Attract & Repel Play

KIDS HANDS-ON | RUN AT 10:30 | 25 MIN

The point

Every magnet has two ends — two **poles** — and they are different: one pairing **attracts** (pulls together), the flipped pairing **repels** (pushes apart). *No pole names today — those wait for the compass lesson.*

Materials

- A pair of bar magnets per pair of kids
- Ring magnets + a pencil (the floating stack)
- Magnetic wands + counting chips (for the littlest)
- One paper clip (the closing contrast)

Steps

1. **Free exploration first** — "find out everything these can do." 10 minutes, no teaching.
2. Collect discoveries; **name both**: attract — pull together; repel — push apart.
3. **Ghost-push:** drive one magnet across the floor with the other, never touching.
4. **Floating stack:** ring magnets on a standing pencil, flipped to repel — squash the gap, feel the invisible spring.
5. Closing contrast: a paper clip is grabbed by **both** ends — plain iron never pushes away; only another magnet can be pushed.

> *Say: "Ends that match push apart. Ends that differ snap together. One day we'll learn the two ends' names — today, just feel what they do."*

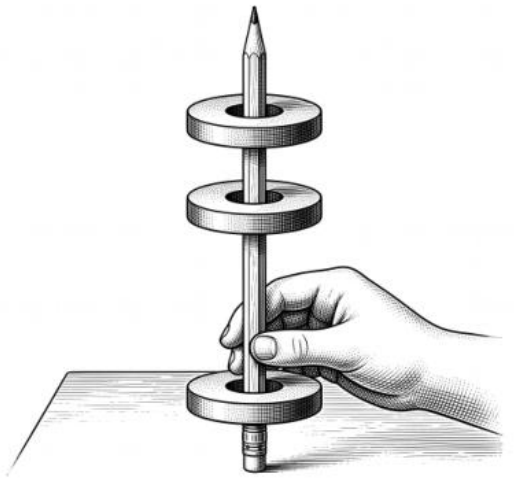


Fig. 2 — the floating stack: each ring rides an invisible spring

TEACHER PREP

Test each bar-magnet pair beforehand — a weak ceramic pair hides the push. Stage the ring magnets and pencil for step 4.

SAFETY

Strong magnets **pinch** — teach *slide apart, don't pry*. Neodymium discs stay teacher-side during free play. Magnets nowhere near electronics.

What to watch for

- The flip moment: same magnets, opposite behavior
- The push growing springier as the gap closes

EXPECTED RESULT

Two magnets snap together one way and shove apart the other — because **the two poles are different from each other**. Iron is only ever pulled; a push means both things are magnets.