

Hot Chocolate Handle Test

TEACHER DEMO

RUN AT 11:45

15 MIN

The point

Why pot handles are never bare metal: **one property** (moving heat fast) is perfect for the pan and terrible for the handle.

Materials

- Kettle + one tall mug of hot cocoa (becomes lunch's drink)
- Metal spoon + wooden spoon (from Card 1)
- Timer or phone

Steps

- 1 Make the cocoa; **stand both spoons in the mug** together, handles well clear of the liquid.
- 2 Kids **predict**: in one minute, which handle will be hot?
- 3 Start the timer. At one minute, **teacher touches both handles first**, high up.
- 4 Each child touches **both handles**: metal hot, wood not.
- 5 Connect back: "**Same mystery as the black block — metal moves heat fast, wood doesn't.**"
- 6 **Kitchen tour**: what are the family's pans made of? The handles? Why?

Say: "A material that moves heat fast is perfect for the pan and terrible for the handle. One property — two opposite jobs."



Fig. 1 — heat climbs one handle, not the other

TEACHER PREP — THE MORNING OF

Stage kettle, cocoa, tall mug, and both spoons by the stove; plan lunch so the cocoa lands warm at 12:00.

SAFETY

The cocoa is **HOT**: **teacher pours and teacher touches first**, always. Kids touch **handle tops only**, one at a time — never the liquid or the mug walls. Tall mug, back from the counter edge.

What to watch for

- The metal handle warming while the wooden one stays cool
- Kids finding the same split on every pot in the kitchen

EXPECTED RESULT

Heat climbed the metal spoon only — metal conducts, wood doesn't. That's why the kitchen puts metal where the fire is and wood or plastic where the hand goes.