Interdisciplinary Unit

First Grade Unit 6

2015-2016

Concept: Attributes

Essential Question:

What can looking at the different attributes of something/someone show us?

Deepening Questions:

How can understanding attributes of different forces be useful in understanding how something moves?

How do forces influence how something moves?

What are the attributes of different 2D and 3D shapes?

What can different versions of the same story teach us about different cultures?

Suggested Trade Book Resources:

What Makes a Magnet? By Franklyn M. Branley (Lexile: 640, GR: L)

And Everyone Shouted, Pull by Claire Llewllyn

Children Just Like Me: Celebrations! By Anabel Kindersley (Lexile: 1000)

Rashad’s Ramadan and Ei-al-Fir by Lisa Bullard

Rosh Hashanah and Yom Kippur by Dana Meachen Rau (Lexile: 790, GR: P)

The Three Little Pigs by James Marshall (Lexile: 560, GR: L)

The Three Little Javelinas by Susan Lowell and Jim Harris (Lexile: 740, GR: L)

Three Little Cajun Pigs by Mike Artell

Alaska’s Three Pigs Arlene Laverde and Mindy Dwyer

Three Little Hawaiian Pigs and the Magic Shark by Donivee M. Laird

The Three Little Goslings

Hook:

The American Flag of Faces™ is a "living" and interactive digital exhibit in the Museum on historic Ellis Island, which features a mosaic of portraits throughout the generations submitted by individuals and families.

Investigate the following things:

How does the flag move? (connect to force and motion)

Who are the people who live in the United States? How are the same and how are they different?

How are people around the world both alike and different in the ways they live and work?

What are some of the stories people might share?

Section 1: How Things Move

States: Missouri, Ohio, Wisconsin, Michigan (only magnets)

NOT: Illinois, Minnesota, Indiana (unless covering process standards)

Deepening Questions:

How can understanding attributes of different forces be useful in understanding how something moves?

How do forces influence how something moves?

* + - Live Binder on Forces and Motion (tons of activities) <http://www.livebinders.com/play/play?id=478112>
    - Force and Motion unit (TPT $5): <https://www.teacherspayteachers.com/Product/Force-and-Motion-Mini-unit-for-Primary-Students-748514>
* Changing Positions
  + Position (up/down, far/near, right/left)
    - Describe the position (attachment)
  + Motion (straight, forward/backward, zig zag, circle)
    - Types of motion sort (attachment)
* Speed
  + - STEM car force and motion activity (attachment): <http://firstgradeblueskies.blogspot.com/2015/01/stem-force-and-motion-freebie.html>
* Pushes/Pulls
  + - Push/pull sort (attachment)
* Gravity
  + - Lesson on gravity: <http://kindergartenboomboom.blogspot.com/2014/01/welcome-to-gravity-falls.html?m=1>
* Friction
* Simple Machines
  + pulleys, levers, ramps
    - Pulley close reading passage (attachment)
    - Lever close reading passage (attachment)
* Magnets (Poles, Repel)
  + - Magnet mini-unit (attachment)
    - Magnet will it stick? Game (attachment)

Section 2: Geometry

States: all

Deepening Question:

What are the attributes of different 2D and 3D shapes?

* + - Shape Unit (attachment)
* Two Dimensional Shapes
  + - 2D geometry poster
  + Squares/Rectangles
  + Triangles and Trapezoids
  + Circles
  + Comparing shapes
    - 2D shape chart (attachment)
  + Composite shapes
    - Shape Monster (see example here: http://mrswheelerfirst.blogspot.com/2014/04/geometry.html
* Fractions
  + - Fraction cookies: <http://www.adventuresoffirstgrade.blogspot.com/2011/04/fractions-fractions-and-more-fractions.html>
  + Equal parts
  + Halves
  + Quarters and Fourths
* LEGO Engineering Project (with Computer Ed. Teacher)
  + Pond Lego Project(attachment)
    - Focus on math: measurement and fractions (fair share and fractions)
* Three Dimensional Shapes
  + - My Book of 3D Shapes (attachment)
    - Identifying 3D shapes (attachment)
  + Cubes and prisms
  + Cones and cylinders
  + Comparing 3D shapes
    - 3D shapes cut and paste (attachment)
  + Combining 3D shapes
* Other resources:
  + - Geometry unit: (TPT $6.75): <https://www.teacherspayteachers.com/Product/Geometry-for-1st-Grade-MEGA-Unit-Fun-with-Shapes-2D-and-3D-Common-Core-Math-488290>
    - First grade geometry assessment (attachment)

Section 3: People around the World

States: all

Deepening Questions:

How are people around the world both alike and different in the ways they live and work?

* What is culture?
  + Language, history, arts, foods, traditions
* The First Americans (native american culture)
  + - Native American (wampum) reading passage (attachment)
    - Dream catcher art project: <http://createartwithme.blogspot.ca/2012/07/super-simple-dream-catcher-from-paper.html>
    - Native American clothing (attachment)
  + Native Americans and Pilgrims
* Introduction to Immigration
  + - Immigration activities (Meet Young Immigrants): <http://teacher.scholastic.com/activities/immigration/>
* Cultures in Different Places
  + Kids around the world
    - Pick a few countries from the site and click through the “Day in the Life” link to learn about the daily life of children from the countries: http://www.timeforkids.com/around-the-world
    - Food around the world (attachment)
    - List of books: http://www.forsmallhands.com/around-the-world/people-of-the-world
* Cultures in the US
  + Learning about US cultures
    - Assign a different US culture to students to research and present (collaborate with computer teacher)
* Sharing Celebrations
  + \*\*\*Note: Try to move away from teaching “Holidays Around the World” only in December. Many of the very important holidays in other cultures take place at different times of the year.
  + Different cultural celebrations
    - Ideas: Cinco de Mayo, Chinese New Year, Kwanzaa, Rosh Hashanah, Ramadan, Diwali
    - Holidays around the world resources (attachment): scroll to the bottom for a list of books/resources
* PERFORMANCE TASK: Persuasive-“Come celebrate \_\_\_\_\_ with me.” Students will create an invitation to one of the studied holidays.
* Families Around the World
  + My family
    - Me and my family unit (attachment)
  + Comparing my family with others around the world

Section 4: Sharing Stories

States: all

Deepening Questions:

What can different versions of the same story teach us about different cultures?

Versions of the Three Little Pigs:

The Three Little Pigs

The Three Little Javelinas

Three Little Cajun Pigs

Alaska’s Three Pigs

Three Little Hawaiian Pigs and the Magic Shark

The Three Little Goslings

* Cultural Stories
  + The Three Little Pigs (Select a few versions)
* The Three Little Pigs versions
  + - Wolf stories comparison (attachment)
    - TPT Unit $5: <https://www.teacherspayteachers.com/Product/Comparing-and-Contrasting-with-the-Three-Little-Pigs-Unit-520449>
    - Pigs and Wolves point of view (attachment)
* Characterization
* Compare and Contrast two different stories
* PERFORMANCE TASK: Persuasive-“You should read…….” Book Report. Students will write a book report that convinces someone to read a specific version of The Three Little Pigs folktale using supporting evidence from the text.
* Other Version
* ELA Standards:

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| RL.1.9 | Compare and contrast the adventures and experiences of characters in stories. |
| RI.1.9 | : Identify basic similarities in and differences between two texts on the same topic (e.g., in illustrations, descriptions, or procedures). |
| W.1.1 | Write opinion pieces in which they introduce the topic or name the book they are writing about, state an opinion supply a reason for the opinion, and provide some sense of closure. |
| W.1.6 | With guidance and support from adults, use a variety of digital tools to produce and publish writing, including in collaboration with peers. |
| L.1.5: | With guidance and support from adults, demonstrate understanding of word relationships and nuances in word meanings. |
| L.1.5(d): | Distinguish shades of meanings among verbs differing in manner (e.g., look, peek, glance, stare, glare, [and] scowl) and adjectives differing in intensity (e.g., large, gigantic) by defining or choosing them, or by acting out the meanings. |
| SL.1.5: | Add drawings or other visual displays to descriptions when appropriate to clarify ideas, thoughts, and feelings. |
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| LA.1.1. | They demonstrate independence. |
| ELA.1.3. | They respond to the varying demands of audience, task, purpose, and discipline |
| ELA.1.4. | They comprehend as well as critique. |
| ELA.1.7. | They come to understand other perspectives and cultures |
| L.1.6. | Use words and phrases acquired through conversations, reading and being read to, and responding to texts, including using frequently occurring conjunctions to signal simple relationships (e.g., I named my hamster Nibblet because she nibbles too much because she likes that |
| RI.1.2. | Identify the main topic and retell key details of a text |
| RI.1.3. | Describe the connection between two individuals, events, ideas, or pieces of information in a text |
| RL.1.1. | Ask and answer questions about key details in a text |
| RL.1.2. | Retell stories, including key details, and demonstrate understanding of their central message or lesson |
| RL.1.3. | Describe characters, settings, and major events in a story, using key details |
| RL.1.6. | Identify who is telling the story at various points in a text |
| RL.1.7. | Use illustrations and details in a story to describe its characters, setting, or events |
| RL.1.9. | Compare and contrast the adventures and experiences of characters in stories |
| SL.1.1. | Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups |
| SL.1.2. | Ask and answer questions about key details in a text read aloud or information presented orally or through other media |
| SL.1.4. | Describe people, places, things, and events with relevant details, expressing ideas and feelings clearly |
| SL.1.5. | Add drawings or other visual displays to descriptions when appropriate to clarify ideas, thoughts, and feelings |
| SL.1.6. | Produce complete sentences when appropriate to task and situation |
| W.1.3. | Write narratives in which they recount two or more appropriately sequenced events, include some details regarding what happened, use temporal words to signal event order, and provide some sense of closure |
| W.1.5. | With guidance and support from adults, focus on a topic, respond to questions and suggestions from peers, and add details to strengthen writing as needed |
| W.1.6. | With guidance and support from adults, use a variety of digital tools to produce and publish writing, including in collaboration with peers |
| W.1.7. | Participate in shared research and writing projects (e.g., explore a number of ôhow-toö books on a given topic and use them to write a sequence of instructions |
| W.1.8. | With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question |
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Math

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| 1.G. | Geometry. |
| 1.G.A. | Reason with shapes and their attributes. |
| 1.G.A.1. | Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size) ; build and draw shapes to possess defining attributes |
| 1.G.A.2. | Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape |
| 1.G.A.3. | Partition circles and rectangles into two and four equal shares, describe the shares using the words halves, fourths, and quarters, and use the phrases half of, fourth of, and quarter of. Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares. |

Standards by State:

Ohio

Social Studies

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| OH 1.6 | Families interact with the physical environment differently in different times and places. |
| OH 1.7 | Diverse cultural practices address basic human needs in various ways and may change over time. |

Science

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| PS.1.2 | Objects can be moved in a variety of ways, such as straight, zigzag, circular, and back and forth. |
| SIA.1.1. | Observe and ask questions about the natural environment; |
| SIA.1.2. | Plan and conduct simple investigations; |
| SIA.1.5. | Communicate about observations, investigations and explanations |
| SIA.1.6. | Review and ask questions about the observations and explanations of others. |
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Michigan

Science

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| MI.P.PM.01.31. | Identify materials that are attracted by magnets. |
| MI.P.PM.01.32. | Observe that like poles of a magnet repel and unlike poles of a magnet attract. |
| MI.S.IA.01.12. | Share ideas about science through purposeful conversation. |
| MI.S.IA.01.13. | Communicate and present findings of observations. |
| MI.S.IP.01.12. | Generate questions based on observations. |
| MI.S.IP.01.13. | Plan and conduct simple investigations. |
| MI.S.RS.01.11. | Demonstrate scientific concepts through various illustrations, performances, models, exhibits, and activities. |
| MI.S.RS.01.12. | Recognize that science investigations are done more than one time. |

Social Studies

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| MI.1. G4.0.1 | Use components of culture (e.g., foods, language, religion, traditions) to describe diversity in family life. |

Missouri

Science

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| MO.1.2.1.A.a. | Compare the position of an object relative to another object (e.g., left of or right of) |
| MO.1.2.1.A.b. | Describe an object’s motion as straight, circular, vibrating (back and forth), zigzag, stopping, starting, or falling |
| MO.1.2.1.A.c. | Compare the speeds (faster vs. slower) of two moving objects |
| MO.1.2.2.A.a. | Identify the force (i.e., push or pull) required to do work (move an object) |
| MO.1.2.2.D.a. | Describe ways to change the motion of an object (i.e., how to cause an object to go slower, go faster, go farther, change direction, stop) |
| MO.1.7.1.A.a. | Pose questions about objects, materials, organisms and events in the environment |
| MO.1.7.1.A.b. | Plan and conduct a simple investigation (fair test) to answer a question |
| MO.1.7.1.B.a. | Make qualitative observations using the five senses |
| MO.1.7.1.C.a. | Use observations as support for reasonable explanations |
| MO.1.7.1.C.b. | Use observations to describe relationships and patterns and to make predictions to be tested |
| MO.1.7.1.D.a. | Communicate simple procedures and results of investigations and explanations through: oral presentations, drawings and maps, data tables, graphs (bar, pictograph), writings |
| MO.1.8.3.A.a. | Identify a question that was asked, or could be asked, or a problem that needed to be solved when given a brief scenario (fiction or nonfiction of individuals solving everyday problems or learning through discovery) |
| MO.1.8.3.A.b. | Work with a group to solve a problem, giving due credit to the ideas and contributions of each group member |

Social Studies

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|  | Cultures meeting the needs of people- Explain how people have common physical, social and emotional needs |
|  | Identify artifacts (building structures and materials, works of art representative of cultures, fossils, pottery, tools, clothing, musical instruments) |
|  | Cultures meeting the needs of people- Explain how people have common physical, social and emotional needs |

Wisconsin

Science

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| WI.1.A.4.1. | When conducting science investigations\*, ask and answer questions that will help decide the general areas of science being addressed |
| WI.1.A.4.2. | When faced with a science-related problem, decide what evidence\*, models\*, or explanations\* previously studied can be used to better understand\* what is happening now |
| WI.1.C.4.2. | Use the science content being learned to ask questions, plan investigations\*, make observations\*, make predictions\*, and offer explanations\* |
| WI.1.C.4.5. | Use data they have collected to develop explanations\* and answer questions generated by investigations\* |
| WI.1.C.4.7. | Support their conclusions with logical arguments |
| WI.1.D.4.6. | Observe\* and describe\* physical events in objects at rest or in motion |
| WI.1.D.4.7. | Observe\* and describe\* physical events involving objects and develop record-keeping systems to follow these events by measuring and describing changes in their properties, including position relative to another object, motion over time, and position due to forces. |
| WI.1.G.4.4. | Identify\* the combinations of simple machines in a device used in the home, the workplace, or elsewhere in the community, to make or repair things, or to move goods or people |
| WI.1.H.4.1. | Describe\* how science and technology have helped, and in some cases hindered, progress in providing better food, more rapid information, quicker and safer transportation, and more effective health care |
| WI.1.H.4.3. | Show\* how science has contributed to meeting personal needs, including hygiene, nutrition, exercise, safety, and health care |

Social Studies

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| WI.B.4.3 | Examine biographies, stories, narratives, and folk tales to understand the lives of ordinary and extraordinary people, place them in time and context, and explain their relationship to important historical events |
| WI.E.4.3 | Describe how families are alike and different, comparing characteristics such as size, hobbies, celebrations, where families live, and how they make a living |
| WI.E.4.4 | Describe the ways in which ethnic cultures influence the daily lives of people |
| WI.E.4.9 | Explain how people learn about others who are different from themselves |
| WI.E.4.11 | Give examples and explain how language, stories, folk tales, music, and other artistic creations are expressions of culture and how they convey knowledge of other peoples and cultures |
| WI.E.4.13 | Investigate and explain similarities and differences in ways that cultures meet human needs |
| WI.E.4.14 | Describe how differences in cultures may lead to understanding or misunderstanding among people |

Minnesota

Science

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| 1.1.1.1.1. | Scientists work as individuals and in groups to investigate the natural world, emphasizing evidence and communicating with others. | |
| 1.1.3.2.1. | Men and women throughout the history of all cultures, including Minnesota American Indian tribes and communities, have been involved in engineering design and scientific inquiry. |

Social Studies

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|  | No Social Studies standards for culture |
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Illinois

Science

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| 1.11.4.01. | Understand how to design and perform simple experiments. |
| 1.11.4.02. | Distinguish among and answer questions about performing the following: observing, drawing a conclusion based on observation, forming a hypothesis, conducting an experiment, organizing data, constructing and reading charts and graphs, and comparing data. |
| 1.11.4.03. | Compare observations of individual and group results. |
| 1.11.4.04. | Distinguish among the following: recording the data from an experiment, organizing the data into a more useful form, analyzing it to identify relevant patterns, and reporting and displaying results. |
| 1.12.4.25. | Define a force as a push or a pull that tends to move an object. Understand that forces may be balanced or unbalanced. Know that when the forces applied to an object are balanced, the motion or rest of that object does not change. |
| 1.12.4.26. | Identify the basic forces, such as friction, magnetism, and gravity. Identify which force is operative in a simple scenario. |
| 1.12.4.27. | Identify simple machines (lever, inclined plane, pulley, screw, and wheel and axle). Understand know how they apply forces with advantage, and identify which machine is suited for accomplishing a given simple task. |
| 1.12.4.28. | Identify equilibrium conditions (e.g., in a diagram of balanced weights on levers or pulleys). |

Social Studies

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| 18.A.1 | Identify folklore from different cultures which became part of the heritage of the United States. |
| 16.A.1c | Describe how people in different times and places viewed the world in different ways. |

Indiana

Science

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| N.1.PS.A1. | Use a scientific notebook to record predictions, questions and observations about data with pictures, numbers or in words. |
| IN.1.PS.A2. | Conduct investigations that may happen over time as a class, in small groups, or independently. |
| IN.1.PS.A3. | Generate questions and make observations about natural processes. |
| IN.1.PS.A4. | Make predictions based on observations. |
| IN.1.PS.A5. | Discuss observations with peers and be able to support your conclusion with evidence. |
| IN.1.PS.A6. | Make and use simple equipment and tools to gather data and extend the senses. |
| IN.1.PS.A7. | Recognize a fair test. |

Social Studies

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| IN.1. 1.3.8 | Compare cultural similarities and differences of various ethnic and cultural groups found in Indiana such as family traditions and customs, and traditional clothing and food. |