**NACA 1st Grade Science Science Activities**

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| **Activity** | **Calendar** | [**Evidence Statements(s)**](http://www.nextgenscience.org/evidence-statements) |
| **Making Music (pow wow)**  Students play various musical instruments. Draw attention to vibrations involved.  Develop an investigation into the cyclical relationship between sound and vibrating materials (what will be observed, how will sounds be described, how will vibration be monitored, etc.) |  | [1-PS4-1](http://www.nextgenscience.org/file/2806/download?token=9Vkgw1qF). Plan and conduct investigations to provide evidence that vibrating materials can make sound and that sound can make materials vibrate. |
| **Cave Exploration (local land)**  After learning about cave exploration (or a similar no-light situation), set up the classroom so that it can be completely dark. Students observe objects with lights on and off (visible?). Then introduce observations about objects that produce their own light. Students summarize what they have learned about the visibility of objects in the dark. |  | [1-PS4-2](http://www.nextgenscience.org/file/2811/download?token=K2nRnbfL). Make observations to construct an evidence-based account that objects in darkness can be seen only when illuminated. |
| **Light Investigations (the way indigenous people have followed/use light)**  Set up a beam of light and students investigate the way that different materials affect that beam. Should start with what students think will happen and then developing an investigation to test these ideas. |  | [1-PS4-3](http://www.nextgenscience.org/file/2816/download?token=iitF-15o). Plan and conduct investigations to determine the effect of placing objects made with different materials in the path of a beam of light. |
| **Long-Distance Calls**   * Making cup and string phones * Using drums to communicate over distances * Flashlights as signaling devices * Morse code (?)   How does this help people? |  | [1-PS4-4](http://www.nextgenscience.org/file/2821/download?token=dfaW93GX). Use tools and materials to design and build a device that uses light or sound to solve the problem  of communicating over a distance.\*  [K-2-ETS1-1](http://www.nextgenscience.org/file/3156/download?token=xVw05hNY). Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.  [K-2-ETS1-2](http://www.nextgenscience.org/file/3161/download?token=c6xQQ3-u). Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.  [K-2-ETS1-3](http://www.nextgenscience.org/file/3166/download?token=bRcXyos3). Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs. |
| **Learning from the Animals (relationship with animals, clans, etc)**   * Learn about multiple animal solutions and design a human equivalent that could solve a GIVEN human problem * Students describe how it should work to solve the problem and evaluate its effectiveness |  | [1-LS1-1](http://www.nextgenscience.org/file/2791/download?token=_luridLG). Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs.\* |
| **Plant and Animal Families**   * Read about/observe plants and animals and their offspring * What are the behaviors of the parents and offspring that help offspring survive? * How are parents and offspring similar/different? * Compare different species * Compare different individuals of same species * Summarize learning |  | [1-LS1-2](http://www.nextgenscience.org/file/2796/download?token=ekZSb7n2). Read texts and use media to determine patterns in behavior of parents and offspring that help  offspring survive.  [1-LS3-1](http://www.nextgenscience.org/file/2801/download?token=wCc37060). Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like, their parents. |
| **Look to the Skies** (how native people use stars, sky, seasons)   * Observe and record observations about the motion of sun, moon, and stars * When are they seen and how do they move? * Students make predictions based on the observations |  | [1-ESS1-1](http://www.nextgenscience.org/file/2781/download?token=BzMd8m2Y). Use observations of the sun, moon, and stars to describe patterns that can be predicted. |
| **Sunrise-Sunset**   * Throughout the year, record the times of light/dark * Students should create an investigation to monitor this and determine whether there is a relationship between the time of year and the amount of daylight | **Ongoing** | [1-ESS1-2](http://www.nextgenscience.org/file/2786/download?token=H8-ntsAw). Make observations at different times of year to relate the amount of daylight to the time of  year. |