

Fifth Grade Gardening Unit

<u>Subject</u> Name of Lesson	Iowa/Common Core Concepts	Where to Find It @TeachersGoingGreen.com : & Notes
Mathematics		
Fractals, Fractions, Fun	<ul style="list-style-type: none"> • 5.MD.A.1 Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems. • 5.NF.A.2 Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers. For example, recognize an incorrect result $2/5 + 1/2 = 3/7$, by observing that $3/7 < 1/2$. Analyze patterns and relationships. • 5.G.B.3 Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category. For example, all rectangles have four right angles and squares are rectangles, so all squares have four right angles. 	<p>Fifth Grade, Mathematics Learn what a fractal is and then find the fractals in the garden.</p>
Rainfall Harvest, Home & Earth	<ul style="list-style-type: none"> • 5.MD.C.4 Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units. • 5.MD.C.5 Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume. 	<p>Fifth Grade, Mathematics Rainfall is essential to gardening.</p>
Forest Field Trip and Decomposition	<ul style="list-style-type: none"> • 5.MD.A.1 Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems. 	<p>Fifth Grade, Mathematics Decomposition is crucial to garden soil.</p>

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Science		
Making Impression	<ul style="list-style-type: none"> • 5-PS1-3 Make observations and measurements to identify materials based on their properties. • 5-PS1-4 Conduct an investigation to determine whether the mixing of two or more substances results in new substance. 	<p style="text-align: center;">Fifth Grade Science</p> <p>Use plants from the garden to make impressions in this activity.</p>
Microbes & Composting	<ul style="list-style-type: none"> • 5-LS2-1 Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment. 	<p style="text-align: center;">Fifth Grade Science</p> <p>Learn about the microbes & composting in the garden.</p>
Photosynthesis, Oh the Drama!	<ul style="list-style-type: none"> • 5-PS3-1 Use models to describe that energy in animals’ food (used for body repair, growth, motion, and to maintain body warmth) was once energy from the sun. • 5-LS2-B Cycles of Matter and Energy Transfer in Ecosystems 	<p style="text-align: center;">Fifth Grade Science</p> <p>How does these garden plants use the sunlight for energy? Let’s find out.</p>
Social Studies		
Rock Sort	<ul style="list-style-type: none"> • SS.3-5.BS.2 Understand the influences on individual and group behavior and group decision-making. <ul style="list-style-type: none"> ○ Understand that people involved in a dispute often have different points of view. ○ Understand that communicating different points of view helps people to find a satisfactory compromise. 	<p style="text-align: center;">Fifth Grade Social Studies</p> <p>Study the rocks in your garden.</p>
Earth Faces a Serious Problem!	<ul style="list-style-type: none"> • SS.3-5.E.5 Understand how human factors and the distribution of resources affect the development society and the movement of populations. <ul style="list-style-type: none"> ○ Understand the relationship between population growth and resource use. ○ Understand the concepts of renewable and non-renewable resources. ○ Understand the relation between economic activities and natural resources in areas. 	<p style="text-align: center;">Fifth Grade Social Studies</p> <p>Investigate environmental problems & solutions.</p>
Water Around the World	<ul style="list-style-type: none"> • SS.3-5.BS.2 Understand the influences on individual and group behavior and group decision-making. <ul style="list-style-type: none"> ○ Understand that people involved in a dispute often have different points of view. ○ Understand that communicating different points of view in a dispute can often help people to find a satisfactory compromise. 	<p style="text-align: center;">Fifth Grade Social Studies</p> <p>Water is essential to gardening.</p>

English Language Arts		
DIY Pledge	<ul style="list-style-type: none"> • RI.5.2. Determine two or more main ideas of a text and explain how they are supported by key details; summarize the text. • RI.5.3. Explain the relationships or interactions between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text based on specific information in the text. • W.5.7. Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic. 	Fifth Grade English Language Arts We are all citizens of this Earth. We all share this planet. What will you pledge as a good citizen?
People for the Planet	<ul style="list-style-type: none"> • RI.5.7. Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently. • IA.1. Employ the full range of research-based comprehension strategies, including making connections, determining importance, questioning, visualizing, making inferences, summarizing, and monitoring for comprehension. 	Fifth Grade English Language Arts Find people & organizations who are heroes in the arena of gardening.
How Long Does That Trash Last?	<ul style="list-style-type: none"> • RI.5.3. Explain the relationships or interactions between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text based on specific information in the text. 	Fifth Grade English Language Arts How does trash affect gardening & environment?
21 st Century Skills		
Searching for Meaning Through Jigsaw Discussions	<ul style="list-style-type: none"> • SS.3-5.PSCI.1 Understand the rights and responsibilities of each citizen and demonstrate the value of lifelong civic action. <ul style="list-style-type: none"> ○ Understand why civic responsibility is important and know examples of civic responsibility. 	Fifth Grade 21st Century Skills Read some good books about gardens. Then find meaning by sharing.
The Pledge Tree	<ul style="list-style-type: none"> • SS.3-5.PSCI.1 Understand the rights and responsibilities of each citizen and demonstrate the value of lifelong civic action. <ul style="list-style-type: none"> ○ Understand why civic responsibility is important and know examples of civic responsibility. 	Fifth Grade 21st Century Skills Hang DIY Pledges on an artistic tree-inside or out in the garden.
Investigation Through PowerPoint Presentation	<ul style="list-style-type: none"> • SS.3-5.PSCI.1 Understand the rights and responsibilities of each citizen and demonstrate the value of lifelong civic action. <ul style="list-style-type: none"> ○ Understand why civic responsibility is important and know examples of civic responsibility. ○ Understand opportunities for leadership and public service in the student's own classroom, school, community, state, and the nation. ○ Understand the importance of voluntarism as a characteristic of American society. 	Fifth Grade 21st Century Skills Investigate issues related to local food and the local food system.