

K-8 Science Bridging Document

| 2019-2020 | Q4 Science Standard | Q1 Bridging Suggestions | Q1 Science Standard | 2020-2021 |
|---------------|------------------------------|--|---------------------------------------|-----------|
| Kinder-garten | Living Things | <p>-Groundhog Day is in February, but to introduce the Light & Shadows unit during Q1, consider having students think back - did the Groundhog see his shadow in February 2020? Students may draw a groundhog, and add in the sun and a shadow.</p> <p>Article Video about groundhogs</p> <p>-1st graders will learn about living things, with a focus on plants during Q4. Consider incorporating relationships between animals and plants during Q4.</p> | Light & Shadows | 1st Grade |
| 1st Grade | Plants | <p>-Begin with a quick review of what plants need: light, water, space, minerals. Have students sketch plants, label the parts, etc. As you transition to solids and liquids, tell them you heard that one great way to water a plant is to give it 2 ice cubes per week. They will be amazed. Discuss how the ice melts to become water. Article</p> | Solids & Liquids | 2nd Grade |
| 2nd Grade | Animals & Their Environments | <p>-Begin the year discussing change - should be a good discussion.</p> <p>-How do the different classes of organisms change during their life cycle</p> <p>-See p. 42-43 in the Supp. Doc.</p> <p>-Transition to changes in matter-melting, boiling, freezing, etc.</p> | Properties & Changes in Matter | 3rd Grade |
| 3rd Grade | Environments & Habitats | <p>-Rising 4th grade students may not have fully grasped, the impact of the environment on organism's behavior and bodily structures. Review before moving into the structural growth aspect of living things.</p> | Characteristics & Growth of Organisms | 4th Grade |
| 4th Grade | Energy & Light | <p>-What is matter? Matter is anything that has mass and takes up space.</p> <p>-Is energy matter - no. What is energy? Energy is the ability to cause change. List and describe some forms of energy.</p> <p>-Is light matter - no. Light is a form of energy. What are some sources of light? What does light enable?</p> <p>-What are some examples of matter?</p> | Matter & Mixtures | 5th Grade |
| 5th Grade | Force & Motion | <p>-Not a clear link here for Q1, but in the weather unit when pressure is taught could be a segway.</p> <p>-Pressure is Force divided by area...what is force?</p> <p>-We say winds can be strong...how would this be measured (Beaufort Scale)</p> <p>-During the Energy Transfer Unit (Q2) force and motion should be discussed along with gravitational potential energy and simple machines.</p> | Weather & Climate | 6th Grade |

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| 6th Grade | Plants | -Begin the ecology unit with a review of plants and their importance in the environment. -Have students plant seeds, if possible. Grassheads | Ecology | 7th Grade |
| 7th Grade | Heredity Ecology | -There would not be a natural connection between Heredity and Ecology with Force & Motion. -8th grade teachers should begin the unit on Earth's History & Diversity of Life with a review of genetics. -Have students make Punnett Squares from given scenarios. -Review mutations, how they can change the characteristics of a population. Additionally, what is the impact of the environment on living things. How has this worked throughout history. | Force & Motion | 8th Grade |
| 8th Grade | Earth's History & Diversity | -There is no direct connection between Earth's History and cells, but later in Biology when students learn about Evolution, teachers should keep in mind that more background scaffolding that usual may be necessary. | Cells? | 9th Grade |