8-14 + teachers · 2-8 players · ~20 min · 24 cards + charts

Cause or Coincidence?

Two lines move together. Who's really in charge?

OBJECTIVE

Twelve Cases, each a pair of things whose charts move together. Is A making B happen, is it backwards, is a hidden third thing behind both, or is it luck? On 3-2-1, show 1, 2, 3 or 4 fingers. The Reveal card says who was right. +2 for the right pile, and a Sure coin can double it. Highest score wins.

QUICK START - READ THIS, START PLAYING

1. Each player takes a Case Mat and 2 Sure coins. Lay both Case Charts pages where the whole table can see them.
2. The Reader flips the top Case card, reads it aloud, and all players find its chart.
3. Count 3-2-1 and show fingers: 1 = A causes B, 2 = B causes A, 3 = hidden third thing, 4 = luck. A Sure coin goes on your mat first.
4. The Reader turns over the Reveal card. +2 if you were right. Sure coin: +4 if right, -1 if wrong. Case card goes in its pile.

SETUP

1. Each player or team takes a Case Mat and 2 Sure coins (any coins or tokens). Lay both Case Charts pages in the middle of the table.
2. Match each Case card (C-) with the Reveal card (R-) that has the same number. Put the Case card face-down on top of its Reveal card. That makes 12 stacks. Shuffle the stacks.
3. Whoever sets up should not read the Reveal cards. The youngest player is the first Reader. The Reader plays too.

EACH CASE

1. The Reader slides the Case card off the top stack and reads its title and story aloud. All players find that chart.
2. Study the two lines and ask the Four Questions on your mat. Decide in secret.
3. Want to use a Sure coin? Put it on your mat now. Then count 3-2-1 and all players show 1, 2, 3 or 4 fingers.
4. The Reader turns over the Reveal card and reads all of it, including the line at the bottom. Check your fingers against it.
5. Put the Case card face-up in the pile for its truth. There are four piles on the table. Pass the Reader role to the left.

SCORING

1. +2 for the right pile.
2. Sure coin: +4 if you were right, -1 if you were wrong. The coin is spent either way, and you only have 2.
3. Perfect score is 28: every Case right, both Sure coins on right calls.
4. Ties: more right calls on HIDDEN THIRD Cases, then the younger player.

TIPS

1. Every chart moves together in 8 to 10 of 11 steps, so "they move together" tells you nothing. Ask who moved FIRST.
2. If B repeats A's moves a step later, A might cause B. If A repeats B, it runs backwards. If neither leads, look for a hidden third thing or call luck.
3. HIDDEN THIRD is the biggest pile (5 of 12 Cases). Calling it every time scores only 10. You need the other piles to get near 28.
4. Spend a Sure coin when you can name the hidden thing, or point at who moved first.

WHAT THE CARDS TEACH

1. Correlation - two things whose charts move together. The link can be real, backwards, shared, or luck.
2. Cause - one thing makes the other happen, and it moves first.
3. Hidden third thing - something behind both that nobody put on the chart. Scientists call it a confounder.
4. Luck - short charts line up by chance all the time. Twelve points is not much evidence.
5. AI link - a bot learns patterns from its data. If the data hides the real cause, the bot learns the shortcut, and fails when the world changes.