

Project ReCharge Curriculum map

Standards covered by NGSS, 21st Century Competencies

Unit 1: Energy Basics	Unit 2: Thermal Systems	Unit 3: Electrical Systems	Unit 4: Energy Detectives	Unit 5: Energy Reduction Plan
<p>1. Simple Circuits</p> <ul style="list-style-type: none"> ● 4-PS3-2 (Elementary) ● C-1 ● KC-2 ● RW-1 <p>2. Series & Parallel Circuits</p> <ul style="list-style-type: none"> ● 4-PS3-2 (Elementary) ● C-1 ● KC-1 ● RW-1 <p>3. Conductors & Insulators</p> <ul style="list-style-type: none"> ● 4-PS3-2 (Elementary) ● C-1 ● KC-1 <p>4. Humdinger Challenge (supplemental)</p> <ul style="list-style-type: none"> ● HS-ETS1-2 ● HS-ETS1-3 ● MS-ETS1-1 ● MS-ETS1-2 ● C-1 ● C-2 ● KC-1 ● KC-2 ● RW-1 <p>5. Electrical Generation</p> <ul style="list-style-type: none"> ● HS-PS2-5 ● MS-PS2-3 ● MS-PS2-5 ● C-1, ● KC-1-3, ● RW-1-2 <p>6. Energy Bike</p> <ul style="list-style-type: none"> ● HS-PS3-3 ● MS-ESS3-3 ● KC-3 ● RW-2 ● TL-3 <p>7. Solar Energy</p> <ul style="list-style-type: none"> ● HS-PS3-3 ● MS-ESS3-3 ● C-1 ● KC-2 ● RW-2 ● TL-2 <p>8. Wind Energy</p> <ul style="list-style-type: none"> ● HS-PS3-3 ● HS-ETS1-3 ● MS-ESS3-3 ● C-3 ● KC-3 ● RW-3 ● SR-1 ● TL-3 	<p>1. Water Heating</p> <ul style="list-style-type: none"> ● HS-ESS3-3 ● MS-ESS3-3 ● C-1 ● RW-2 ● KC-1 ● SC-2 <p>2. Building Envelope</p> <ul style="list-style-type: none"> ● HS-PS3-1 ● MS-PS3-3 ● C-1 ● KC-1-2 ● RW-1 ● SC-2 <p>3. Cooling</p> <ul style="list-style-type: none"> ● HS-ESS3-4 ● HS-ETS1-3 ● MS-ESS3-3 ● MS-ETS1-3 ● C-3 ● RW-3 ● KC-3 ● SC-2 <p>4. Heating</p> <ul style="list-style-type: none"> ● HS-ESS3-4 ● HS-ETS1-3 ● MS-ESS3-3 ● MS-ETS1-3 ● C-3 ● RW-3 ● KC-3 ● SC-2 	<p>1. Lighting</p> <ul style="list-style-type: none"> ● HS-ESS3-4 ● HS-ETS1-3 ● MS-ESS3-3 ● C-1 ● KC-2 ● RW-2 ● SC-2 ● TL-1 <p>2. Appliances</p> <ul style="list-style-type: none"> ● HS-ESS3-4 ● MS-ESS3-3 ● C-1 ● KC-1 ● RW-2 ● SC-2 ● TL-2 <p>3. Analyzing Home Energy Bills</p> <ul style="list-style-type: none"> ● MS-ESS3-3 ● C-1 ● KC-3 ● RW-1 ● TL-2 	<p>1. Three Spheres Sustainability</p> <ul style="list-style-type: none"> ● HS-ESS3-3 ● MS-ESS3-3 ● C-3 ● KC-3 ● RW-2 ● TL-2 ● SC-1 <p>2. Exploring outliers</p> <ul style="list-style-type: none"> ● MS-ESS3-5 ● 7.SP.B.4 ● 7.SP.C.5 ● 8.SP.A.1 ● C-1 ● KC-2 ● RW-1 ● T-1-3 <p>3. School Energy Trends</p> <ul style="list-style-type: none"> ● MS-ESS3-3 ● C-4 ● KC-3 ● RW-2 <p>4: Energy Audits</p> <ul style="list-style-type: none"> ● HS-ESS3-4 ● HS-ETS1-3 ● MS-ESS3-3 ● MS-ETS1-4 ● C-1-3 ● KC-1-3 ● RW-1-2 ● T-1-3 ● SR-1-3 	<p>1. Home Energy Efficiency Proposals</p> <ul style="list-style-type: none"> ● HS-ESS3-4 ● HS-ETS1-3 ● MS-ESS3-3 ● MS-ETS1-1 ● C-4* ● KC-4* ● RW-3 ● T-3 ● SR-3* ● SC-3*
				<p>KEY</p> <p>Black - NGSS Standards Blue - 21st Century Competencies Red - Common Core Math Standards</p>
				