Measure and Weight

|  |  |
| --- | --- |
| AOLE: Mathematics and numeracy | |
| 4 Purposes: Ambitious, capable learners | |
| WM:  Geometry focuses on relationships involving shape, space and position, and measurement focuses on quantifying phenomena in the physical world. | DL:  I can estimate and measure length, capacity, mass, temperature and time, using appropriate standard units. |
| LO:  I can record found items accurately by first estimating and then recording accurate measurements. | |

|  |  |
| --- | --- |
| Introduction: | **Discuss or gather ideas:**  What is measure?  How do we measure?  standard and non standard units?( we often just use our eyes or hands to estimate measure)  metric and imperial measurements (we still use imperial for lots of different things- heights, weight of babies, pints etc)  **How much?**  Do children know what 2kg or 20kg feels or looks like?  Get a selection of standard weights (cover up the numbers) or bags of sand, stones, bricks, and try them out to see how much they weigh.  use a variety of scales: electronic, balance and round face spring scales and perhaps bathroom scales to allow the children to see how much weights are in real life  Can the children start to develop the accuracy of their estimation?  Are they able to compare it to something else of roughly the same weight?    Record in table if needed (in resource section)    **How long?**  Repeat with measure if you feel it is needed by measuring different classroom items or going out into the yard to measure distances between buildings.  Children should be able to:   * measure to the nearest mm and convert between mm, cm and m. * decide which is the most appropriate unit of measurement and which is the most appropriate ruler * make increasingly accurate estimates       Use 30cm rulers, trundle wheels, tape measures, metre rulers. |
| Main body: | * Make a collection of found items from a walk or visit (sticks, stones, shells, leaves, plants including roots) * record each item using a visual description, weight and key measurements marked on a diagram.   (table for recording in resources) |
| Extension: | **Expedition Pack Activity** (see resources)  select and justify equipment that ARW should take on his travels  Use google maps to calculate distances between home and school in km.  use Google maps to calculate distance between different cities or countries  Mapping tasks in humanities  Cookery as practical weighing tasks |
| Plenary: |  |
| Resources: | Expedition Pack  nrich activities:  <https://nrich.maths.org/public/topic.php?group_id=15&code=152> |