Measurement: Measure Height Using Non-Standard Units

Aim:	**Success Criteria:**	**Resources:**
Measure and begin to record lengths and heights. To measure height using non-standard units.	I can accurately measure height using various non-standard units. I can write down my measurements.	Lesson Pack Lolly sticks Building bricks Paper clips Interlocking cubes
	Key/New Words: Measure, height, tall, taller, tallest, short, shorter, shortest, accurately, non-standard units, estimate.	**Preparation:** How Tall? Activity Sheets – 1 per child Diving into Mastery Activity Cards – as required

Prior Learning: It will be helpful if children can compare heights using 'taller' and 'shorter'. Height Comparisons is a great lesson to support this.

Learning Sequence

1 2 ? 3	**Remember It:** Children recap their understanding of height comparisons and the vocabulary 'taller' and 'shorter'. They find objects in the classroom that have been described using this language on the Lesson Presentation.	
Whole Class	**Measure It:** Using the Lesson Presentation, explain to children what 'measure' means and what it means to measure accurately. Introduce children to measuring the height of objects using non-standard measures. This part of the lesson uses squares to measure. Explain to children that the units used to measure need to be the same and that they need to line up with the base and top of the object being measured. Also, the objects should stack on top of each other without gaps. There are questions included to address these potential issues.	
Whole Class	**Using Different Units:** The Lesson Presentation now shows children how different units can be used to measure objects. As a class, measure the height of a table using cubes. Children should notice that this takes a long time and therefore bigger objects should be used. Children then complete sentences that recognise small objects need measuring with small units and big objects need measuring with big units.	
	How Tall? Children complete the differentiated How Tall? Activity Sheets by recording the measurements of objects on their sheet. After the children have completed the activity sheets, they would benefit from having experience measuring real objects in the classroom using non-standard units. Can the children accurately measure and record height using various non-standard units? ★ Children are given a selection of objects to measure using the cut-out cubes. ★★ Children are given a selection of objects to measure using either lollipop sticks or paper clips. They then go on to notice what happens when you measure a tall image with a small unit. ★★★ Children are given a selection of objects to measure using either lollipop sticks or paper clips. They then go on to notice what happens when you measure a tall image with a small unit.	
	Diving into Mastery: Schools using a mastery approach may prefer to use the following as an alternative activity. These sheets might not necessarily be used in a linear way. Some children might begin at the 'Deeper' section and in fact, others may 'dive straight in' to the 'Deepest' section if they have already mastered the skill and are applying this to show their depth of understanding. Children begin with measuring objects on the activity card and then go on to measuring objects around the classroom. Children use their understanding to explain mistakes shown in measuring the heights of objects. Children use their understanding of measuring with non-standard units to solve an all possibilities problem. They then go on to suggest more practical equipment to use to measure the height of an adult.	

Exploreit

Measureit: Children explore measuring various objects accurately using a wide range of non-standard units.