

**Youngstown City Schools
Grade 6 Science Pacing Guide
Grading Period 2**

Strand/Content Statement	Duration	Clear Learning Targets	Curriculum Resources	Vocabulary/Concepts
<p style="text-align: center;">EARTH &SPACE SCIENCE</p> <p style="text-align: center;">Soil is unconsolidated material that contains nutrient matter and weathered rock. (6.ESS.4)</p>	<p style="text-align: center;">Weeks 1-2</p>	<p style="text-align: center;">"I Can..."</p> <ul style="list-style-type: none"> - investigate how soil forms at different rates and has different measurable properties through soil sampling and testing. - explain how soil is formed into layers called horizons based on measurable properties. - identify and describe Ohio's soil as it relates to formation and soil properties. 	<p><u>Curriculum Units:</u></p> <ul style="list-style-type: none"> • Thinking Like A Soil Scientist <p><u>Holt Series Science Textbook:</u> How Soil Forms</p> <p>Soil Conservation</p> <p><u>Discovery Education:</u> http://www.discoveryeducation.com</p> <p><u>Ohio Department of Education - Science:</u> http://education.ohio.gov/Topics/Ohio-s-New-Learning-Standards/Science</p> <p>AIR Practice Site</p>	<p>Minerals</p> <p>Soil Horizon</p> <p>Soil Profile</p> <p>Soil Properties</p> <p>Soil Region</p>
<p style="text-align: center;">Rocks, minerals and soils have common and practical uses. (6.ESS.5)</p>	<p style="text-align: center;">Weeks 3-4</p>	<ul style="list-style-type: none"> - identify examples of different ways the soil, rock and minerals can be used. - recognize the characteristics of soil, rock and minerals to determine how they can be used. 	<p><u>Curriculum Units:</u></p> <ul style="list-style-type: none"> • What Is In that? <p><u>Holt Series Science Textbook:</u> Rocks Minerals Weathering and Soil Formation</p> <p><u>Discovery Education:</u> http://www.discoveryeducation.com</p> <p><u>Ohio Department of Education - Science:</u> http://education.ohio.gov/Topics/Ohio-s-New-Learning-Standards/Science</p> <p>AIR Practice Site</p>	<p>Nonrenewable</p> <p>Open-Pit</p> <p>Ore</p> <p>Quarries</p> <p>Reclamation</p> <p>Strip Mining</p> <p>Subsurface Mining</p> <p>Surface Mining</p>

**Youngstown City Schools
Grade 6 Science Pacing Guide
Grading Period 2**

Strand/Content Statement	Duration	Clear Learning Targets	Curriculum Resources	Vocabulary/Concepts
<p>PHYSICAL SCIENCE</p> <p>All matter is made up of small particles called atoms. (6.PS.1)</p>	<p>Weeks 5-7</p>	<p>"I Can..."</p> <ul style="list-style-type: none"> -recognize that all matter is made up of atoms. -explain that atoms take up space, have mass, and are in constant motion. - create models of elements, compounds, and molecules to show atomic differences. - describe the composition of substances in terms of elements and/or compounds. -measure the mass and volume of a substance, and calculate density by dividing mass by the volume. -compare substances by the amount of mass a substance has in a given amount of volume (density). - construct and interpret mass vs. volume graphs. 	<p><u>Holt Series Science Textbook</u> Density Atoms Elements and the Periodic Table Molecules and Compounds Investigation Lab Density</p> <p><u>Explore Learning GIZMOS:</u></p> <ul style="list-style-type: none"> • Density • Density via Comparison • Density Laboratory • Density Experiment: Slice and Dice • Determining Density via Water Displacement <p><u>Discovery Education:</u> http://www.discoveryeducation.com</p> <p><u>Ohio Department of Education - Science:</u> http://education.ohio.gov/Topics/Ohio-s-New-Learning-Standards/Science</p> <p>AIR Practice Site</p>	<p>Atoms Compounds Density Element Mass Matter Molecules Particles Pure Substance Volume</p>

**Youngstown City Schools
Grade 6 Science Pacing Guide
Grading Period 2**

Strand/Content Statement	Duration	Clear Learning Targets	Curriculum Resources	Vocabulary/Concepts
<p>PHYSICAL SCIENCE</p> <p>Changes of state are explained by a model of matter composed of atoms and/or molecules that are in motion. (6.PS.2)</p>	<p>Weeks 8-9</p>	<p>"I Can..."</p> <ul style="list-style-type: none"> -explain that thermal energy is a measure of the motion of the atoms and molecules (kinetic energy) in a substance. - describe the factors that affect thermal energy. - investigate temperature change in order to infer changes in thermal energy. - describe solids, liquids, and gases in terms of motion of and spacing and attractions between particles. - model and explain how mass is conserved when substances undergo a change of state. 	<p><u>Holt Series Science Textbook</u> Temperature, Heat, and the Phases of Matter Investigation Lab Temperature and Heat Investigation Lab Phase Change and Energy</p> <p><u>Explore Learning GIZMOS:</u></p> <ul style="list-style-type: none"> • Temperature and Particle Motion • Phase Changes • Phases of Water <p><u>Discovery Education:</u> http://www.discoveryeducation.com</p> <p><u>Ohio Department of Education - Science:</u> http://education.ohio.gov/Topics/Ohio-s-New-Learning-Standards/Science</p> <p>AIR Practice Site</p>	<p>Gas Kinetic Energy Liquid Mass Particles Solid Temperature Thermal Energy</p>