

**Discover @ Home / Extension Activity: More measuring.**



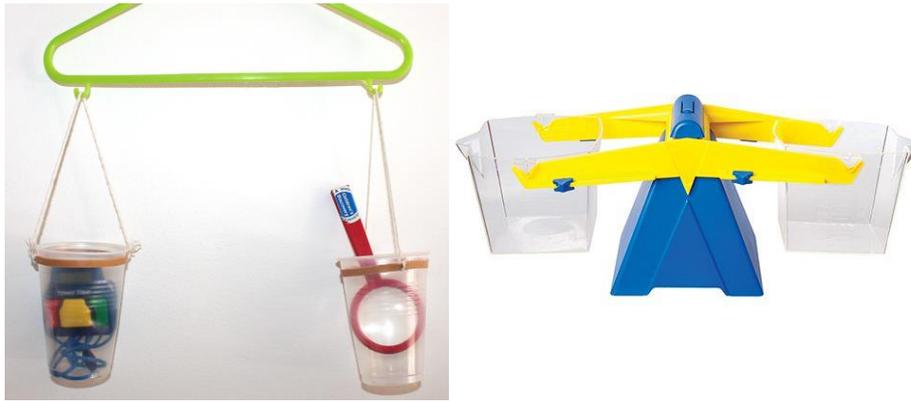
Today we have measured length or height informally and formally. We have measured weight in a balance. We have learnt that scientists like to measure things like size, weight, distance and speed as this gives them information about an object. This information is called data.

**At home after this session, do lots of measuring and record your results.**

- You can measure the weight of objects using kitchen or bathroom scales.
- Next time you do some cooking, measure ingredients with measuring cups or spoons
- You can also measure how long things take with a timer.
- You could time how long you take in the bath / shower.
- Measure the size of your head with the tape measure
- Measure a small and a big toy. Compare the difference.
- Use the ruler to measure the size of your Discovery Box



## Comparing weights with a coat hanger balance



Go back to your 5 items from your Discovery Box that you earlier lined up according to length. Now pick up the longest and shortest item. Can you tell, just by holding them, which one is heavier? Let's make a 'balance' to help us.

### From your Discovery Box find:

- the coat hanger,
- 2 plastic cups,
- rubber bands and
- ask your adult to cut two x 30 cm lengths of string.

Put a rubber band around the top of each cup. Wrap or tie one end of one piece of string around the rubber band and then do the same with the other end of the string on the opposite side. If your coat hanger doesn't have hooks, you'll need to put the string over the lower part of the coat hanger before attaching it on the other side. Do the same with the other cup.

Evenly spread the cups apart on the coat hanger.

Talk with your grown up about what will happen if you put an object into each cup that weighs the same.

### Some questions to ask:

- What will happen if the objects don't weigh the same?
- Does it make a difference which cup the heavier item goes in?

Choose more items from your Discovery Box or around your house to put in your coat hanger.

Record your results.

### Prep for next session: If you want to prep for next session gather these items:

- One of the experiments in the next session uses a boiled egg or a grape, so if using the egg, please have it ready in advance.

#### Also needed:

- A piece of strong cardboard or a tray or a flat box lid
- 2 or more small wheeled toys (e.g. Matchbox cars)
- Metal coat hanger and 2 pieces of string approx. 45 cm long, a spoon or pen
- 3 strips of Blu tack or plasticine, 5 cups with tap water, 1 spoon, 1 bowl, ¼ cup salt, (newspaper, towel)