## Grade 3 Science

Diary map is based on the 2014-2015 school year. Information may change year to year. Months are guidelines and items may be done at different times of the year.

<table>
<thead>
<tr>
<th>Month</th>
<th>Essential Questions</th>
<th>Content</th>
<th>Skills</th>
<th>Assessment</th>
<th>Resources</th>
<th>Technology</th>
</tr>
</thead>
</table>
| Aug. - Sept. | **Force and Motion**  
What is the tradeoff when using a simple machine to do work? | **Force and Motion**  
- Measuring Force  
- Work in Motion  
- Levers for Lifting  
- Friction Stops Motion  
- Wheels Overcome Friction  
- The Wheel and Axle | **Force and Motion**  
- Observe the effect of pushing and pulling on object  
- Compare the amount of work accomplished in moving objects a distance  
- Name the parts of a lever and use a lever to lift a load  
- Observe the effects of friction on a moving object  
- Discover how wheels reduce friction  
- Identify the parts of a wheel and axle and observe how it works | **Force and Motion**  
- Whole group discussion  
- Hands on group activity  
- Activity Sheet | **Force and Motion**  
- Delta Science Modules:  
  Force and Motion (2011)  
- Delta Science Kit (2011) | **Force and Motion**  
- Computer  
- Elmo  
- SMART Board  
- YouTube |
| Oct. | **Force and Motion**  
What is the tradeoff when using a simple machine to do work? | **Force and Motion**  
- Gears: Wheels with Teeth  
- Pulleys: Groovy Wheels  
- Inclined Planes  
- Wedges | **Force and Motion**  
- Observe how gears transfer force, change the direction and of rotation  
- Make and use a single fixed and moveable pulley  
- Measure the amount of force it takes to lift and drag a load up an inclined plane  
- Observe how a wedge changes the direction of applied force  
- Use a wedge to lift a load | **Force and Motion**  
- Whole group discussion  
- Hands on group activity  
- Activity Sheet | **Force and Motion**  
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<td><strong>Nov.</strong></td>
<td><strong>Force and Motion</strong></td>
<td>What is the tradeoff when using a simple machine to do work?</td>
<td>Force and Motion</td>
<td>Force and Motion -Observe how screws change the direction of force -Compare the amount of force it takes to drive a nail and a screw into a piece of wood -Review the six types of simple machines -Examine a variety of common objects and discuss the features that make them simple machines</td>
<td>Force and Motion -Whole group discussion -Hands on group activity -Activity Sheet</td>
<td>Force and Motion -Delta Science Modules: Force and Motion (2011) -Delta Science Kit (2011)</td>
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<td><strong>Weather</strong></td>
<td>How is an area’s climate determined? -How do scientists record weather patterns and make predictions? -Why do natural hazards occur? -How do natural hazards impact humans?</td>
<td>Weather</td>
<td>Weather</td>
<td>Weather -Understand the differences between weather and climate -Determine a variety of ways to predict the weather -Discuss the causes and effects of natural hazards</td>
<td>Weather -Whole group discussion -Hand on activity -Natural Hazard Flipbook</td>
<td>Weather -Teachers Pay Teachers resources -Guest Speaker Tegan Orpet with KHQA Weather Team</td>
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<tr>
<td><strong>Dec.</strong></td>
<td><strong>Weather</strong></td>
<td><strong>Weather vs. Climate</strong></td>
<td>Weather Predicting -Natural Hazards</td>
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