### Focused Assessment of Science

<table>
<thead>
<tr>
<th>Topic: Electricity</th>
<th>Year 4 Age 8-9</th>
<th>Title: Purposeful switches</th>
</tr>
</thead>
</table>

#### Working Scientifically Link Review:
- using results to draw simple conclusions, make predictions for new values, suggest improvements

#### Conceptual Knowledge Focus:
- recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit

---

### Example

Children were asked to apply their knowledge of circuits and switches by creating a switch for a purpose. For example, making a pressure switch for an alarm or making a switch for a light house model (using a crisps tube).

---

Children meeting the objective would be able to apply their knowledge of conductors and insulators in order to make a switch. For example, they would realise that the alarm bulb will not light if the switch is covered in plastic tape. They could also demonstrate their understanding of circuits by drawing their design (can be done after model making).

---

Example from Burscough Primary School, Lancs.