

To tenth exploration activities



1 Same objects, two questions

Ten toy animals queue at the drawn door, the cat somewhere in the middle. Ask both questions about the same queue: how many animals are waiting, then where the cat is, counted from the front. Then the cat sneaks to the front and ask both again.

"How many animals are waiting now? Has the answer to the first question changed? Has the answer to the second question changed?"

"Ordinal numbers tell us position — which one, not how many."

2 Who moves?

Ten students stand in a queue with an agreed front. Call actions by position: the fourth hops, the seventh sits down, everyone in front of the ninth waves.

"Seventh — hop. How did you work out who that was? Did you count from the front, or could you see it another way?"

Then the change: the sixth person steps out of the line. Students predict who the new sixth is before anyone recounts, then check.

"The sixth stepped out. Who is sixth now? Who kept their place? Why did only some places change?"

3 Which end is first?

Show two scenarios side by side: a race with a finish line, and a queue with a counter. Students find the first in each, then test a third context.

"In the race, first is the runner who finished earliest — at the line. In the queue, first is the person at the front. Both have a 'first', but which end is first depends on the context."

"A building has a first floor, a second floor, a third floor. Which floor is first — the top or the bottom? Why?"

4 Non-example: first means tallest

Line up five students of clearly different heights, tallest at one end. Stand at the tallest end and announce the claim.

"This line is in order. The tallest is first. So first means tallest — right?"

Wait for the disagreement. Shuffle the same students, tallest in the middle, and stand at the shortest end.

"Who is first now? Is it still the tallest? Has the tallest student changed? What has changed?"

"First is a position in a line, not a quality of the person."