

**CIRCUIT 1**

1. Sketch this circuit in your lab notebook.
2. Fill in and copy each of the following predictions in your lab notebook:

I predict that when you open a switch at A, lightbulbs (1, 2, 3, 4) will light up.

I predict that when you open a switch at B, lightbulbs (1, 2, 3, 4) will light up.

I predict that when you open a switch at C, lightbulbs (1, 2, 3, 4) will light up.

I predict that when you open a switch at D, lightbulbs (1, 2, 3, 4) will light up.

I predict that when you open a switch at E, lightbulbs (1, 2, 3, 4) will light up.

Next, test your predictions with either a lab kit or online simulation. Record your observations.

When we opened a switch at A, lightbulbs (1, 2, 3, 4) lit up.

When we opened a switch at B, lightbulbs (1, 2, 3, 4) lit up.

When we opened a switch at C, lightbulbs (1, 2, 3, 4) lit up.

When we opened a switch at D, lightbulbs (1, 2, 3, 4) lit up.

When we opened a switch at E, lightbulbs (1, 2, 3, 4) lit up.



**CIRCUIT 2**

1. Sketch this circuit in your lab notebook.
2. Fill in and copy each of the following predictions in your lab notebook:

I predict that when you open a switch at A, lightbulbs (1, 2, 3, 4) will light up.

I predict that when you open a switch at B, lightbulbs (1, 2, 3, 4) will light up.

I predict that when you open a switch at C, lightbulbs (1, 2, 3, 4) will light up.

I predict that when you open a switch at D, lightbulbs (1, 2, 3, 4) will light up.

I predict that when you open a switch at E, lightbulbs (1, 2, 3, 4) will light up.

Next, test your predictions with either a lab kit or online simulation. Record your observations.

When we opened a switch at A, lightbulbs (1, 2, 3, 4) lit up.

When we opened a switch at B, lightbulbs (1, 2, 3, 4) lit up.

When we opened a switch at C, lightbulbs (1, 2, 3, 4) lit up.

When we opened a switch at D, lightbulbs (1, 2, 3, 4) lit up.

When we opened a switch at E, lightbulbs (1, 2, 3, 4) lit up.



**CIRCUIT 3**

1. Sketch this circuit in your lab notebook.
2. Fill in and copy each of the following predictions in your lab notebook:

I predict that when you open a switch at A, lightbulbs (1, 2, 3, 4) will light up.

I predict that when you open a switch at B, lightbulbs (1, 2, 3, 4) will light up.

I predict that when you open a switch at C, lightbulbs (1, 2, 3, 4) will light up.

I predict that when you open a switch at D, lightbulbs (1, 2, 3, 4) will light up.

I predict that when you open a switch at E, lightbulbs (1, 2, 3, 4) will light up.

I predict that when you open a switch at F, lightbulbs (1, 2, 3, 4) will light up.

I predict that when you open a switch at G, lightbulbs (1, 2, 3, 4) will light up.

Next, test your predictions with either a lab kit or online simulation. Record your observations.

When we opened a switch at A, lightbulbs (1, 2, 3, 4) lit up.

When we opened a switch at B, lightbulbs (1, 2, 3, 4) lit up.

When we opened a switch at C, lightbulbs (1, 2, 3, 4) lit up.

When we opened a switch at D, lightbulbs (1, 2, 3, 4) lit up.

When we opened a switch at E, lightbulbs (1, 2, 3, 4) lit up.

When we opened a switch at F, lightbulbs (1, 2, 3, 4) lit up.

When we opened a switch at G, lightbulbs (1, 2, 3, 4) lit up.



**CIRCUIT 4**

1. Sketch this circuit in your lab notebook.
2. Fill in and copy each of the following predictions in your lab notebook:

I predict that when you open a switch at A, lightbulbs (1, 2, 3, 4) will light up.

I predict that when you open a switch at B, lightbulbs (1, 2, 3, 4) will light up.

I predict that when you open a switch at C, lightbulbs (1, 2, 3, 4) will light up.

I predict that when you open a switch at D, lightbulbs (1, 2, 3, 4) will light up.

I predict that when you open a switch at E, lightbulbs (1, 2, 3, 4) will light up.

Next, test your predictions with either a lab kit or online simulation. Record your observations.

When we opened a switch at A, lightbulbs (1, 2, 3, 4) lit up.

When we opened a switch at B, lightbulbs (1, 2, 3, 4) lit up.

When we opened a switch at C, lightbulbs (1, 2, 3, 4) lit up.

When we opened a switch at D, lightbulbs (1, 2, 3, 4) lit up.

When we opened a switch at E, lightbulbs (1, 2, 3, 4) lit up.



**CIRCUIT 5**

1. Sketch this circuit in your lab notebook.
2. Fill in and copy each of the following predictions in your lab notebook:

I predict that when you open a switch at A, lightbulbs (1, 2, 3, 4) will light up.

I predict that when you open a switch at B, lightbulbs (1, 2, 3, 4) will light up.

I predict that when you open a switch at C, lightbulbs (1, 2, 3, 4) will light up.

I predict that when you open a switch at D, lightbulbs (1, 2, 3, 4) will light up.

I predict that when you open a switch at E, lightbulbs (1, 2, 3, 4) will light up.

Next, test your predictions with either a lab kit or online simulation. Record your observations.

When we opened a switch at A, lightbulbs (1, 2, 3, 4) lit up.

When we opened a switch at B, lightbulbs (1, 2, 3, 4) lit up.

When we opened a switch at C, lightbulbs (1, 2, 3, 4) lit up.

When we opened a switch at D, lightbulbs (1, 2, 3, 4) lit up.

When we opened a switch at E, lightbulbs (1, 2, 3, 4) lit up.