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| **Investigating Length** | | |
| Identifies which metric unit (mm, cm, or m) should be used to measure the length of an object.  A cm is the width of my finger. The thickness of a nickel is much less than 1 cm, so I would use millimetres to measure it.” | Uses benchmarks to estimate and measure length using metric units.  “The paper clip is a little more than two fingertips long, so I estimate its length to be about 2 cm. I measured to check. It was about 2.5 cm long.” | Chooses an appropriate metric unit to estimate and measure lengths of objects and explains reasoning.  A kangaroo can jump 750 cm in one leap.  “To measure the length of the kangaroo’s jump, I would use metres because I can picture the length being between 7 and 8 metre sticks long.” |
| **Observations/Documentation** | | |
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| **Investigating Length (cont’d)** | | |
| Explains the relationships among mm, cm, m, and km and converts length measures.    A kangaroo can jump 750 cm in one leap.  “100 cm = 1 m; 750 ÷ 100 = 7.5,  so 750 cm = 7.5 m;  1 cm = 10 mm; 750 × 10 = 7500,  so 750 cm = 7500 mm.  I would give the length of the jump in metres as it is more reasonable.” | Compares and orders lengths when measures are given in different units.  Lengths of jumps of different animals:  Rabbit: 3000 mm  Red Kangaroo: 12.2 m  Chipmunk: 690 cm  “I would convert the lengths to metres:  3000 mm = 3 m and 690 cm = 6.9 m.  The animals ordered from longest to shortest jump: rabbit, 3 m; chipmunk, 6.9 m; red kangaroo, 12.2 m.” | Flexibly uses the relationships among metric units to estimate, measure, and solve problems involving length.  Dakota buys a spool of 200 m of fishing line. Dakota uses 950 cm of the line. How much line is left on the spool?  “I convert 950 cm to metres.  1 m = 100 cm and 950 ÷ 100 = 9.5.  Dakota used 9.5 m of fishing line.  So, there is 200 m - 9.5 m = 190.5 m of line left on the spool.” |
| **Observations/Documentation** | | |
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