

# Zoom In Physical Sciences Grade 11

## Worksheet 2

### Building circuits and drawing circuit diagrams

- 1 Sketch circuit diagrams for circuits that contain the following components:
  - 1.1 two light bulbs (in series); a battery; a voltmeter that measures the potential difference over the battery; an ammeter that measures the total current strength; connecting wires
  - 1.2 a battery;  $3\ \Omega$ ,  $4\ \Omega$  and  $5\ \Omega$  resistors (in parallel); an ammeter that measures the current strength that flows through the  $4\ \Omega$  resistor; an open switch; connecting wires

- 2 Write down the circuit symbols for the following components:

2.1



2.2

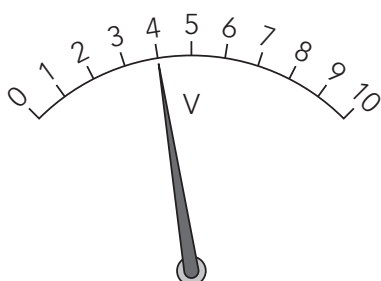


2.3

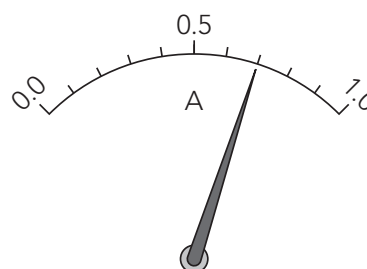


- 3 Give the following meter readings:

3.1



3.2



### Current strength

- 4 Describe the direction of conventional current.

- 5 Complete the following table:

Charge	Current	Time
5.1	1,5 A	15 s
5.2	20 A	2 min
220 C	5.3	300 s
580 C	4,8 A	5.4
75 C	13 A	5.5