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| Third Grade Science Unit Guide | 2015-2016 | |
| <http://science.dmschools.org> | |  |



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| ***Literacy Unit*** | ***Theme*** | ***Iowa Core Standard***  ***3-5*** | ***I Can Statements*** | ***Materials/ Resources*** | ***Project Ideas*** | ***Vocabulary needed*** |
| 2 | Structures of Life | Understand and apply knowledge of organisms and their environments, including:  Structures, characteristics, and adaptations of organisms that allow them to function and survive within their habitats.  How individual organisms are influenced by internal and external factors.  The relationships among living and non-living factors in terrestrial and aquatic ecosystems. | * I can describe how outside factors such as water and sunlight affect plant growth. * I can explain the relationship between seeds and fruits. * I can determine a suitable habitat for a crayfish based on its needs and characteristics. * I can discuss the behavior of a crayfish based on my observations. | Foss Structures of Life Kit, Investigations 1-3  ***Order crayfish from Trans-Mississippi (see live animals ordering instructions at:*** <http://science.dmschools.org/elementary.html> )  ***Order topical books from Heartland AEA*** <http://media1.aea11.k12.ia.us/display/041/wwk770?kw=crustaceans++&au=I&submit=1>  ***Online Resources***  <http://www.johnston.k12.ia.us/schools/lawson/gradelevellinks/crayfish/crayhome.html>  <http://www.biokids.umich.edu/critters/Orconectes_rusticus/>  <http://www.enchantedlearning.com/paint/subjects/invertebrates/crustacean/Crayfishprintout.shtml>  <http://www.buglife.org.uk/conservation/currentprojects/Species+Action/UK+Crayfish+Website/Crayfish+for+everyone/Crayfish+Fun>  <http://www.gvsd.org/Page/1738>  <http://academic.scranton.edu/faculty/cannon/kidsjudge/kj04/collinsl2.html>  <http://animal.discovery.com/marine-life/crayfish-info.htm> | Foss Structures of Life Kit, Investigations 1-3 | Seed, germinate, fruit, dormant, seed coat, cotyledon, crayfish, crustacean, aquatic, habitat, behavior, antennae, carapace, swimmerets, pincers, bristles |

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| ***Literacy Unit*** | ***Theme*** | ***Iowa Core Standard***  ***3-5*** | ***I Can Statements*** | ***Materials/ Resources*** | ***Project Ideas*** | ***Vocabulary needed*** |
| **3** | Scientific Experimentation and Water | Plan and conduct scientific investigations.  Use appropriate tools and techniques to gather data (thermometer).  Incorporate mathematics in science inquiries. (graphing and measurement)  Use evidence to develop reasonable explanations.  Communicate scientific procedures and explanations.  Follow appropriate safety procedures when conducting investigations. | * I can determine what constitutes evidence. * I can judge the merits or strengths of the data and information used to make explanations. * I can use tools appropriately to gather information during an experiment. * I can construct a simple graph using data from an experiment. | Foss Kit Water  ***Online Resources:***  <http://www.sciencekids.co.nz/lessonplans/water.html>  <http://thewaterproject.org/resources/water_pollution_filtration_experiments.asp>  <http://water.epa.gov/learn/kids/waterkids/waterforkids.cfm>  <http://www.watereducation.org/doc.asp?id=1022>  <https://engineering.purdue.edu/SafeWater/kids/>  ***The Water Cycle:***  <http://thewaterproject.org/resources/the_water_cycle.asp>  <http://ga.water.usgs.gov/edu/watercycle-kids.html>  <http://www.sciencekids.co.nz/sciencefacts/weather/thewatercycle.html>  ***Project WET***  <http://www.discoverwater.org/> | Foss Kit Water, Investigations 1-4 | variable, experiment, water, surface tension,  flow, slope, absorb, liquid, property, thermometer, condensation, water cycle, evaporation |
| ***Literacy Unit*** | ***Theme*** | ***Iowa Core Standard***  ***3-5*** | ***I Can Statements*** | ***Materials/ Resources*** | ***Project Ideas*** | ***Vocabulary needed*** |
| **6** | Great Discoveries: Magnetism and Electricity | Understand and apply knowledge of sound, light, magnetism, electricity and heat. | * I can identify how electricity in circuits can produce light, heat, sound, and magnetic effects. * I can demonstrate that electricity can only flow through a closed circuit. * I can describe how magnets attract and repel each other and certain kinds of other materials. | Foss Kit: Magnetism and Electricity, Investigations 1-4  ***Order related books from Heartland AEA***  **Magnets**  <http://media1.aea11.k12.ia.us/display/041/wwk770?kw=magnets&au=I&submit=1>  **Electricity**  <http://media1.aea11.k12.ia.us/display/041/wwk770?kw=electricity&au=I&submit=1>  ***Online Resources***  **Magnetism**  <http://www.sciencekids.co.nz/sciencefacts/magnets.html>  <http://www.neok12.com/Magnetism.htm>  <http://video.nationalgeographic.com/video/kids/cartoons-tv-movies-kids/i-didnt-know-that-kids/idkt-magnets-kids/>  <http://www.explainthatstuff.com/magnetism.html>  **Electricity**  <http://www.sciencekids.co.nz/electricity.html>  <http://www.vrml.k12.la.us/curriculum/quicktip/science/electricity/elec.htm>  <http://kids.saveonenergy.ca/en/what-is-electricity/>  <http://www.bbc.co.uk/schools/scienceclips/ages/8_9/circuits_conductors.shtml> | Foss Kit: Magnetism and Electricity, Investigations 1-4 | magnet, electricity, circuit, series, parallel, wire, conductor, insulator, closed circuit, open circuit, poles, positive, negative, attract, repel, iron |