

# Science Study Guide: Electricity

Students have been learning about electricity. In this upcoming test, students will be asked knowledge and understanding questions about electricity. Below is a list of the lessons and vocabulary that students should know, as well as the student resources/readings that have been given out in these lessons. Students may have to apply their knowledge and understanding to answer application questions.

### **Lesson 1: Understanding Energy**

- Define words: electricity, atom, protons, neutrons, electrons, and nucleus
- Explain how electricity is generated
- Label a diagram of an atom
- Readings or student resources to review: Electricity and Atoms, Electricity Videos on Weebly

# **Lesson 2: Static and Current Electricity**

- Define words: static electricity, current electricity, electrostatic phenomenon
- Explain the electrostatic phenomenon and how static electricity works (e.g., inclass experiment with static electricity balloon "sticking" to tissue paper)
- Know the difference between static and current electricity
- Readings or student resources to review: Static and Current Electricity, Static Electricity, Electrostatic Phenomenon, Current Electricity, Interactive Computer Program on Weebly

#### **Lesson 3: Conductors and Insulators**

- Define words: conductor, insulator
- Give examples of, or identify different materials that are conductors and insulators of electricity
- Explain how a conductor or insulator works
- Readings or student resources to review: Conductors and Insulators,

## **Lesson 4: Series and Parallel Circuits**

- Define: series circuit, parallel circuit, open circuit, closed circuit, battery, light bulb/load, switch,
- Explain briefly how each type of these circuits work
- Identify all of the parts of a series and parallel circuit
- Explain advantages and disadvantages of both types of circuits
- Readings or student resources to review: Parts of a Circuit, Electrical Circuit, Creating a Simple Circuit, Creating a Series Circuit, Creating a Parallel Circuit

REMEMBER TO PLAN YOUR STUDY SESSIO	NS AND ASK	K QUESTIONS TH	HAT YOU MAY	HAVE
PRIOR	TO THE TEST!	1		

# **Definitions:**

Word	Definition	Example (where it applies)
Electricity		
Atom		
Electron		
Proton		
Neutron		
Static Electricity		
Current Electricity		
Electrostatic Phenomena		

Conductor	
Insulator	
Series Circuit	
Parallel Circuit	
Open Circuit	
Closed Circuit	
Battery	
Load	
Switch	