

## Standards

MS-PS1: Matter and Its Interactions http://nextgenscience.org/msps1-matter-interactions

## Performance Expectations

The materials, lessons, and activities outlined in this activity is just one step toward reaching the performance expectation listed below.

MS-PS1-2. Analyze and interpret data on properties of substances before and after the substances interact to determine if a chemical reaction has occurred.

MS-PS1-3. Gather and make sense of information to describe that synthetic materials come from natural resources and impact society

come from natural resources and impact society		
Dimension	Name and NGSS code	Matching student task or question taken directly from the activity
Science and Engineering Practice	Analyzing and Interpreting Data Engaging in Argument and Evidence	<ul> <li>Students research and analyze data on a variety of metallic elements to determine if they are worth recycling.</li> <li>"Would your product be something worth recycling? Tell us why or why not. Give evidence from your research and cost analysis to support your answer."</li> </ul>
Disciplinary Core Ideas	PS1.A. Structure and Properties of Matter  • Each pure substance has characteristic physical and chemical properties (for any bulk quantity under given conditions) that can be used to identify it.	<ul> <li>"What are the chemical and physical properties of your assigned metallic element? (e.g., melting point, state at room temperature, density, etc.)."</li> <li>"What are three common uses for the metals when combined with other elements to form compounds?"</li> </ul>
Crosscutting Concepts	Cause and Effect	"What are some possible reasons for the difference between commodity market product sales price?"