

The Cold-Touch Mystery

KIDS HANDS-ON

RUN AT 11:25

20 MIN

The point

Nothing is heated, nothing is chilled — and one block still feels icy. **Feels-cold really means carries-heat-away-from-your-hand-fast.**

Materials

- Ice-melting conductivity block pair (black metal + white plastic) + retaining rings
- 2 identical ice cubes
- Infrared thermometer (from the A-2 kit)
- Paper towels

Steps

- 1 Both blocks have sat untouched all morning. **IR-read each block first** — a child calls both numbers aloud: **the same number**. Write both on the board.
- 2 Every child **touches both blocks**: the black one feels icy, the white one doesn't.
- 3 Sit in the puzzle: **"The thermometer says SAME. Your fingers say NOT. Who's lying?"**
- 4 Kids **predict which block melts ice faster** (most pick the "warm" white one — perfect).
- 5 **One ice cube on each block**, same moment, rings on. Watch.
- 6 Resolve: **nobody lied** — the metal block moves heat fast: out of your finger (the icy feeling), into the ice (the fast melt).

Say: "Your finger is not a thermometer. It only feels heat LEAVING. Metal feels cold because it carries your heat away fast — and now you know why the metal spoon felt cold at nine-thirty."

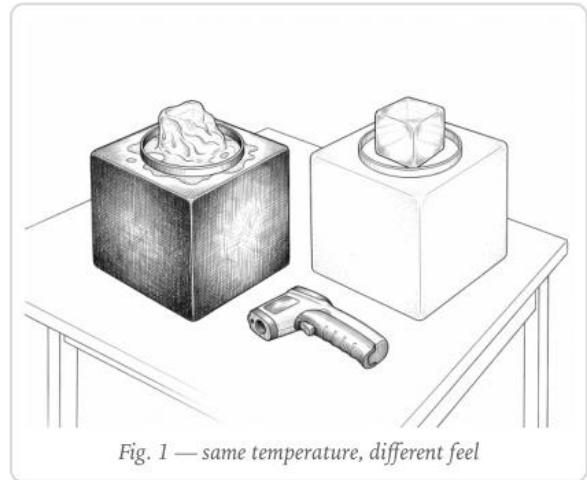


Fig. 1 — same temperature, different feel

TEACHER PREP — THE MORNING OF

Set the block pair on the table early and **leave them untouched** (a held block reads warm); park 2 ice cubes in the freezer door for a fast grab.

What to watch for

- The two matching IR numbers — the mystery's anchor
- The cube on the black metal block collapsing in about a minute; the other barely changing
- The prediction flip: the "cold" block is the ice's worst enemy

EXPECTED RESULT

Same temperature, different feel: the metal block **conducts heat fast** — it pulls heat from a warm finger and pours room-warmth into ice. Sets up the hot-handle test at 11:45.