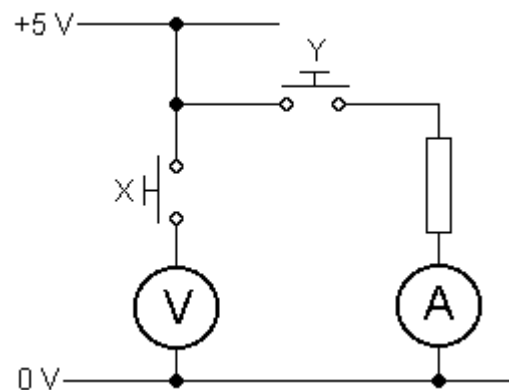


1 Link each electrical term to its best description.

electrical term	description
power	rate of flow of charge
charge	fixed by a power supply
voltage	flows in and out of supply rails
current	ratio of voltage drop to current
resistance	rate at which energy is transferred

2 Study the circuit diagram.  
Then complete the sentences.  
Choose from these words.

- |                   |                 |
|-------------------|-----------------|
| <b>0 V</b>        | <b>5 V</b>      |
| <b>charge</b>     | <b>current</b>  |
| <b>parallel</b>   | <b>power</b>    |
| <b>series</b>     | <b>supply</b>   |
| <b>resistance</b> | <b>resistor</b> |
| <b>power</b>      | <b>voltage</b>  |



Only Y is pressed. This means that \_\_\_\_\_ can flow through it.  
The voltmeter which is in \_\_\_\_\_ with switch X reads \_\_\_\_\_.  
The ammeter measures the \_\_\_\_\_ in the \_\_\_\_\_.  
The voltage drop across the resistor is \_\_\_\_\_ .

3 Complete the table. Choose from these numbers.

	50	30	20	1.5	0.5	0.2
<b><math>R/\Omega</math></b>						
				0.1		5
10						2
5			0.3			
			0.5		15	
24						12
8			2.5			

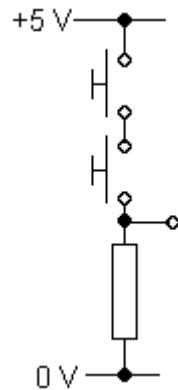
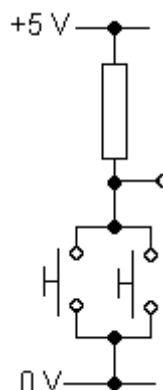
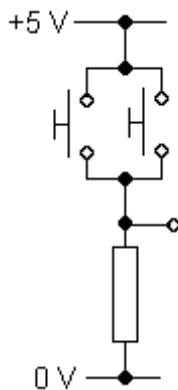
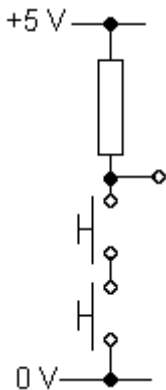
4 Complete the table. Choose from these values.

**4 W      2 W      1 W      0.5 W      0.25 W      0.125 W**

resistor	voltage drop	current	power rating
200 Ω	24 V	0.12 A	
1 kΩ	5 V	5 mA	
10 kΩ	230 V	6 mA	
100 Ω	12 V	60 mA	

5 Match each circuit with its best description.

- low unless both switches pressed**
- only low when no switches pressed**
- goes low when either switch pressed**
- only low when both switches pressed**



6 Complete the sentences.

Closing the switch allows \_\_\_\_\_ to flow through. This means that there is a \_\_\_\_\_ in the resistor. The voltmeter reads \_\_\_\_\_ and the ammeter reads \_\_\_\_\_ so the power of the resistor is \_\_\_\_\_. The output goes \_\_\_\_\_.

When the switch is open, no \_\_\_\_\_ can flow in the circuit. So the ammeter reads \_\_\_\_\_, the voltmeter reads \_\_\_\_\_ and the power of the resistor is \_\_\_\_\_. The output goes \_\_\_\_\_.

