



Experience and Outcomes

I am developing a sense of size and amount by observing, exploring, using and communicating with others about things in the world around me.

MNU 0-01a

I can share ideas with others to develop ways of estimating the answer to a calculation problem, work out the actual answer and then check my solution by comparing it with the estimate.

MNU 1-01a

I can estimate how long an object or distance is, then measure it using appropriate instruments and units.

MNU 1-11a

Learning Outcome

Pupils will demonstrate their skills of estimation in the context of measure, using relevant vocabulary such as longer than, further than, less than, more than. (MNU 0—01a)

Pupils will use knowledge of everyday objects to provide reasonable estimates of length or height. (MNU 1-11a)

Pupils will make accurate use of a range of instruments including cones, sticks of the same length or longer sticks such as 1 metre measuring sticks or 1 metres pieces of rope when measuring length and height (depending on stage and ability). (MNU 0-01a and MNU 1-11a)

Pupils will record measurements of length (MNU 1-11a)

Resources

Chalk

Cones

Sticks of same length

1 metre measuring sticks (these could be homemade using tape to measure every 10 cm (this could be a lesson in itself depending on stage of children).

Paper to record measurements (this could be made by teacher or as a challenge children could create their own to decide how they are going to organise the information).

Activity

- **Warm up;** Ask children to line up according to height starting from shortest to tallest. Now do it tallest to shortest. Ask how else they could order the line using height – perhaps tallest in middle with shortest either side.
- And/or can they estimate how many children it would take to measure the distance between A and B? (This could be a distance marked with chalk or it might be the distance between two landmarks in the playground). Ask for volunteers to lie down on the playground in a long line to measure the distance. How will they have to position themselves to make sure they do it accurately? Were they right? What would their estimate be if they used taller/shorter children?
- **Main:** In pairs, ask the children to estimate how far they can jump from a designated spot (this could be marked by chalk, a stick, a cone, stone etc)
- Jump and then measure how far they have jumped. This might be measured using non standard units of measure such as cones, sticks, string or it could be measured using 1 metre lengths of string or sticks or formal measuring sticks depending on stage or ability.
- How accurate were they in their estimates? For an extension can they calculate the difference between their estimate and actual measurement?

- Send children on a search to estimate and measure different objects in and around the school playground. Record measurements using the correct units (if appropriate depending on stage and ability).
Plenary; gather back in a group and check for understanding “what does estimate mean?” “When we are measuring the length/height of an object, how do we do it accurately?”

Assessment

Pupils will be able demonstrate their skills of estimation in the context of measure, using relevant vocabulary such as longer than, further than, less than, more than.

Pupils will be able to use knowledge of everyday objects to provide reasonable estimates of lengths or height.

Pupils will be able to use a range of objects to measure length accurately (by lining up correctly, reading the info from measuring stick etc)

Pupils will be able to record measurements of length to the nearest standard or non standard unit (upper first level)