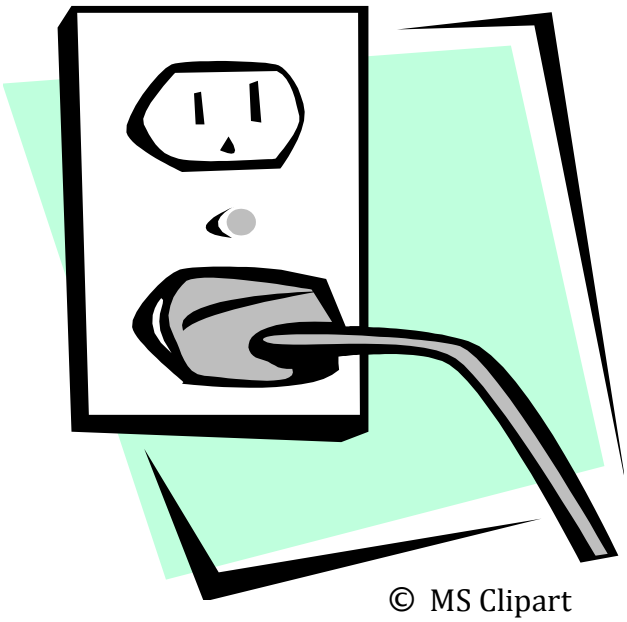
All Charged Up

Science 9

Static & Current Electricity

MY QUESTIONS



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Our Inquiry into **ELECTRICITY** will help us better understand that:

- An object usually becomes electrically charged as the result of electrons moving.
- Electric current results from the separation of charge and the continuous movement of electrons.
- Every electric circuit has three key parts: a source, a load, and a conducting path that connects them.
- Series circuits generally have a higher overall resistance and draw less current from the source than parallel circuits.

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Key Words

- source
- load
- voltage
- current
- resistance
- circuit

What's Coming Next

KNOW			
B	D	A	**I can…**
			List three ways an object can become electrically charged.
			Describe the arrangement of protons, neutrons & electrons in a charged object.
			List two ways the electrical force between two objects can be increased.
			Give working defintions of the following terms: Source, Load, Voltage, Current, Conductor, Insulator, Resistor
			Distinguish between *conventional current* and *electron current*
			Summarize Ohm's Law
			Give working defintions of the following terms: Electrical Power, Electrical Energy

DO			
B	D	A	**I can…**
			Describe the movement of charges in an object when it becomes charged. (consider all three ways of becoming charged)
			Explain how a battery converts chemical energy into electrical energy.
			Use Ohm's Law to describe the relationship between Current & Voltage.
			Draw a schematic diagram for a simple circuit. Draw schematic diagrams for series & parallel circuits.
			Analyze series & parallel circuits that have two or more resistors.
			Differentiate between series & parallel circuits in terms of: • the voltage drops across each resistor • the current through each resistor • the overall current drawn from the source • the overall resistance of the circuit
			Calculate the current "drawn" by various household devices (based on their power rating)
			Calculate the energy consumption of various household devices.