**Electrical challenge Series Circuits**

**NAME:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**NAME:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**NAME:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Series Circuit Challenge 1**

What would happen to the LED if you put the button/switch in a parallel with the led instead of series?

Test your theory were you right?

I have completed the challenge, taken everything apart, and checked that all the components are in the box.

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Series Circuit Challenge 2**

What is the Voltage of one of the batteries in the battery pack?

How can you get the motor to change direction (clockwise vs. counter clockwise)?

I have completed the challenge, taken everything apart, and checked that all the components are in the box.

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Series Circuit Challenge 3**

Can you figure out how to light just one LED at a time?

 What happens to the LED when you just light one?

I have completed the challenge, taken everything apart, and checked that all the components are in the box.

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Series Circuit Challenge 4**

Why do you think you need 3 batteries for this circuit?

I have completed the challenge, taken everything apart, and checked that all the components are in the box.

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Series Circuit Challenge 5**

This circuit will work in series or parallel

How does the LED look in Parallel?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

How does the LED look in Series?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

I have completed the challenge, taken everything apart, and checked that all the components are in the box.

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_