

Weather-Map Match

Classroom-ready printable pack · Grades 5–8

Pack contents

Two blank regional maps, two weather-symbol sets, forecast challenges, and a NOAA-aligned reference. Two student sets are included.

Teacher directions

1. Give each partner a blank map and one identical weather-symbol set.
2. The Describer chooses a challenge and places pressure systems, fronts, precipitation, temperatures, and arrows.
3. The Describer states locations and the direction shown by front symbols. The Builder recreates the map.
4. Compare maps and use cautious language—weather symbols support a forecast, not certainty.

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 with H, L, one cold front, and one warm front. Provide the symbol key. Symbols differ by shape, label, and line pattern in addition to conventional color.

Storage-envelope labels

Weather-Map Match

Set A — Describer

Count pieces before storing.

Weather-Map Match

Set B — Builder

Count pieces before storing.

Weather-Map Match

Challenge / model cards

Count pieces before storing.

Weather-Map Match

Teacher reference

Count pieces before storing.

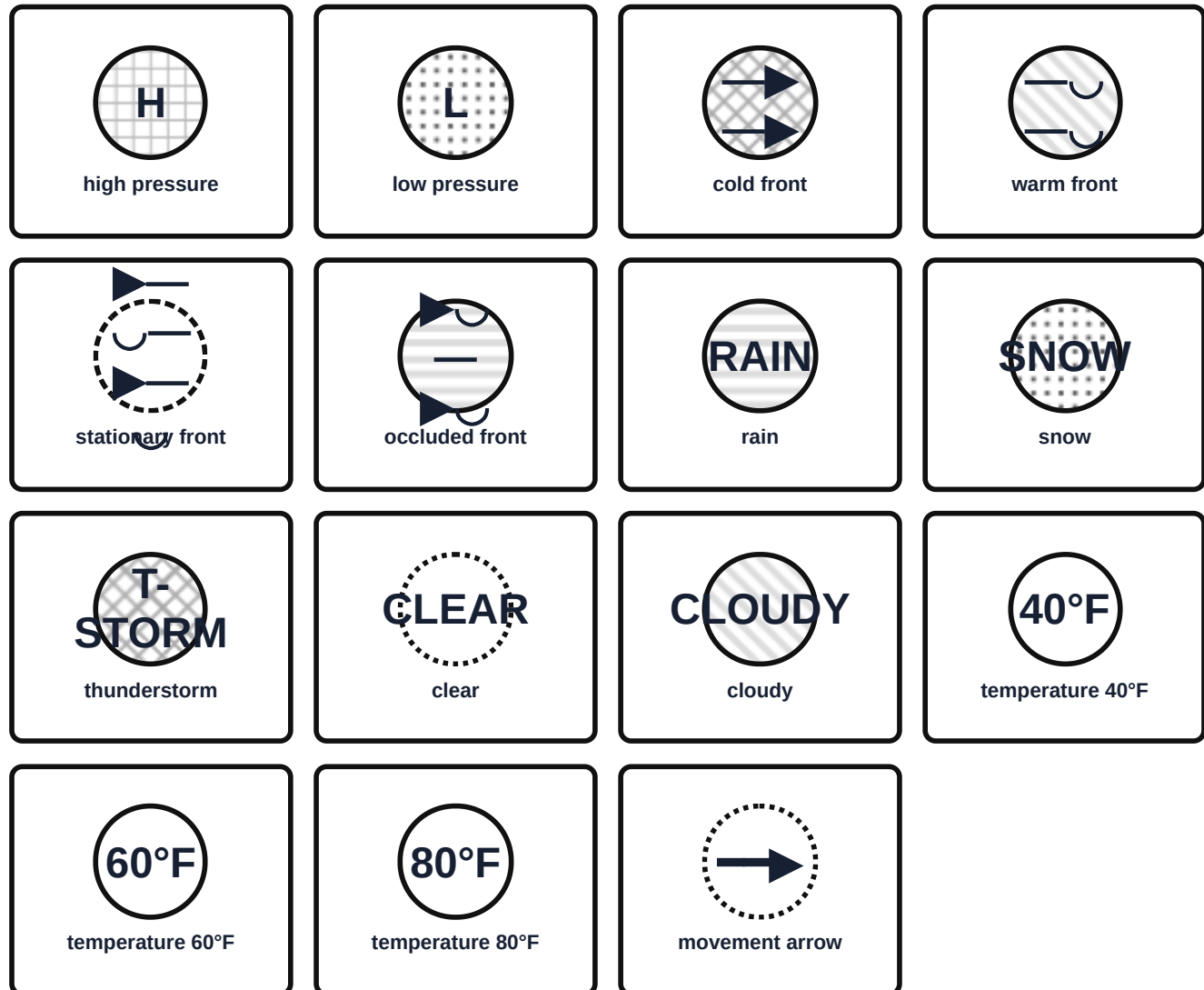
Student language supports

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

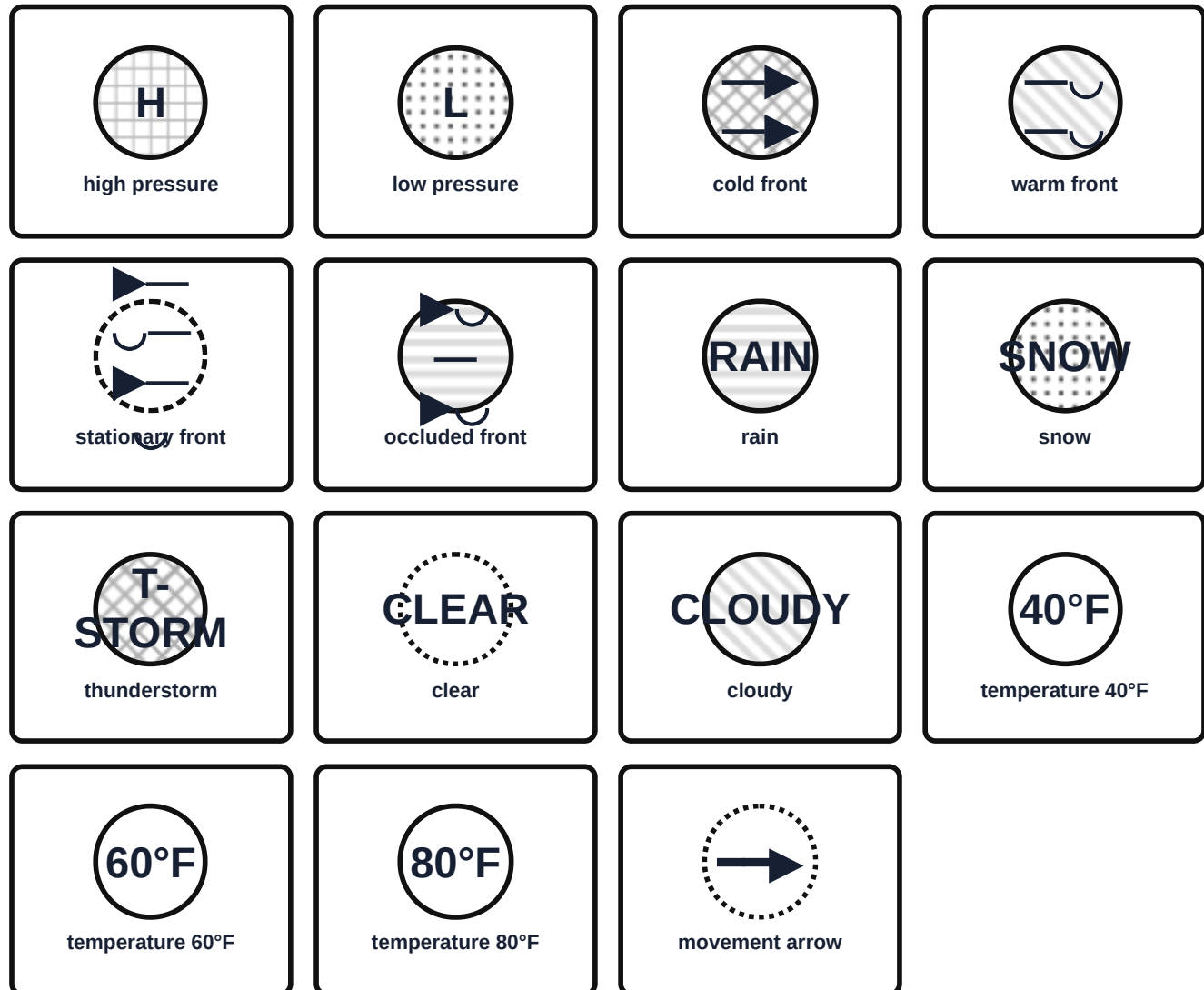
Cut on the solid borders. This set is identical to the partner set.



Movable pieces

Set B

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



Regional weather map

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

Set A — Regional weather map

north • south • east • west • six location zones

top / far

center

bottom / near

Set B — Regional weather map

north • south • east • west • six location zones

top / far

center

bottom / near

Describer-only challenge cards

Keep these cards hidden from the Builder.

Challenge 1: Cold front crossing

Place L in the northwest; extend a cold front southeast with triangles pointing southeast.

Challenge 2: Warm front approach

Place L near center; extend a warm front east with semicircles pointing east.

Challenge 3: Stationary front

Place a west–east stationary front across the center; add rain nearby.

Challenge 4: High-pressure day

Place H in the center and clear symbols nearby; describe this as likely, not guaranteed.

Challenge 5: Mixed system

Place L with cold and warm fronts; add rain near the low and different temperatures on opposite sides.

Weather-Map Match reference

NOAA-aligned symbol reference

H: high pressure, often associated with fair weather. **L:** low pressure, often associated with clouds/storms. **Cold front:** triangles point in the direction of motion. **Warm front:** semicircles point in the direction of motion. **Stationary front:** alternating triangles and semicircles on opposite sides. **Occluded front:** alternating symbols on the same side.

“Often” is important: a single symbol does not guarantee exact local weather. This simplified pack omits full station models and isobars unless a teacher explicitly adds them.

Symbols and descriptions checked against NOAA/NESDIS and National Weather Service educational references.

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?