Activity 3: Identifying mistakes

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| **Scenario 1 – Using a balance to measure the mass of salt.**  **Equipment needed:**  Balance  50cm3 beaker  Beaker containing salt (unknown mass)   * A student turns on the balance. They then place the beaker on the balance containing an unknown mass of salt. They wait for the balance display to stop fluctuating and record the mass of salt. * What did they do wrong? * **Repeat the procedure using the equipment provided to correctly measure the mass of salt.** |
| **Scenario 2 – Using a measuring cylinder to measure a volume of water.**  **Equipment needed:**  Measuring cylinder  Water  50cm3 beaker   * A student measures out 30cm3 of water into a measuring cylinder. To do this, they pour water into the cylinder from a beaker whilst holding the measuring cylinder in their hand. They read the scale from looking above the measuring cylinder. * What did they do wrong? * **Repeat the procedure using the equipment provided to correctly measure the volume of water.** |

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| **Scenario 3 – Using a thermometer to measure the temperature of a liquid whilst heating.**  **Equipment needed:**  50cm3 beaker  Water  Thermometer  Bunsen burner  Gauze  Tripod  Mat  Safety glasses   * A student heated a beaker of water using a Bunsen burner. They did this safely by wearing safety glasses. They rested a thermometer in the beaker, so the bulb was touching the bottom of the beaker and took the temperature of the water. * What did they do wrong? * **Repeat the procedure using the equipment provided to correctly measure the temperature of the liquid.** |
| **Scenario 4 – Using a beaker to measure a 12cm3****volume of liquid.**  **Equipment needed:**  Pipette/syringe  50cm3 beaker  Water   * A student measures 12cm3 water by pouring water directly into a beaker, ensuring that their eye is level with the scale on the beaker. * What did they do wrong? * **Repeat the procedure using the equipment provided to correctly measure 12cm3 of liquid.** |