

1

The tall jar and the wide bowl

Put out a tall narrow jar and a short wide bowl where the shorter one holds more, and have students commit to an answer before touching anything.

"Which holds more? Say what you think first, then find out."

"Was your first answer right? What changed it?"

A student at this level tests by pouring and then says that the tall jar looked bigger but holds less, giving the pour as the reason rather than their first impression.

2

The scoop that is too big

Give the same three containers with a scoop too big for the smallest one, so that filling fairly takes a decision. Students find which holds the most and say what they did to keep it fair.

"Find out which holds the most. Tell me what you did to keep it fair."

"Did every container get filled the same way?"

3

More than one way

Put out a full water bottle and an empty jug, a pair where more than one attribute would work, and ask for two ways rather than one.

"Which way would you compare these, and why?"

"Is there another way that would also work? What would each one tell you?"

4

Set a challenge

Groups choose a pair of objects and an attribute, set the pair up at a station, and challenge another group to work out which way the pair is meant to be compared. The challenge only counts if the second group can carry the comparison out and get an answer.

"Choose your pair and the way you want it compared. Do not tell them."

"Did they choose the same way? Could they do it?"

length

mass

capacity

duration