

Versant Power Electrical Safety Lesson

Grade: Grades 3 – 5 Targeted to Grade 4 Standards	Length: 45 – 50 minutes
NGSS Connection: 4-PS3-2 Make observations to provide evidence that energy can be transferred from place to place by sound, light, heat, and electric currents. 4-PS3-4 Apply scientific ideas to design, test, and refine a device that converts energy from one form to another	Maine DOE Health Standard: HE-3 - Health Promotion and Risk Reduction: Health literate students demonstrate the ability to practice health-enhancing behaviors and avoid or reduce health risks for self and others
Learning Targets: “I know energy can be transferred from place to place by electrical currents” – “I know how to keep myself and others safe around electricity”	
Materials & Prep (Versant Power Specialist will provide & set up)	<ul style="list-style-type: none"> ▪ Versant Power’s Electric Town ▪ A 6 foot buffer between the Electric Town and Students ▪ Safety Gloves & Safety Glasses ▪ Visuals (digital if room has a projector/paper & easel if no projector)
Introduction – 5 minutes	<ul style="list-style-type: none"> ▪ Versant Specialist introduction ▪ Explanation of materials the students will see
Lesson – 40 minutes Discussion and demonstrations of power and electrical hazards using the Electric Town	<ul style="list-style-type: none"> ▪ The Electrical System - (generation, transmission, distribution, homes & businesses) ▪ Types of Electricity – static, direct, alternating ▪ Electricity Terms (electrons, conductors, insulators, electrical current, voltage) ▪ Transferring power from pole to house ▪ The Power Path ▪ Electrical Circuit (outlets) ▪ Touch Potential ▪ Being safe around power lines & electricity ▪ Ground Potential
Questions – 5 minutes	<ul style="list-style-type: none"> ▪ Taking student questions ▪ Versant goodies handed out

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