Electric

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Understanding Electricity

• Understand the important effects electric energy has on humans and their environment
• Describe the difference between AC and DC currents
• Explain the difference between conductors and insulators
• Model how electricity flows through a circuit
• Define voltage, resistance and current, then identify the units of measure associated with each

Safety

• Recognize that electricity can be dangerous if not used properly
• Describe hazards involved when working with electricity

Magnets

• Understand why magnets and magnetic fields are so important in our study of electricity
• Explain the cause and effect relationship of magnets
• Describe how magnets cause changes in the motion and position of objects, even when the objects are not touching the magnet
• Learn how magnetic fields are used to generate electricity

Circuits

• Identify and collect basic tooling needed to work on residential electrical circuits
• Examine basic electrical circuits and components
• Label the parts of a simple circuit
• Draw examples of an open circuit and a closed circuit

Machinery

• Demonstrate safe practices and procedures to prevent personal injury and property damage
Electric Beginner Outcomes

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