

Unit 6: Fuels

Lesson Plan

Disciplinary Core Ideas:	Energy, Matter and its Interactions
NGSS:	<ul style="list-style-type: none">• MS-PS1-2 Analyze and interpret data on the properties of substances before and after the substances interact to determine if a chemical reaction has occurred.• MS-PS1-5 Develop and use a model to describe how the total number of atoms does not change in a chemical reaction and thus mass is conserved.• MS-PS3-4 Plan an investigation to determine the relationships among the energy transferred, the type of matter, the mass, and the change in the average kinetic energy of the particles as measured by the temperature of the sample.
Lesson Title	Complete and Incomplete Combustion
Lesson Number	6-3
Learning objectives:	<ul style="list-style-type: none">• Define combustion• Write a chemical reaction for the combustion of a fuel.• Compare and contrast complete and incomplete combustion.
"I can" statement:	<ul style="list-style-type: none">• I can define combustion, write the chemical reaction for combustion, and compare and contrast complete and incomplete combustion.
Prior Knowledge: Types of fuels, hydrocarbons	
Vocabulary: Complete combustion, Exothermic reaction, Fuel, Hemoglobin, Incomplete combustion, Soot	
Summary of Activities: <ol style="list-style-type: none">1. Distribute and complete bell ringer activity.2. Discuss guided notes and slideshow, with students.3. Vocabulary doodle notes worksheet4. Exit quiz	
Additional Resources: <ul style="list-style-type: none">• See online activities• Lab activity	
Homework: <ul style="list-style-type: none">• Assignment	
Assessment: <ul style="list-style-type: none">• Bell work• Assignment• Exit quiz• Lab activity• End of unit review	