







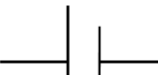

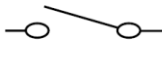
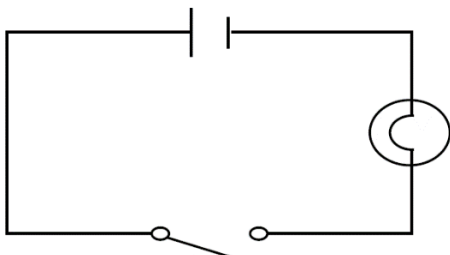
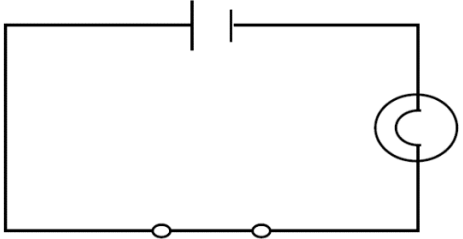
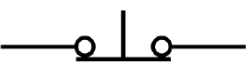
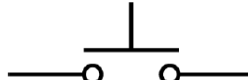


Our Lady's Catholic Primary School - Knowledge Organiser

Design Technology		Alarms	Year 4
<p>Key Vocabulary</p> <ul style="list-style-type: none"> Circuit Closed circuit Complete circuit Switch Mains Electricity 	<p>Key Learning Objectives:</p> <ol style="list-style-type: none"> 1. To investigate how to make circuits with a variety of different switches. 2. To design and create an alarm system for a particular purpose. 3. To evaluate my work. 	<p>Images / Diagrams</p> <div style="display: flex; justify-content: space-around;">      </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="border: 1px solid purple; padding: 5px; width: 30%;"> <p style="text-align: center; background-color: purple; color: white; margin: 0;">wire</p>  </div> <div style="border: 1px solid purple; padding: 5px; width: 30%;"> <p style="text-align: center; background-color: purple; color: white; margin: 0;">bulb</p>  </div> <div style="border: 1px solid purple; padding: 5px; width: 30%;"> <p style="text-align: center; background-color: purple; color: white; margin: 0;">motor</p>  </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="border: 1px solid purple; padding: 5px; width: 30%;"> <p style="text-align: center; background-color: purple; color: white; margin: 0;">battery</p>  </div> <div style="border: 1px solid purple; padding: 5px; width: 30%;"> <p style="text-align: center; background-color: purple; color: white; margin: 0;">buzzer</p>  </div> <div style="border: 1px solid purple; padding: 5px; width: 30%;"> <p style="text-align: center; background-color: purple; color: white; margin: 0;">switch</p>  </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;">   </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="border: 1px solid purple; padding: 5px; width: 45%;"> <p style="text-align: center; color: purple; margin: 0;">PUSH-TO-BREAK SWITCH CIRCUIT SYMBOL:</p>  </div> <div style="border: 1px solid purple; padding: 5px; width: 45%;"> <p style="text-align: center; color: purple; margin: 0;">PUSH-TO-MAKE SWITCH CIRCUIT SYMBOL:</p>  </div> </div>	
<p>Skills used in this unit:</p> <ul style="list-style-type: none"> Joining Evaluating Making Cutting Designing Drafting Using tools effectively Shaping Imagination Exploration Generating Selecting Analysing Constructing 	<p>Key facts & Information</p> <ul style="list-style-type: none"> Many alarms use switches to 'arm' them - These switches include on/off, push-to-break and push-to-make switches. Electrical circuits work by a flow of electricity powering components. For the components to work, the circuit needs to be <u>closed</u>. Don't make short circuits - If you make a circuit without a bulb, buzzer or a motor it could overheat and cause a fire. 		