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STAGE 1 – DESIRED RESULTS

Unit Title: Matter and Its Interactions

Grade Level: 5

Length/Timing of Unit:

Designer(s): Pascack Valley Regional Science Committee

Science State standards addressed (verbatim):

5-PS1-1. Develop a model to describe that matter is made of particles too small to be seen. [Clarification Statement: Examples of evidence could include adding air to expand a basketball, compressing air in a syringe, dissolving sugar in water, and evaporating salt water.] [Assessment Boundary: Assessment does not include the atomic-scale mechanism of evaporation and condensation or defining the unseen particles.]

5-PS1-2. Measure and graph quantities to provide evidence that regardless of the type of change that occurs when heating, cooling, or mixing substances, the total weight of matter is conserved. [Clarification Statement: Examples of reactions or changes could include phase changes, dissolving, and mixing that form new substances.] [Assessment Boundary: Assessment does not include distinguishing mass and weight.]

5-PS1-3. Make observations and measurements to identify materials based on their properties. [Clarification Statement: Examples of materials to be identified could include baking soda and other powders, metals, minerals, and liquids. Examples of properties could include color, hardness, reflectivity, electrical conductivity, thermal conductivity, response to magnetic forces, and solubility; density is not intended as an identifiable property.] [Assessment Boundary: Assessment does not include density or distinguishing mass and weight.]

5-PS1-4. Conduct an investigation to determine whether mixing of two or more substances results in new substances.

Connections to Common Core Standards (verbatim)**:**

ELA/Literacy

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.*(5-PS1-1)*

W.5.7 Conduct short research projects that use several sources to build knowledge through investigation of different

aspects of a topic. *(5-PS1-2),(5-PS1-3),*(5-PS1-4)

W.5.8 Recall relevant information from experiences or gather relevant information from print and digital sources; summarize or paraphrase information in notes and finished work, and provide a list of sources. *(5-PS1-2),(5-PS1-3),*(5-PS1-4)

W.5.9 Draw evidence from literary or informational texts to support analysis, reflection, and research. *(5-PS1-2),(5-PS1-3),(5-PS1-4)*

Mathematics

MP.2 Reason abstractly and quantitatively. *(5-PS1-1)*,(5-PS1-2),(5-PS1-3)

MP.4 Model with mathematics. *(5-PS1-1)*,(5-PS1-2),(5-PS1-3)

MP.5 Use appropriate tools strategically. (5-PS1-2),(5-PS1-3)

5.NBT.A.1 Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10. *(5-PS1-1)*

5.NF.B.7 Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions. *(5-PS1-1)*

5.MD.A.1Convert 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-PS1-2)*

5.MD.C.3 Recognize volume as an attribute of solid figures and understand concepts of volume measurement. *(5-PS1-1)*

5.MD.C.4 Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units. *(5-PS1-1)*

Essential Questions (3-4) in provocative, student-friendly language:

- EQ 1: How do we learn about objects that are too small to be seen?
- EQ 2: How does matter behave?
- EQ 3: How can we classify matter?

Big Ideas/ Enduring Understandings: *Students will understand that…*

EQ 1:
- People use all of their senses to detect matter.

EQ 2:
- Even when matter seems to vanish, it is still conserved. The amount (weight) of matter is conserved when it changes form even when it seems to vanish (such as dissolving, mixing, melting and freezing.)
- Matter can change state when external forces are applied.

EQ 3:
- Matter has different properties that can be observed and tested

A list of factual knowledge to be taught – *Students will know…*

EQ 1:

- The terms matter, mass and volume.
- The structure of an atom: protons, neutrons in the nucleus, electrons outside the nucleus.
- The states of matter and evidence of different states.
- Examples of physical and chemical changes.
- The structure of an element
- The structure of a molecule

EQ 2:

- Examples of mixtures.
- The terms solution, solvent, solute, suspension, saturation
- Some matter has a melting point and a freezing point

EQ 3:

- The properties of substances (color, hardness, ability to conduct electricity and heat, etc.)
- Methods for testing the properties of substances

A list of skills to be taught or reinforced (including habits of mind) – *Students will be able to…*

EQ 1:

- Make a model to demonstrate changes in matter. (Air expanding balloon or ball; Air compressing in a syringe; Sugar dissolving in water; Salt water evaporating in a dish.)
- Observe, measure, record and/or graph physical and chemical changes in matter being investigated

EQ 2:

- Observe, measure, record and/or graph physical changes in matter being investigated

EQ 3:

- Design an investigation for testing the properties of matter.

STAGE 2 – SAMPLE ASSESSMENT

Assessments (Quizzes, tests, and a performance task to assess student mastery formatively and summatively, including an exemplar of proficient student work and a scoring guide for the performance task):

Goal: Conduct an investigation to determine whether mixing two or more substances results in a new substance.

Role: You are a mad scientist with your own TV show.

Audience: The TV viewing audience

Situation: You will create a pilot on television. You, as the mad scientist, will conduct an investigation to determine whether mixing of two substances results in a new substance. (You may do this “live” in the classroom or you may tape your own home investigation to be shown in class. All materials will first be

approved by your producer (the teacher). Conduct three trials of your experiment and make observations of the reactions when the substances are combined. These reactions serve as the model to describe the phenomena that occurred.

Product/Performance and Purpose:
Prepare a script. Within the script, list the materials you use in your investigation. Make observations about the properties of each of the substances you use. Include measurement quantities you use as well as any procedural steps you follow during your three trials. As an option, prepare an audience feedback portion to your script that would allow your audience to respond with their observations and understandings of your demonstration. This might be a graph that you prepare for your audience to complete that displays a change before and after each trial (example mass or color change). At the end of your script, write the three things that you want your audience to observe/understand.

Standards and Criteria for Success:
Your proposed pilot t.v. show can be recorded at home and presented in class, or can be done ” live” in the classroom.
Your proposed pilot t.v. show needs to include….

- A title for the television show
- A script for the pilot that includes a description of your investigation with the two substances you are combining
- Evidence of having used three sources to produce your script
- A list of materials needed and procedures followed for each of the three trials
- An explanation of how your scientific model uses interactions between matter and displays the cause of your chemical reaction and the effect of combining the two substances.
- Optional audience feedback documents or graphs

Supplemental Mini-Assessment for Performance Expectation 5-PS1-2: Measure and graph quantities to provide evidence that regardless of the type of change that occurs when heating, cooling, or mixing substances, the total weight of matter is conserved.

“Investigating Change of State by Observing Solid (ice) Changing to a Liquid (water)”

Conduct a classroom demonstration by placing ice cubes in 3-5 different containers. Each container will have an equal amount of water initially. Place a different amount of equal-sized ice cubes in each container. For example, distribute into the containers 1 ice cube, 5 ice cubes, 10 ice cubes, and so on. Allow the ice cubes to melt. Have students measure and graph the rise in the water level after the phase change. First students will prepare a data table and then create a graph. Analyze and interpret the data to explain why the matter is conserved.

Parcc Preparation:
Gather information from sources.
Analyze cause and effect and respond to the results.

STAGE 3 – LEARNING PLAN

Summary of Learning Activities (Lectures, mini-lessons, read alouds, independent reading, films, website exploration, discussions, dialogues, debates, partner or small-group work, student presentations, reports, journals, reflections, in-class assessments, written reports, essays, research, and homework):

EQ 1: How do we learn about objects that are too small to see?

- The following link has a PDF download written by the American Chemical Society that contains 474 pages full of investigation and activities for these standards:
- www.inquiryinaction.org/pdf/InquiryinAction
- Study Jams: http://studyjams.scholastic.com/studyjams/jams/science/index.htm
- http://education.jlab.org/beamsactivity/6thgrade/hotandcold/
- The following link has many PDF resources generated by the Delta Science Kits website: http://application4.org/s/states-of-matter-inquiry-based-hands-on-science-curriculum-kits-w167/

EQ 2: How does matter behave?

- The following link has a PDF download written by the American Chemical Society that contains 474 pages full of investigation and activities for these standards:
- www.inquiryinaction.org/pdf/InquiryinAction
- Study Jams: http://studyjams.scholastic.com/studyjams/jams/science/index.htm

EQ 3: How can we classify matter?

- The following link has a PDF download written by the American Chemical Society that contains 474 pages full of investigation and activities for these standards:
- www.inquiryinaction.org/pdf/InquiryinAction (Chapter 6)
- "States of Matter" is another resource for exploring this topic. Follow this link. http://www.chem.purdue.edu/gchelp/atoms/states.html
- Free Brainpop: http://www.brainpop.com/science/matterandchemistry/statesofmatter/
- Study Jams: http://studyjams.scholastic.com/studyjams/jams/science/index.htm
- http://education.jlab.org/beamsactivity/6thgrade/hotandcold/

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STAGE 1 – DESIRED RESULTS

Unit Title: Ecosystems: Interactions, Energy, and Dynamics

Grade Level: 5

Length/Timing of Unit:

Designer(s): Pascack Valley Regional Science Committee

Science State standards addressed (verbatim):

5-LS2-1. Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment. [Clarification Statement: Emphasis is on the idea that matter that is not food (air, water, decomposed materials in soil) is changed by plants into matter that is food. Examples of systems could include organisms, ecosystems, and the Earth.] [Assessment Boundary: Assessment does not include molecular explanations.]

5-PS3-1. Use models to describe that that energy in animals' food (used for body repair, growth, motion, and to maintain body warmth) was once energy from the sun. [Clarification Statement: Examples of models could include diagrams, and flowcharts.]

5-LS1-1. Support an argument that plants get the materials they need for growth chiefly from air and water. [Clarification Statement: Emphasis is on the idea that plant matter comes mostly from air and water, not from the soil.]

Connections to Common Core Standards (verbatim)**:**

ELA/Literacy

RI.5.1 Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text. (5-LS1-1)

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. (5-LS2-1)

RI.5.9 Integrate information from several texts on the same topic in order to write or speak about the subject knowledgeably. (5-LS1-1)

W5.1 Write opinion pieces on topics or texts, supporting a point of view with reasons and information. (5-LS1-1)
SL.5.5 Include multimedia components (e.g., graphics, sound) and visual displays in presentations when appropriate to enhance the development of main ideas or themes. (5-LS2-1)

Mathematics

MP.2 Reason abstractly and quantitatively. (5-LS2-1)

MP.4 Model with mathematics. (5-LS2-1)

MP.5 Use appropriate tools strategically. (5-LS1-1)

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-LS1-1)

Essential Questions (3-4) in provocative, student-friendly language:

- EQ1. How is life dependent on the sun?
- EQ2. What are the dynamics of life on Earth?
- EQ3. How do animals and plants get energy?

Big Ideas/ Enduring Understandings: ***Students will understand that…***

EQ1:
- All food chains begin with the sun, and energy moves from one organism to another in a food chain.
- The oxygen content and availability of sunlight help determine the nature of living things on land and in the water.

EQ2:
- Living and nonliving things are different, interact and have specific roles in the environment.

EQ3:
- Ecosystems vary and change over time.

A list of factual knowledge to be taught – ***Students will know…***

EQ1:
- Examples of food chains/webs.
- Photosynthesis

EQ2:
- Examples of producers, consumers, decomposers, scavengers.
- Examples of symbiosis.

EQ3:
- The terms biome, ecosystem, habitat, population, community and niche.

A list of skills to be taught or reinforced (including habits of mind) – ***Students will be able to…***

- Make a visual model of living and nonliving things in community. Define each animal's role and describe interactions.
- Make a model of a food web that represents the transfer of energy (plants, herbivores, carnivores, omnivores, and decomposers). Infer the effects of extinction.

Born: June 2015

- Use a cause and effect graphic organizer, compare the effect of removing a producer from the food web with the effect of removing a consumer from the food web.
- Explain the key traits and interactions of consumers, scavengers, producers, decomposers.

STAGE 2 – SAMPLE ASSESSMENT

Assessments (Quizzes, tests, and a performance task to assess student mastery formatively and summatively, including an exemplar of proficient student work and a scoring guide for the performance task):

Goal: Describe the movement of matter among plants, animals, decomposers, and the environment. Identify the sun, air, and water as important components in this process.

Role: You are a farmer or gardener who will grow a fruit or a vegetable.

Audience: Classmates in need of energy

Situation: Through the taking in of water, sunlight, and carbon dioxide, the producers make food (glucose) and the oxygen that animals need for respiration. The animals need oxygen and food from plants to create energy with which to live their lives. In exchange the animals give off carbon dioxide and water needed by the plants. As a farmer/gardener, pick a fruit or a vegetable. Name the parts of the ecosystem that this plant will rely on for growth. Name the contributions of the plant to the ecosystem and how others will use this plant for energy.

Product/Performance/Purpose: (1) Using a flowchart or a diagram, show your classmates what matter was used by the plant, how it was used, and what the plant contributed to its ecosystem. (2) Then, make an energy pyramid poster as a model to describe that energy in animals' food (used for body repair, growth, motion, and to maintain body warmth) was once energy from the sun. The energy pyramid poster will focus on the ecosystem of which the fruit or vegetable is a part and will show the transfer of energy in the energy pyramid from bottom (sun) to the top (a consumer). (3) Construct a written argument that supports why animals need that fruit or vegetable to get the energy they need to live. Also explain what the animals give to the ecosystem that helps the plant in this cycle, and why this plant is reliant on these offerings. Infer what would happen to the ecosystem if air and water were missing.

Standards/Criteria for Success:

- Flow chart or diagram that is accurate and clearly labeled
- Energy Pyramid Illustration
- Written argument with prediction (inference)

STAGE 3 – LEARNING PLAN

Summary of Learning Activities (Lectures, mini-lessons, read alouds, independent reading, films, website exploration, discussions, dialogues, debates, partner or small-group work, student presentations, reports, journals, reflections, in-class assessments, written reports, essays, research, and homework):

EQ1. How is life dependent on the sun?

- Competitive activity relating to food webs and energy transfer. https://www.brainpop.com/games/foodfight/
- http://maggiesscienceconnection.weebly.com/habitats-food-chains--webs-trophic-pyramid.html

EQ2. What are the dynamics of life on Earth?

- Organism (sharks and prey) interactions and symbiotic relationships. http://www-tc.pbs.org/wnet/nature/files/2008/12/symbiotic-strategies.pdf
- Grand Canyon National Park Distance Learning Project with a park ranger (Skype) (Must sign up early in the school year because there are limited spots.) "Canyon Connections"http://www.nps.gov/grca/forteachers/learning/canyon-connections.htm
- Montclair State Rainforest Virtual Classroom http://www.montclair.edu/csam/prism/rainforest-connection/

EQ3. How do animals and plants get energy?

- http://www.pbslearningmedia.org/resource/lsps07.sci.life.oate.plantparts/supermarket-botany/ (let's look through this)
- Root Beer Activity Document to explore transfer of energy www.engr.sjsu.edu/tanagnos/Ecology/Root_Beer_**Activity.doc**

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STAGE 1 – DESIRED RESULTS

Unit Title: Earth's Place in the Universe

Grade Level: 5

Length/Timing of Unit:

Designer(s): Pascack Valley Regional Science Committee

Science State standards addressed (verbatim):

5-ESS1-1. Support an argument that differences in the apparent brightness of the sun compared to other stars is due to their relative distances from the Earth. [Assessment Boundary: Assessment is limited to relative distances, not sizes of stars. Assessment does not include other factors that affect apparent brightness (such as stellar masses, age, stage).]

5-ESS1-2. Represent data in graphical displays to reveal patterns of daily changes in length and direction of shadows, day and night, and the seasonal appearance of some stars in the night sky. [Clarification Statement: Examples of patterns could include the position and motion of Earth with respect to the sun and selected stars that are visible only in particular months.] [Assessment Boundary: Assessment does not include causes of seasons.]

5-PS2-1. Support an argument that the gravitational force exerted by Earth on objects is directed down. [Clarification Statement: "Down" is a local description of the direction that points toward the center of the spherical Earth.] [Assessment Boundary: Assessment does not include mathematical representation of gravitational force.]

Connections to Common Core Standards (verbatim)**:**

ELA/Literacy

RI.5.1 Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text. *(5-ESS1-1)*

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.*(5-ESS1-1)*

RI.5.8 Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point(s). *(5-ESS1-1)*

RI.5.9 Integrate information from several texts on the same topic in order to write or speak about the subject

knowledgeably. (5-ESS1-1)

W.5.1 Write opinion pieces on topics or texts, supporting a point of view with reasons and information. (5-ESS1-1)

SL.5.5 Include multimedia components (e.g., graphics, sound) and visual displays in presentations when appropriate to enhance the development of main ideas or themes. *(5-ESS1-2)*

Mathematics

MP.2 Reason abstractly and quantitatively. *(5-ESS1-1)*,(5-ESS1-2)

MP.4 Model with mathematics. *(5-ESS1-1)*,(5-ESS1-2)

5.NBT.A.2 Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10. *(5-ESS1-1)*

5.G.A.2 Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation. (5-ESS1-2)

Essential Questions (3-4) in provocative, student-friendly language:

- EQ 1: Why are some stars easier to see?
- EQ 2: Why does our sun (a star) and stars appear to change position in the sky over time?
- EQ 3: What keeps people and objects on Earth and why don't they just float away into space?

Big Ideas/ Enduring Understandings: *Students will understand that…*

EQ 1:

- People observe the sun as large and bright in relation to other stars. There are more stars in the sky than anyone can easily count or see with the naked eye.

EQ 2:

- There are different factors that contribute to seasonal changes.
- Seasonal patterns of the sky as viewed from Earth rely on Earth's rotation and revolution.

EQ 3:

- Gravity is one of the fundamental forces of nature that influences the universe.
- Mass and force affect motion.
- Gravity pulls on any object on or near the earth without touching it.

A list of factual knowledge to be taught – *Students will know…*

EQ 1:

- The composition of a star
- The terms magnitude, lightyear, galaxy
- The stages of the life cycles of stars
- Our star's (the Sun) importance to the solar system/planet

EQ 2:

- The term rotation and how a rotating planet influences day and night
- The term revolution and how movement around the sun in one year causes seasons.
- Solstices and equinoxes
- Seasonal patterns of shadows (length; direction) as influenced by the sun
- Constellations can only be seen in certain seasons depending upon location on Earth (northern hemisphere, southern hemisphere, equator, or poles)

EQ 3:

- The term gravity and its influence as a force on Earth.
- The terms mass and force
- Sir Isaac Newton's Universal Laws

A list of skills to be taught or reinforced (including habits of mind). Students will be able to...

- Demonstrate magnitude by using models with various brightnesses and distances.
- Analyze images of stars in various forms.
- Make a timeline (in any presentation format) of the history of star gazing and the tools/technology used.
- Make models using any objects to demonstrate comprehension of rotation and revolution (coins, globes, people, etc.)
- Observe, draw and track shadows over time, and record data regarding changes in length and directions.
- Explain how shadows can be used to tell the time of day (sun dial).
- Use cardinal directions (orienteering) to describe shadow direction.
- Identify the cause of the sun's apparent motion in the sky.
- Conduct investigations of gravity's effect on various objects (i.e. dropping objects with varied masses from a height; manipulating cars, etc. on inclined planes).
- Identify the forces of gravity described by Newton's three laws.
- Make a claim about how quickly or slowly an object moves (velocity) and provide evidence and supportive reasoning for your claim.

STAGE 2 – SAMPLE ASSESSMENT

Assessments (Quizzes, tests, and a performance task to assess student mastery formatively and summatively, including an exemplar of proficient student work and a scoring guide for the performance task):

Goal: Support an argument that differences in the apparent brightness of the sun compared to other stars is due to their relative distances from the Earth. Explain the seasonal appearance of some stars in the night sky.

Role: You are a stargazer.

Audience: Other stargazers in your class.

Situation: Analyze a picture of a constellation to observe star brightness and to determine proximity to Earth. Explain the seasonal appearance of the constellation in the night sky.

Product/Performance/Purpose:

1) Conduct an investigation of the apparent brightness of lights based on size and distance parameters. (See "Experimenting with Brightness" - Students will investigate with with large flashlight and penlights (representing the size variable of stars) and distances (representing distance from Earth) to make and test hypotheses and record observations. They will draw conclusions based on their observations about how stars differ in apparent brightness when viewed from Earth.
2) Find a picture of a constellation currently in the night sky that shows its stars as viewed from Earth.
3) Construct a written argument that explains why certain stars appear brighter than others in that constellation when viewed from Earth. Include in your writing an analysis of when that constellation is visible from your location on Earth and why at certain times of the year it is not visible from your location.

Standards/Criteria for Success:

- "Experimenting with Brightness" Lab Report
- Data represented by the image of a constellation
- Written essay that explains brightness and seasonal appearance

Supplemental Mini-Assessment for Performance Expectation 5-ESS1-2. Represent data in graphical displays to reveal patterns of daily changes in length and direction of shadows, day and night, and the seasonal appearance of some stars in the night sky.

Explore and investigate shadows in an outdoor setting. Think about what controls the length of an object's shadow or what causes it to move from one place to another. Consider whether your shadow looks longer or shorter at different times of the day. Observe the shortest and longest shadows. Measure and record lengths in a data file. Also, identify the position of the sun when these shadows were made. Using the observations made in your data file, articulate a theory or a "rule" that explains how the angle of the light source affects the length of the shadow produced.

Supplemental Mini-Assessment for Performance Expectation 5-PS2-1: Support an argument that the gravitational force exerted by Earth on objects is directed down.

Use a list of resources that explore gravity, including articles, books, and websites. Develop and use a model that demonstrates gravitational force being exerted on an object or objects. Carry out your investigation in front of the class or record a video at home to be presented to the class.

STAGE 3 – LEARNING PLAN

Summary of Learning Activities (Lectures, mini-lessons, read alouds, independent reading, films, website exploration, discussions, dialogues, debates, partner or small-group work, student presentations, reports, journals, reflections, in-class assessments, written reports, essays, research, and homework):

EQ 1: Why are some stars easier to see?

- **Student exploration of star brightness:** **5th Grade Star Brightness.docx** ~ Students will support an argument that differences in the apparent brightness of the sun compared to other stars is due to their relative distances from Earth. They will learn about different types of stars (Blue Dwarf, etc.). This document will provide guidance in conducting experiments.

EQ 2: Why does our sun (a star) and stars appear to change position in the sky over time?

- **http://www.stem4students.net/fifth-grade---space-science-quarter-2.html (possible lesson to adpat and use for this standard)**
- **The Noon Day Project:** The Goal of the Noon Day Project is to have students measure the circumference of the earth using a method that was first used by Eratosthenes over 2000 years ago. Students at various sites around the world will measure shadows cast by a meter stick and compare their results. From this data students will be able to calculate the circumference of the earth. The link to the Noon Day Project is as follows: **http://ciese.org/curriculum/noonday/**

EQ 3: What keeps people and objects on earth and why don't they just float away into space?

- **Student exploration of gravity:** Explore the concept of gravity using a variety of different experiments, programs, etc. using this website. http://www.internet4classrooms.com/grade_level_help/physical_science_investigate_gravity_fifth_5th_grade_science.htm
- **Gravity and Falling Objects:** http://www.pbslearningmedia.org/resource/phy03.sci.phys.mfe.lp_gravity/gravity-and-falling-objects/
- **Falling for Gravity:** http://sciencenetlinks.com/afterschool-resources/falling-gravity/

Links to investigate Newton's Laws of Gravity:

- http://www.ehow.com/info_8407445_fifth-grade-gravity-projects.html (gravity experiments)
- http://www.physicsclassroom.com/Class/newtlaws/u2l1a.cfm ~ Law #1
- http://www.physicsclassroom.com/Class/newtlaws/u2l3a.cfm ~ Law #2
- http://www.physicsclassroom.com/Class/1DKin/U1L5b.cfm ~ acceleration of gravity
- https://www.brainpop.com/science/motionsforcesandtime/newtonslawsofmotion/preview.weml ~ Brain Pop video, quiz and activities