

Science In Action 9 - Numerical Response Questions - Electrical Principles & Technologies

1. A motor has an internal resistance of **6 Ω**.
The motor is in a circuit with a current of **2.75 A**

What is the voltage?

1	6	.	5
	.	.	
0	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

2. A current of **620mA** runs through a bulb that is connected to **12V**.

What is the resistance of the bulb?

1	9	.	4
	.	.	
0	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

3. There are four common forms of energy:
1 - Chemical
2 - Electrical
3 - Mechanical
4 - Thermal

Match the form with its description

stored charged moving kinetic

1	2	3	4
	.	.	
0	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

4. There are many different alternative energy sources including:
1 - Tidal
2 - Wind
3 - Solar
4 - Waterfall

Match the Type of alternative energy you would most likely find in each region.

Alta N.S. B.C. Ont.

2	1	4	3
	.	.	
0	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9