

Planning Sheet for Focused Science 1 Assessment

| | |
|---|--------------------|
| QCA Unit: 3D Rocks and Soils | Not in the QCA SOW |
| <p>Scientific Enquiry Focus: Strand: obtaining and presenting results</p> <p>Measuring length, recording in tables, bar charts</p> | |
| <p>Learning Objectives:</p> <ul style="list-style-type: none"> To make careful measurements of length To design and (or) simple tables to record results To present results as a bar chart | |
| <p>Differentiated Activity: Context: This activity is not in the QCA SOW. We have added it to extend the opportunities for investigative work. The investigation is: Craters! Investigate dropping asteroids (e.g.marbles) in sand and explore the craters produced. As a class brainstorm what could be changed and measured (could use post-it planning board) and allocate different variables to different groups (see below). Ask each group to make measurements and record them in a table.</p> <p>Lower attainers- categoric variable, e.g. tennis ball/Ping-Pong ball/rubber ball, use prepared table, support with making measurements of crater to nearest cm (provide ruler marked in cm only). Put bars on partly prepared chart.</p> <p>Middle attainers- numeric variable e.g. height of drop, measure to nearest ½ cm fill in column headings and results on partially prepared chart, support with deciding on scales and axes for bar chart</p> <p>Higher attainers- choose own variables, measure to nearest mm, design own table to record results, make bar chart independently.</p> | |
| <p>Key Questions:</p> <ul style="list-style-type: none"> Where on the table will you write down the things you have changed/measured? What would be a good heading for this column? Where on the bar chart will you show what you changed? Where on the bar chart will you show your measurements? Can you explain to me how you decided to draw your table of results? | |
| <p>Sc1 Assessment Indicators:</p> <p>L2 – can measure using a simple ruler marked in cm with some help, can use a simple prepared table, can record results on a bar chart with help.</p> <p>L3 (low) – can measure to nearest ½ cm, can make decisions about where to put information in a simple table, can make a bar chart with some support</p> <p>L3 (high) Can measure to nearest mm, can design and use own simple table, can make bar chart with some help.</p> <p>L4 Can design and use a suitable table independently, with some repeated measurements (though not necessarily taking a mean) and can draw a bar chart from the table independently.</p> | |

