

# Taunton Public Schools Learning Opportunities

## Grades 3 & 4 Science and Technology/Engineering, Week One

### Earth & Space

- Write and illustrate a children's story about life without fossil fuels in the year 2100. Use evidence from the Newsela this article to support your claims. [CLICK HERE](#) for the article, “Types of Renewable Energy.”
  - Please use the article above to write an argument for the best type of renewable energy and justify your claim with evidence from the article.
  - These two articles can help you get more information about energy:
    - [1.5 Energy Resources](#) and [1.6 Moving Air and Water as Energy Sources](#)
- Keep a weather journal! Collect weather data like temperature and precipitation, and write about any other observations you make including cloud cover and humidity. Keep track of the temperature changes on a chart.
  - [CLICK HERE](#) for an article to help you understand weather forecasting.

### Life Science

- Create an organism that can survive in a given environment (any habitat, ecosystem, or biome). Include a labeled drawing highlighting the organism’s features and a written description of additional details (e.g., diet, seasonal changes, shelter). Be sure to include how your organism’s specific features help it survive in its environment.
  - [CLICK HERE](#) for an article that has examples of different world climates (Grade 3). [CLICK HERE](#) for the same article but at a Grade 5 level.
- Investigate variations in Coquina Clams with the attached article. [CLICK HERE](#) for the article. Follow the instructions on the article to make an argument about the clams and ghost crabs. Please include a claim with evidence to support it from the picture and story.
  - [CLICK HERE](#) for an article about animal adaptations and survival.

### Physical Science

- Determine whether a duck floating on the surface of a pond would be moved horizontally or vertically by a passing wave in the water. Design and conduct the investigation. If you are stuck, you can use a light ball as the duck and a pan of water as the pond.
  - Write about what you find. How will the duck’s movement change when waves have more or less energy? Try it and report it!
  - [CLICK HERE](#) for an article about ocean waves and how they move.

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- In a paragraph, describe the life cycle of a snowman using the states of matter (e.g., gas, liquid, solid) and phase changes (e.g., melting, freezing, evaporating). Include a labeled diagram.
  - Next write a letter to a poor snowman who is melting and explain to him what is happening using appropriate scientific vocabulary.
  - [CLICK HERE](#) for an article about solids, liquids, and gases.

## Technology/Engineering

- Construct a solar oven. Choose something to put in the solar oven that provides evidence that the oven transfers solar energy into heat (e.g., melting ice cubes, melting chocolate, roasting a marshmallow). Draw a labeled diagram of the solar oven.
  - [CLICK HERE](#) for an article from *Scientific American* may help you to build one.
  - [CLICK HERE](#) for an article to help you understand heat and thermal energy.
- Develop a device to protect an egg falling towards the surface of the Earth. Test the device.
  - Now think like an engineer: Make an improvement on the design of the device based on specific criteria (for example: smaller size, must include a parachute) and/or constraint (like low cost, limited or specific materials).
  - [CLICK HERE](#) for Newsela article about football helmets. Write a paragraph relating how the device designed to protect an egg is similar to how football helmets are designed.
    - [CLICK HERE](#) for an article to help you better understand gravity.
  - Why don't you check out this cool activity from the Curiosity Factory? [Eggstrodinary Eggs!](#) Remember, always ask an adult!