



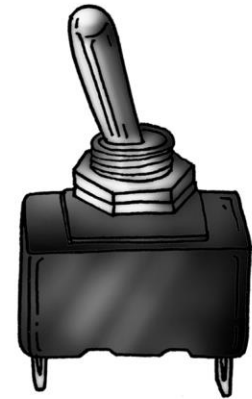
INPUT



PROCESS



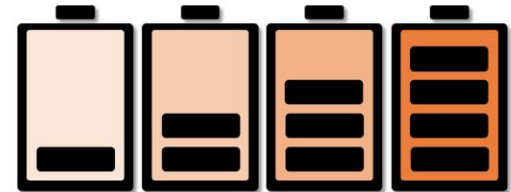
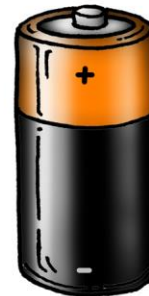
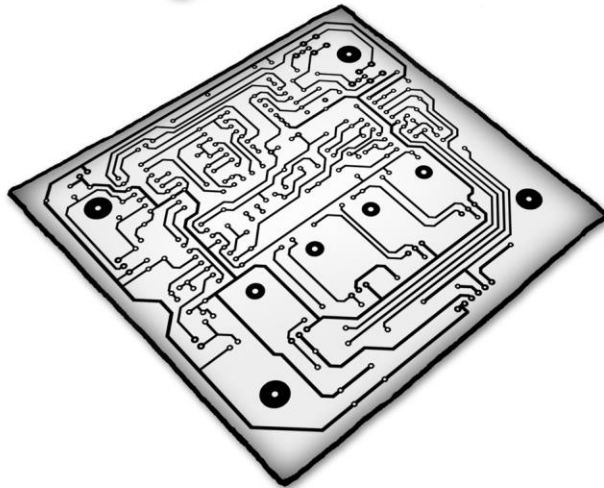
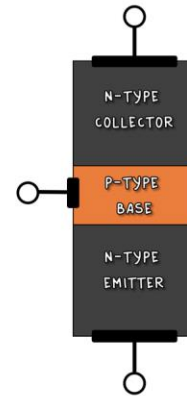
OUTPUT



Reuse
Reduce
Recycle



KnowIT
ELECTRONICS



Systems and components

- Explain what a system is?
- List the parts of a system diagram
- Explain how a system diagram can be used in the design of an electronic product

Inputs

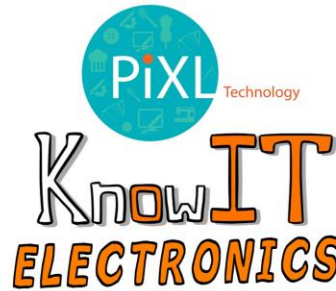
- Write the meaning of the following abbreviations: SPST, PTM, SPDT, PTM and PTB
- What is a transistor? Draw a diagram to identify parts
- What is a potential divider?

Outputs

- What is an LED?
- How is it used?
- Why should it be positioned correctly?

Processes and manufacture

- Explain one-off, batch and high volume production. Identify the different approaches for each method.
- What is a PCB?
- Describe how to create a PCB using the photo etching method
- What is a computer controlled router used for in PCB manufacture?
- Explain the following: breadboard, stripboard, through hole and surface mount
- What is CAM?
- Explain quality assurance and quality control



Design and market influences

- What is planned obsolescence?
- What is meant by 'maintenance' of a product?
- Why is it important to consider recyclability in the design of electronic products?

Circuit symbols

- Draw and label three different symbols for a power supply
- Draw and label five resistor symbols
- Draw and label two different types of capacitor symbols

Materials

- List different types of woods, metals and polymers
- What is a composite material?
- What are smart materials?