

1

The big soft toy

Put out a large soft toy and a small tin of food, so that the bigger object is the lighter one, and ask which is heavier.

"Which is heavier? Tell me how you know."

"Does the bigger one decide it?"

A student at this level names the tin and says that size does not decide it, giving hefting or the balance as the reason rather than repeating that the tin is heavy because it is metal.

2

Do they agree

Give two identical containers, one holding sand and one holding crunched paper, with a balance nearby. Students heft, name the heavier one, then put both on the balance.

"Heft these, then check them on the balance. Do they agree?"

"If they did not agree, which one would you believe?"

3

The parcel that was never picked up

Set out a large parcel and a small one and report that another student has said the bigger parcel must be heavier without picking either one up. Students say whether that is right and how they would settle it.

"Are they right? How would you settle it?"

"What would you say to them?"

4

Make them balance

Give a container of sand, a scoop and a balance with a fixed object on one side. Students add sand a scoop at a time until the two sides stay level, then say how they knew to stop.

"Put sand in until the two sides stay level."

"How did you know when to stop adding?"