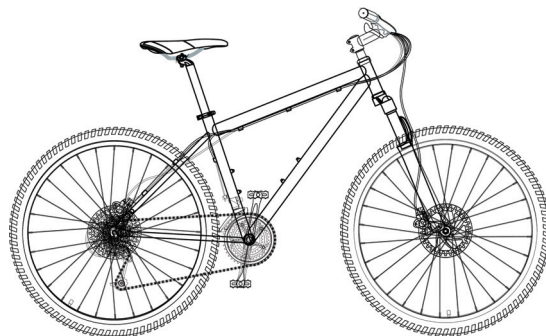








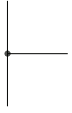


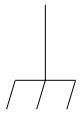
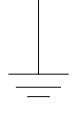

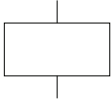




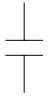

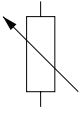
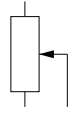
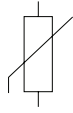
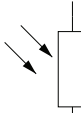


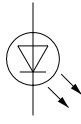
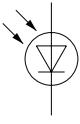
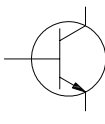
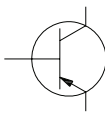
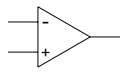
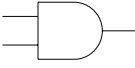
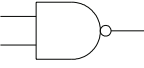
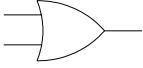
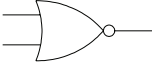
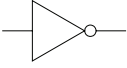
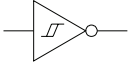
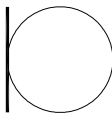
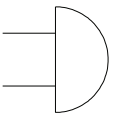
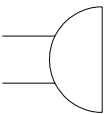
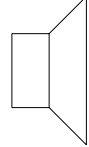
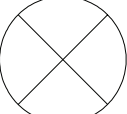



Electrical and electronic symbols list

Cambridge IGCSE® and Cambridge IGCSE® (9–1) Design & Technology 0445, 0979

For examination from 2020.



| | | | | | |
|---|---|---|---|---|---|
|  |  |  |  |  |  |
| Primary or secondary cell | Terminal | ac supply | Ammeter | Voltmeter | Motor |
|  |  |  |  |  |  |
| Junction of conductors | Double junction | Crossing of conductors with no electrical connection | Frame | Earth | Fuse |
|  |  |  |  |  |  |
| Coil | Single pole double throw switch Together make an SPDT relay | Switch | Break contact | Make contact spring return | Capacitor |
|  |  |  |  |  |  |
| Resistor | Variable resistor | Potentiometer | Thermistor | Light dependent resistor (LDR) | Polarised capacitor |
|  |  |  |  |  |  |
| Semiconductor diode | Light emitting diode (LED) | Photodiode | NPN transistor | PNP transistor | Operational amplifier |
|  |  |  |  |  |  |
| AND | NAND | OR | NOR | NOT (inverter) | Schmitt inverter |
|  |  |  |  |  |  |
| Microphone | Bell | Buzzer | Loudspeaker | Lamp | Heating element |