

Brush Monsters Worksheet

Name: _____

Name these electrical parts:



Draw your circuit using these circuit symbols, and using lines to represent the wires. Label the components.



Is metal an insulator or a conductor?

Is plastic an insulator or a conductor?

Why do you need to attach the crocodile clips onto bare metal, not onto plastic insulation?

What could happen if you short circuit your battery?

If you measure a time T to travel a distance D , how do you calculate the average speed?

What was the average speed of your brush monster?

Which force acts downwards on the brush monster?	
Why do you need an offset hole in your eraser, instead of a central one?	
What would happen if the eraser is pushed up against the end of the brush? How could you fix this?	
Does the brush monster work on carpet? Explain your findings.	

EXTENSION QUESTIONS

Suggest two products where offset weights are used to cause vibrations.	
What does a ratchet do? 	
Which joining methods did you use when creating your brush monster?	