

Directions and routes (left/right, N/S/E/W)

CURRICULUM ALIGNMENT

SHA.SAL.3a describe, interpret and record directional instructions and location.

INTERACTIVES Coordinate Grid · challenge, display, explore

WHAT THIS LESSON TEACHES

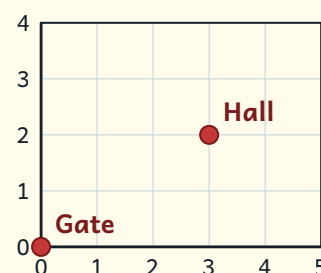
A heading is a fixed compass direction: north, south, east or west. On the map north points up the page, south down, east to the right and west to the left. A heading points the same way from anywhere, so 'go east 3 squares' always means the same way no matter which direction you are facing.

- From the gate, go north 2 then east 3 to reach the hall.
- To reverse east 3 then north 2, go south 2 then west 3.

MODEL THIS ON THE BOARD

FOLLOWING A ROUTE ON THE GRID

- 1 Start at the Gate (bottom-left). North is up the page and east is to the right.
- 2 Go **east 3** squares along the bottom row.
- 3 Then go **north 2** squares up. You land on the Hall.



DISCUSSION STARTER

REFLECT When giving a route, do left/right turns or N/S/E/W headings feel clearer to you?

LESSON ARC

Open on the yard map with the compass rose fixed: confirm east is right, then take one gate-to-hall route (east 2, north 2) and trace each leg so headings stay fixed. Watch and Notice contrasts a right turn for Aoife facing north with Cian facing south — same words, opposite paths — then a pure heading route that lands the same for everyone. Pupils draw and label a compass rose in copybook. Try It Together walks three grid routes one move at a time, then reverses east 3, north 2 as south 2, west 3 with last-out-first-back. Class Challenge is brisk board practice of follow-and-reverse.

TEACHING MOVES

1. **Getting Started.** With the yard map up, take two or three hands-up answers on which way is east before you confirm it. Give five seconds of quiet think-time on gate-to-hall, then take one pupil's route and finger-trace east 2, north 2 so the class sees the heading hold steady on each leg.
2. **Watch and Notice.** Stage Aoife facing north and Cian facing south, both told turn right — her right is east, his is west. Draw out why the same words send them opposite ways. Then run east 3, north 2 from the marked square and point at the compass rose: headings never depend on where you stand.

3. **Draw Your Compass Rose.** Pupils draw the rose in copy with north up the page. Walk the room for N-up and all four arms labelled; stuck pupils copy the board rose. Keep this beat to drawing only — direction-writing comes after the routes.
4. **Try It Together.** Reveal one route at a time; reset the marker to the start before each. Before every slide, ask the class which way it moves. For the return, send east 3 then north 2, then undo south 2 then west 3 saying last out, first back until it lands on the start.
5. **Class Challenge.** Keep it brisk: pupil at the board, class predicts the finish square, confirm, next. Before the reverse challenge, model opposite order then flip headings on the board — original east 3, north 2 becomes south 2, west 3 — and catch anyone who flips headings but keeps the old order.
6. **What Did We Notice?.** Pose the shop prompt cold. Re-voice a strong answer: east is always east, but my left changes when I turn around. Head off the idea that left and right are wrong — they just need you to know which way you face.

COMMON MISCONCEPTIONS

⚠ A pupil told to reverse east 3, north 2 writes west 3, south 2 — headings flipped but order kept the same.

Have them trace it from the finish square: it misses the start. Say last out, first back, reverse the order first (north 2, east 3) then flip to south 2, west 3, and re-trace until it lands.

⚠ Pupils treat left and right as fixed map labels — 'right always means east' — so a turn instruction sends everyone the same way.

Replay Aoife-north and Cian-south both turning right. Same word, opposite paths. Point back at the compass rose: only N/S/E/W are fixed to the map.

⚠ When facing south on the grid, a pupil slides 'north' toward the bottom of the board because that is forward for them.

Freeze the marker. Point at the compass rose: north is up the page from every square. Have the class call the heading before the marker moves, not the way the imaginary walker faces.

DIFFERENTIATION

EMERGING

- On early routes stay with single-leg moves (north 2 only, then east 3 only) before chaining two legs; keep the compass rose visible beside the grid the whole time.
- Pre-draw the four arms of the rose in copybook so the pupil only adds the N, S, E, W labels and checks against the board.

DEVELOPING

- After a forward route lands, ask them to write the reverse in copy before anyone moves the marker — then test it on the grid.
- Add a three-leg reverse (e.g. south 1, east 2, north 3) once the two-leg reverses are secure.

PROFICIENT

- Give a finished reverse path and ask them to reconstruct the original outward route — opposite of the opposite.
- Set a route that must end on a named yard landmark and ask them to justify each heading choice from the compass rose alone.

✂ **Cross-curricular:** Link to Geography — fix north on a simple map of the school or local street and give one heading-only route to the gate.

ANSWER KEY

b) (4, 1)

c) (0, 2)

Q1: north

Q2: east

Q3: south 3, west 4

a) Never : Lesson shows order matters: (2,3) and (3,2) are different points.

b) Always : This is the exact procedure taught: across first, then up, starting at (0,0).

c) Always : Lesson states every count starts from the bottom-left corner at (0, 0).

d) Sometimes : True for points like (5,5); false for points like (4,1) or (2,3).

EXTENSION SHEET · STRETCH ANSWERS

S1: (3, 8)

S2: (8, 4)

S3: (4, 10)

S4: (5, 4)

S5: (10, 4)