

Cup Coordinate Build

Classroom-ready printable pack · Grades K–8

Pack contents

Coordinate mats, orientation keys, cup tokens, and challenge cards. Two student sets are included.

Teacher directions

1. Align both mats with START nearest the students.
2. The Describer places cups by column, row, and stack level.
3. The Builder recreates the arrangement behind a barrier.
4. Compare from the shared START edge and revise ambiguous coordinates.

Before class

- Print at 100% on US Letter paper. Use cardstock or laminate for reuse.
- Cut on the thick solid borders. Keep Set A and Set B separate.
- Give challenge/model cards only to the Describer.
- Use a folder, book, or tabletop barrier so partners cannot see each other's work.

Accessibility and accommodations

Begin on a 3 × 3 mat with one level. Tokens differ by number and pattern, not color alone.

Storage-envelope labels

Cup Coordinate Build

Set A — Describer

Count pieces before storing.

Cup Coordinate Build

Set B — Builder

Count pieces before storing.

Cup Coordinate Build

Challenge / model cards

Count pieces before storing.

Cup Coordinate Build

Teacher reference

Count pieces before storing.

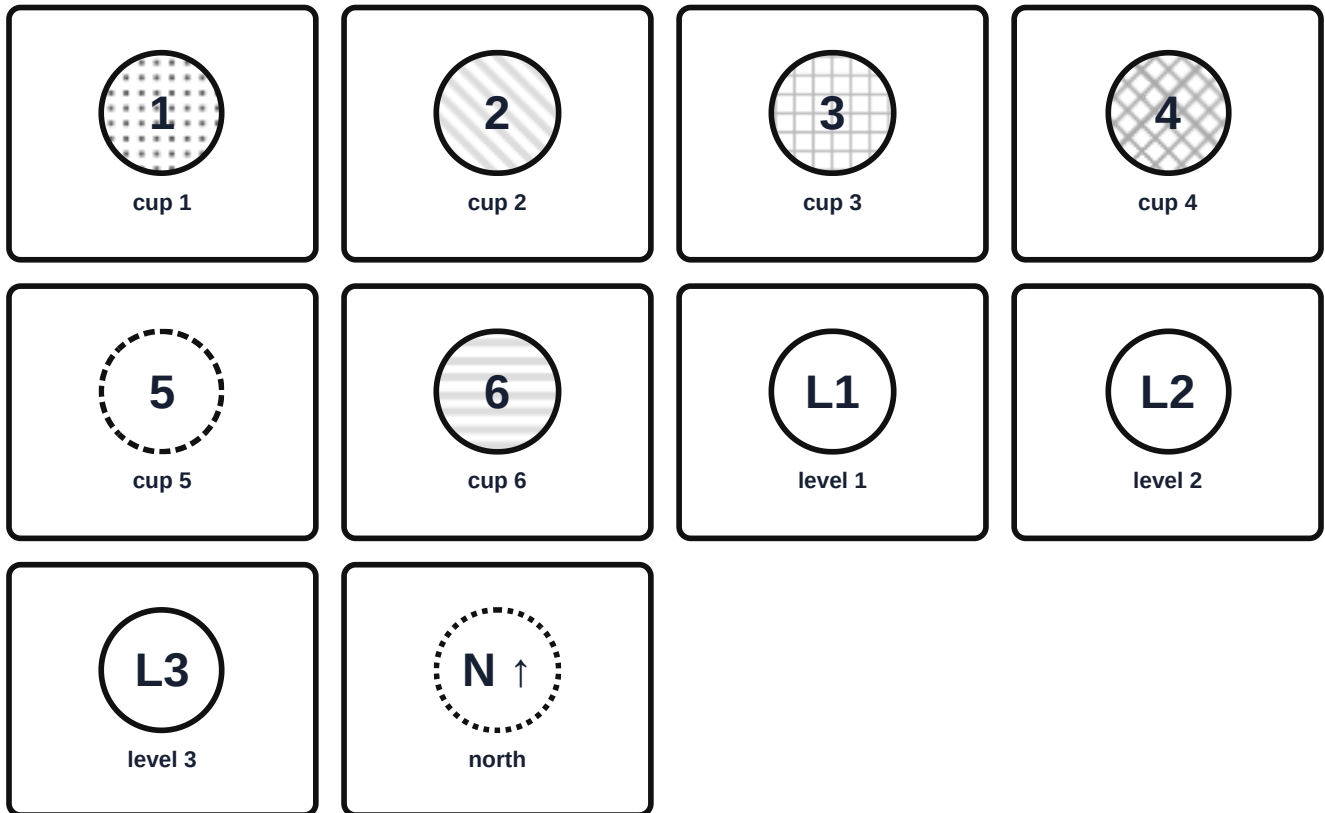
Student language supports

Position: above · below · beside · between · near · far · left · right · clockwise**Clarify:** “Please repeat...” · “Is ___ beside ___?” · “What should I place next?”**Compare:** same · different · rotate · move · replace · sequence

Movable pieces

Set A

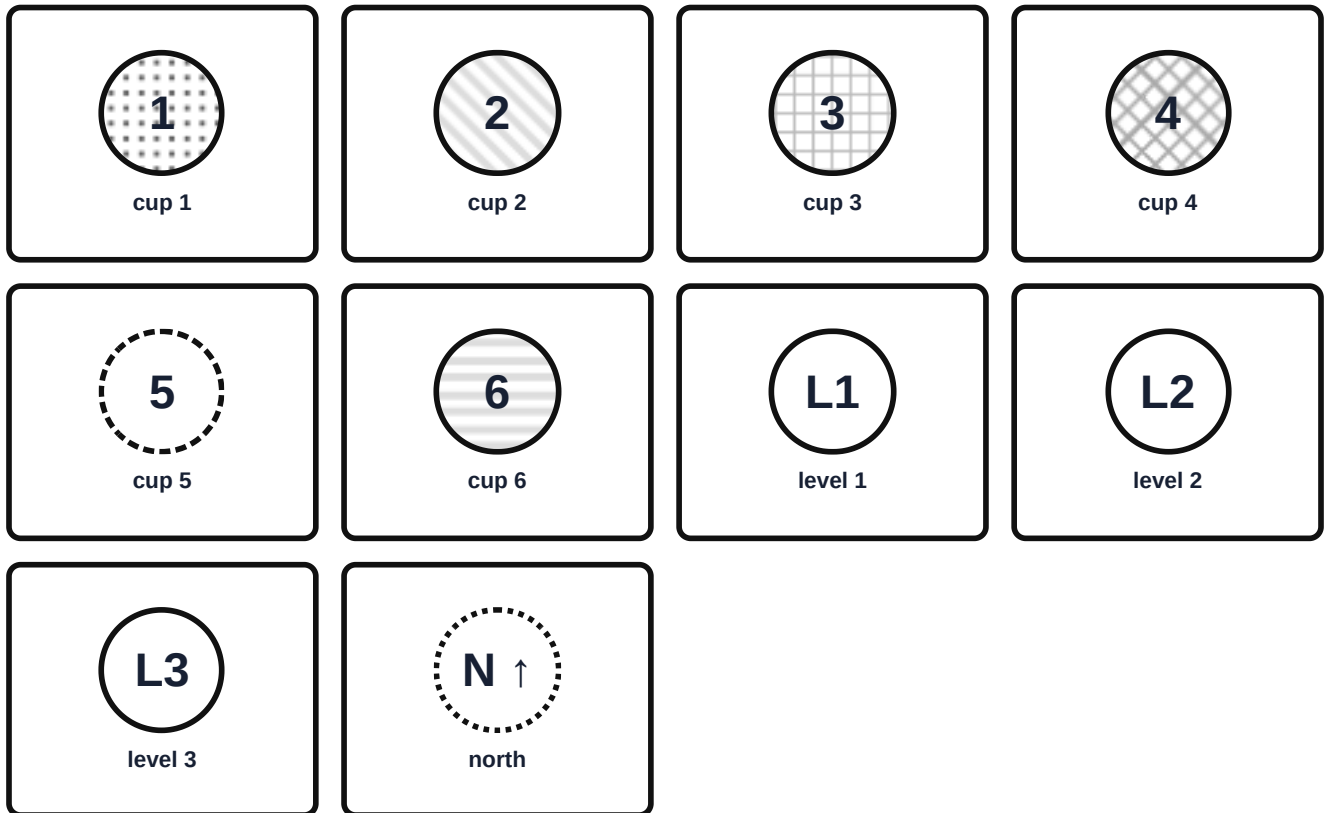
Cut on the solid borders. This set is identical to the partner set.



Movable pieces

Set B

Cut on the solid borders. This set is identical to the partner set.



Cup coordinate mat

Cut the page in half. Both partner mats are identical.

Set A — Cup coordinate mat

START at bottom • columns 1–3 • rows A–C

top / far

center

bottom / near

Set B — Cup coordinate mat

START at bottom • columns 1–3 • rows A–C

top / far

center

bottom / near

Describer-only challenge cards

Keep these cards hidden from the Builder.

Challenge 1: Diagonal

Place cups at 1-A, 2-B, and 3-C.

one cup per cell

Challenge 2: Corners

Fill the four corner cells.

leave center empty

Challenge 3: Center stack

Stack three cups at 2-B.

name bottom to top

Challenge 4: L shape

Use five cups to make an L.

state every coordinate

Cup Coordinate Build reference

Orientation key

Name column first, then row (for example, 2-B). Keep START nearest each student and north pointing away. For stacks, name levels from bottom to top.

Quality check after a round

- Can each student identify pieces by shape or label without relying on color?
- Do both models match in pieces, order, orientation, and relative position?
- Which direction was most precise? Which should be revised?