reference names a SQUARE using a letter + number.

	A	B	C
3			
2			
1			

is at **B3** (column B, row 3). Letter first, then number.

Year 5 — Coordinates (x, y)

Coordinates find an exact POINT — not a square.

3				
2				
1				
0				
0	1	2	3	4

(3, 2): go 3 across → then 2 up ↑

(1, 0): go 1 across → then 0 up (stays on bottom line)

Rule: always go ACROSS first, then UP. "Along the corridor, then up the stairs!"

Questions to ask your child

You don't need to know the answer — just asking helps! Let them explain it to you.

F Foundation

→ Can you tell me where something in this room is, using position words?

→ Is the cup in front of or behind the plate?

1 Year 1

→ Can you give me directions to get from the kitchen to your bedroom?

→ If I walk forward 3 steps and turn right, where do I end up?

2-3 Year 2-3

→ Can you draw me a map of your bedroom from above?

→ On this map, how do I get from the front door to the backyard?

4 Year 4

→ What grid reference is the park on this map?

→ Can you give me directions using grid references?

5 Year 5

→ What are the coordinates of that point?

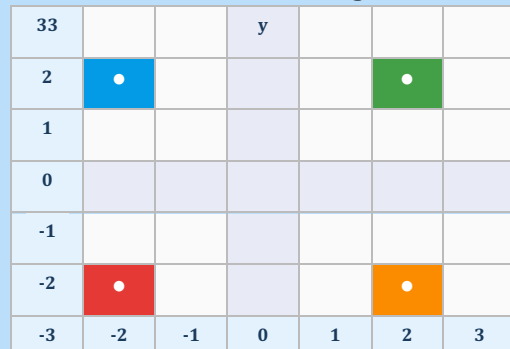
→ Which number do you read first — across or up?

→ Can you plot (4, 2) for me and show me how you worked it out?

Year 6 on next page

Year 6 — All 4 quadrants

Now both axes extend into negative numbers.



• $(2,2)$ • $(-2,2)$ • $(-2,-2)$ • $(2,-2)$

Negative x means LEFT of centre. Negative y means BELOW centre.

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Year 6

- What quadrant is the point $(-3, 2)$ in?
- If I move a point 2 spaces to the left, what changes — the x or the y?
- Can you plot a shape using coordinates that includes negative numbers?

Activities to try at home

Any age: Play 'hot and cold' using position words to guide someone to a hidden object.

Year 1-2: Give each other directions around the house using left, right, forward, back.

Year 2-3: Draw a map of your house from above — then give each other a tour using the map.

Year 4: Get a street directory or local map and practise reading grid references together.

Year 5: Play Battleship! This is exactly the same as using coordinates to find a location.

Year 6: Draw a set of axes on paper. Plot points in all 4 quadrants and connect them to make a shape.