Science Corner
The CT Green LEAF team

Overview: Bring science into your classroom by adding a Science Corner. Science corners can consist of fun hands-on materials, literature, displays and visuals. A science corner is meant to act as an area where students can explore, engage, ask and answer questions and make connections.

Targeted Grade: 1 Additional Connections: PK-5

Suggested Implementation

- Dedicate a section of your classroom for your science corner. This area can be set up in a variety of different ways and could include visuals, books, hands-on objects and displays.
- Keep the science corner new and exciting by adding new topics for students to explore.
- Your science corner may be themed to the science questions you are teaching, or it might be more free-formed.
- Science corners could include fact sheets or questions to help guide students in learning and making connections.

NGSS Standard(s)

1-PS4.1-4 Waves and their Applications in Technologies for Information Transfer

Standards-Based Curricular Connections: Objects in a science corner can support your curricular goals in many ways including, but not limited to, the example below (not everything should be out at one time!!) Your science corner might have a white board or poster paper to allow students to write down their thoughts and observations.

Suggested Topics for Science Corner

Below are suggestions on linking a classroom science corner to some of the Grade 1 standards

- 1-PS4-1. Plan and conduct investigation to provide evidence that vibrating materials can make sound and that sound can make materials vibrate
  - Objects could include band instruments, materials to make shaker canisters using plastic jars, cardboard or wood boxes, and metal cans with various small things to go inside. Some examples could be made ahead and ask students to
write down a guess about what object is inside, or how many items are inside that canister.
  o A variety of pitchforks might be set out for experimentation.
  o Rubber band instrument materials might be set out to be made.
  o Books about musical instruments might be included in an associated reading corner.

- **1-PS4-2.** Make observations to construct an evidence-based account that objects can be seen only when illuminated
  o “Feely” boxes might be offered, asking students to feel inside for the object that is attached to the inside of the box, and then draw the object they think is inside. A small opening in the box (about the size of a penny) challenges students to “see the object” in the dark inside the box, and discuss what they “see” and why. At the end of this offering, the class could look inside the box with varying amounts of light added until they can see what is inside (and discuss the experience.)
  o Books about shapes and textures might be included in a reading corner, encouraging descriptive vocabulary.

- **1-PS4-3** Plan and conduct an investigation to determine the effect of placing objects made with different materials in a beam of light
  o A light and shadows stage can be set up, with a strong light, and various toys, shapes, and hand shadow puppets encouraged. Some transparent or opaque objects should be included (e.g. cups or plates made from different plastics).
  o Books about shadow puppets might be included in an associated reading corner.

- **1-PS4-4** Use tools and materials to design and build a device that uses light or sound to solve the problem of communicating over a distance.
  o Examples of Morse Code and Flag Signals might be displayed.
  o Soup cans and string might be offered to make can “phones”.
  o Students might try to signal with small flashlights across the room to send messages in a code they create.
**Suggested Topics for Science Corner**

Below is a list of suggested topics, materials, questions, and additional resources that might be presented in a science corner. There is much more that can and should be added to your science corner throughout the year.

<table>
<thead>
<tr>
<th>Topics</th>
<th>Materials</th>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plants and water levels</td>
<td>Plants/Flowers at different cycle stages. Plants “drink” activity- Plant in a pot with a wick of fabric out the bottom, set into a jar with water, string, ruler, data collection sheet.</td>
<td>What factors contribute to a plant’s growth? How do plants eat? Why is the sun so important to plants? Water levels: Last week/month the water was...today it is... what is the difference? What happened to the water? Why do plants need water?</td>
</tr>
<tr>
<td>Rainbows and light interactions</td>
<td>Prisms, source of light and white paper</td>
<td>How do rainbows work? What colors do you see? How does light work? Why is the sky blue?</td>
</tr>
<tr>
<td>Autumn Leaves</td>
<td>Colored Leaves from different trees, Paper and crayons to make rubbings</td>
<td>Why and how do the leaves change colors? Why do the leaves fall? Are all tree leaves the same? How are they similar and different?</td>
</tr>
<tr>
<td>Insects/ Bees</td>
<td>Abandoned bee hive, insect cocoons, worm bin, ant “farm”, piece of log with insect tunnels</td>
<td>Where do insects and other animals live?</td>
</tr>
<tr>
<td>Ecosystems/ water cycle</td>
<td>Terrariums</td>
<td>What are the parts of the water cycle? Can you identify parts using the terrarium? How does the terrarium represent an ecosystem?</td>
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<tr>
<td>Animal Evidence</td>
<td>Snake skin, bones, fossils, bird’s nest, feathers, shells</td>
<td>What animal did these belong to? What body parts or how/why was it used? Can you identify which bones match different parts of the body? Why do snakes shed their skin?</td>
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<tr>
<td>Defense mechanisms</td>
<td>Thorns, shells (from plants or animals), tree bark, different smells (examples of stink bugs, skunks), colors (butterfly images).</td>
<td>Why are these defenses important to the plant or animal? How do colors or smells help them? What do you notice about these objects? How do they feel? What would people be like if they used mechanisms like this? Do they??</td>
</tr>
<tr>
<td>Energy</td>
<td>Light bulb, mini fan, water, “sun”, battery</td>
<td>What do all these objects have in common? How does each provide us energy?</td>
</tr>
</tbody>
</table>
**Additional Material:** The following items are other materials you may consider adding to your science corner “tool kit” to facilitate observations.

- Magnifying glasses
- Small flashlight
- Tweezers
- Science goggles
- Binoculars
- Dig box - Hid items such as rocks for students to find
- Feel box - Students have use touch to determine what’s inside
- Question/Task cards
- Fact sheets about the objects
- Related reading material
- Word wall char with scientific and descriptive vocabulary

These suggestions are examples only, and may require adaptation. Check your grade-specific standards to determine whether or not the suggestions provided meet your individual curricular needs.

*For more information, contact ctgreenleaf@ctgreenschools.org*

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