

Supplies

Small sealed containers (small tupperware boxes or ziplock bags) filled with rice, beans, sand, rocks, and something light like feathers - 2 of each. Balancing scales.

The Activity

The student will explore the sealed containers by holding and comparing weights. They will pair up the ones that weigh the same, and contrast the ones that are light and heavy, by holding them. Next, the student will use the scale to determine which ones are heavier than others.

Variations

- The student can make their own weights by for instance putting 1 scoop of rice in one ziplock bag, 2 scoops in the next and 3 in the third. They can then weigh them and order them by heavy and light, or heavy, in between, and light.
- With 2 containers of the same size, student fills up one with feathers and one with something heavy like rocks. They will then determine which one is heavy and which is light. Discuss with student how come, even though they are the same size, one is heavy and one is light.

Focus:

Encourage the child to focus their attention on the task at hand. Allow the student to get acquainted with the supplies by touching, holding, and talking about them. Then explain what you will do. Formulate a plan with the child to accomplish the goal.

Questions: What is the plan? What do you need to do first? Next?

Act:

The student will explore and weigh the containers.

Questions: How do these two containers feel? Which one is heavy? How can you tell? Can you find one that feels the same as this? How are these containers different? Can you line them up with the lightest on this side and the heaviest on that side?

Reflect:

During and after the activity reflect on what the student is doing/has done.

Questions: What did you do? What did you find out about the containers? What was the easiest way to weigh them.

Math Observation Checklist:

This activity will give insight into the student's understanding of weight, quantity, ordering, conservation, focused perception, systematic exploration, attending to more than one piece of information, attending to relevant information, inhibition of impulsivity.

Supplies

Small objects that can be weighed and can serve as measuring units of weight, such as washers, bolts, popsicle sticks or pennies. Balancing scales.

The Activity

The student will take two items and estimate which one is the heaviest. They then weigh the objects on the scales and records the result on a sheet of paper with the headings Heavy and Light. Recording can take place by drawing a picture in the correct column, or writing down the name of the object.

Variations

- The student can make their own units of weight with, for instance washers. They then select an object to be weighed and puts washers on the other side of the scale until the scale balances. They then record, for instance “my eraser weighs 3 washers”.
- The student will estimate the weight first and then check the estimate by weighing the object.

Focus:

Encourage the child to focus their attention on the task at hand. Allow the student to get acquainted with the supplies by touching, holding, and talking about them. Then explain what you will do. Formulate a plan with the child to accomplish the goal.

Questions: What is the plan? What do you need to do first? Next? What do you think we can do with these containers.

Act:

The student will explore and weigh the objects using the units of measurement.

Questions: Which one do you think is heavier? How can you find out? How many washers do you think this eraser weighs? How many popsicle sticks? Does this eraser weigh more washers or popsicle sticks? Can you tell which object is the heaviest by looking at your list?

Reflect:

During and after the activity reflect on what the student is doing/has done.

Questions: What did you do? What did you find out about the objects? What was the easiest way to weigh them? Were your results the same when you weighed with popsicle sticks or washers? What was the difference?

Math Observation Checklist:

This activity will give insight into the student’s understanding of weight, quantity, ordering, conservation, focused perception, systematic exploration, attending to more than one piece of information, attending to relevant information, inhibition of impulsivity.



HEAVY	LIGHT