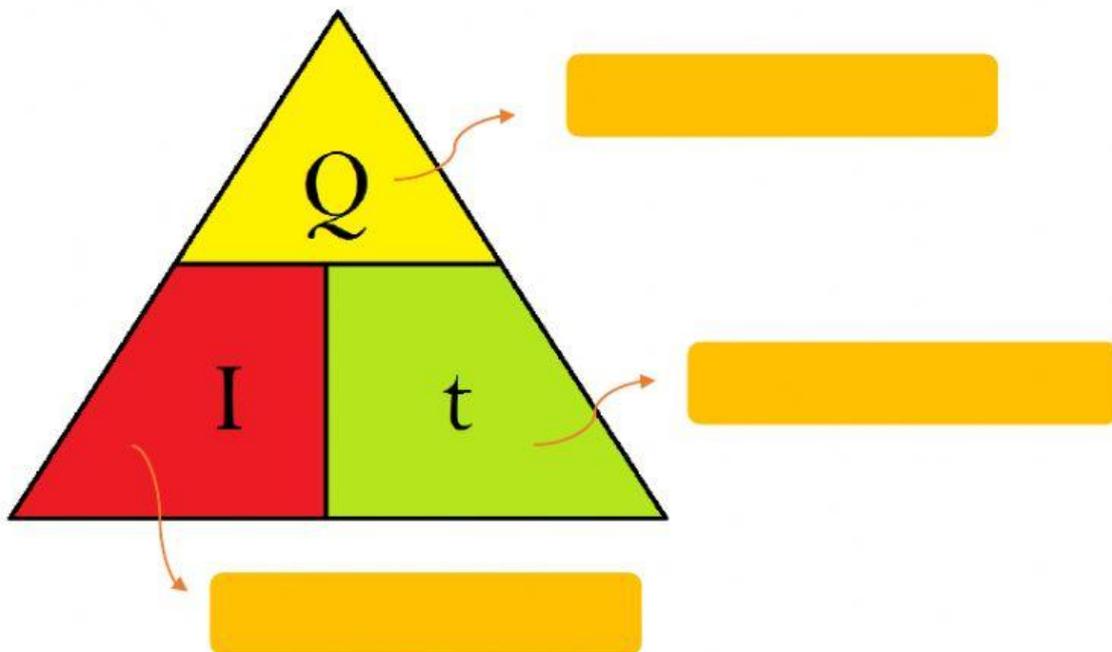


## BASIC ELECTRICITY\_G11

For each physical quantity on the left, write the letter of the matching unit of measurement on the right.

- |  |            |
|--|------------|
| _____ 1. charge                        | a. watt    |
| _____ 2. potential energy              | b. ohm     |
| _____ 3. current                       | c. coulomb |
| _____ 4. resistance                    | d. joule   |
| _____ 5. electric potential difference | e. ampere  |
| _____ 6. power                         | f. volt    |



Electric Current

Time

Electric Charge

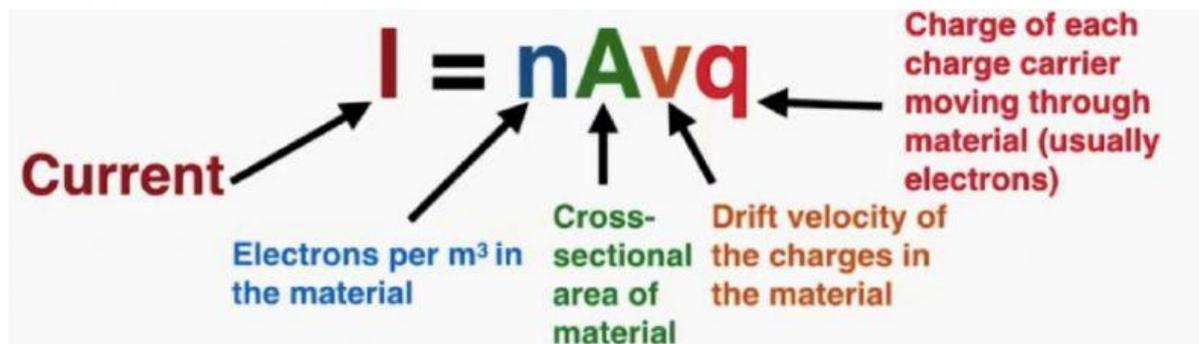
## BASIC ELECTRICITY\_G11

1. If a battery can produce a charge of 3000 mA for 1 hour before it is depleted, for **how long could it produce a current of 2000 mA ?**

\_\_\_\_\_ hours

2. A hair dryer draws a current of 3 A. If it is switched on for 5 minutes. **How much charges that flow ?**

\_\_\_\_\_ Coulombs



1. There are  $6.5 \times 10^{17}$  charge carries within volume of resistance R. The cross-sectional area is  $2.4 \times 10^{-6} m^2$ . The current flow is 1000 mA. **Calculate the drift velocity of the charge carries within the resistor R.**

2. The drift velocity of free electrons in a conductor is  $v$ , when a current  $I$  is flowing in it. If both the radius and current are doubled, then **the drift velocity will be \_\_\_\_\_.**

## BASIC ELECTRICITY\_G11

Fill in the BLANK.

V (volt)	I (Ampere)	t (second)	R (Ohm)	W (Joule)	P (Watt)
3	2	0.5			
	4	1	6		
8	0.5			12	
4		2	1		16
	0.2	0.5		4	8