



NATIONAL MATHEMATICS PROGRAMME

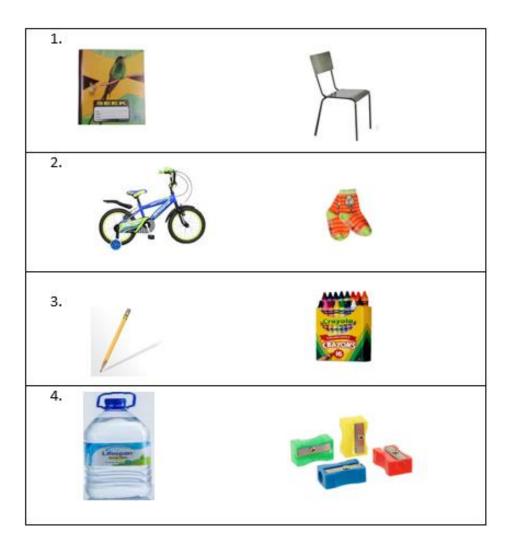
RESOURCE DOCUMENT

FOR GRADE ONE TEACHERS

 ${\it RDG1Measurement} Estimate {\it WeightsNonstandardCompareWeights20181009v2}$

Objective: Estimate the weight of objects in non -standard unit Topic/ Name of activity: Heavier or lighter

Which item is heavier or lighter than a tennis ball? Circle the item that are lighter and mark an X on the ones that are heavier



Objective: Estimate the weight of objects in non -standard unit

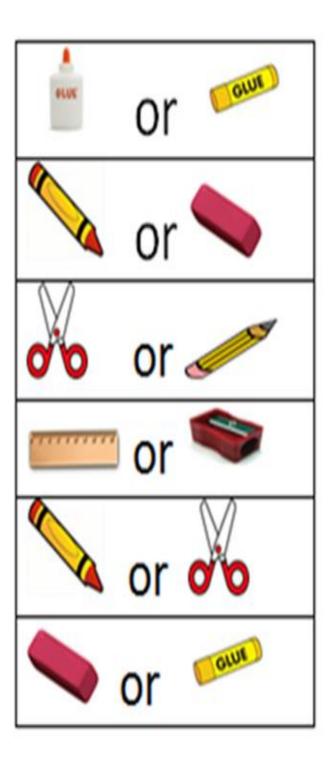
Topic / Name of activity: <u>Heavier or lighter in my home</u>

Draw or paste something from inside your	Draw or paste something from inside your
house that is heavier than a marker.	house that is lighter than a tennis ball.
Draw or paste something from outside your	Draw or paste something from outside your
Draw or paste something from outside your house that is lighter than a tennis ball.	Draw or paste something from outside your house that is heavier than a tennis ball.

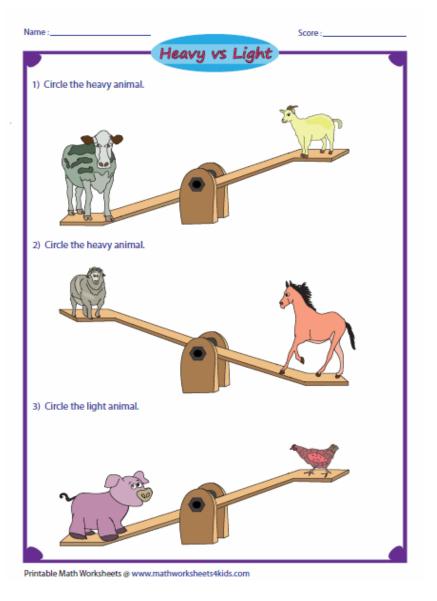
Objective: Estimate the weight of objects in non -standard unit

Topic / Name of activity: Lighter objects worksheet

Teacher, provide students with sample items to compare on a beam balance. Have them Circle the object that is lighter. Modify the worksheet to fit your situation.



Objective: Compare the weights of objects Topic / Name of activity: Heavy versus light



Look at the balance and circle which animal is heavier.

- 1. Why did you choose your answers? Look at the cow and the goat. Is it possible for a goat to ever be heavier than a cow?
- 2. Are there any birds that could possibly be heavier than a pig? Why do you think so?

Objective: Comparing the weight of objects

Activity: Instructions on how to make a balance scale

How to make a balance scale

1. Use a hole punch to make holes in 2 small paper cups. Punch 2 holes in each cup. Make the holes close to the rim of the cups and on opposite sides.

If you don't have paper cups, you can make the buckets for your balance scale with plastic cups instead.

2. Cut 2 pieces of twine that are each around 1 foot (0.30 m) long. Any kind of twine will work, but a thick, strong twine will make the balance scale more durable. After you cut the twine pieces, lay them next to each other to make sure they're the same length. If they're not, cut them with scissors to adjust their lengths.

3. Tie the ends of the twine through the holes in the cups. Use 1 piece of twine per cup. When you're finished, the twine pieces should form thin handles on the cups, like the cups are little buckets.



4. Find a notched clothes hanger. A plastic, metal, or wooden hanger will work, as long as it has a notch on both sides of the hook. Otherwise, the paper buckets will slip and fall right off the scale.



5. Hang the cups on the clothes hanger using the twine handles. Hang the cups on opposite sides of the clothes hangers in the notches. When you're finished, lift up the scale and hold it by the top to examine the buckets. Both buckets should be hanging at the same level — if one is higher than the other, you'll need to adjust the twine handles. The clothes hanger will have to be placed on a knob or hook or any kind or bar it can attach to.

6. Have the students' experiment putting the different small objects in the cups. When the object in 1 cup weighs more than the object in the other cup, the heavier cup will sink and tip the scale. Explain to your kids that the lower bucket has the heavier object, and the higher bucket has the lighter object.



Objective: Compare the weights of objects

Topic / Name of activity: Estimate and Weigh Worksheet

Items	Which <u>do you think</u> is heavier?	Which <u>is</u> heavier?
Spoon and bowl	Bowl	Bowl

Objective: Compare the weights of objects Topic / Name of activity: Weight comparison

Weight Comparison

Refer to the coloured dots on the bags and record which bag is the heaviest, which is the lightest and if any of them have equal weights. Use the balance scale to explore their weight and compare the different bags.

The	_ mystery bag is the heaviest.	
The	mystery bag is the lightest.	
The weight.	_ and	_ mystery bags are equal