Discover, Create, and Explore

Science in the Language Classroom

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An inquiry based lesson or activity should require the students to complete specific tasks. The following is a guide for some tasks that mirror the type of scientific learning going on in the regular classroom. Use these ideas to create a response page or to guide a discussion in the target language in your classroom.

1. Start with a question:

2. Watch the demonstration

3. Hypothesis - I think that...

4. Experiment

5. Answer to question:

6. Was your hypothesis correct?

7. Draw what you observed.
Science Activity Template

Topic:

Objectives:
1.

2.

Vocabulary connections

Hands-on Activities or experiments:
A.

B.

**Learning Song:
NSTA Position Statement:

Elementary School Science

The National Science Teachers Association supports the notion that inquiry science must be a basic in the daily curriculum of every elementary school student at every grade level. In the last decade, numerous reports have been published calling for reform in education. Each report has highlighted the importance of early experiences in science so that students develop problem-solving skills that empower them to participate in an increasingly scientific and technological world. The elementary science program must provide opportunities for students to develop understandings and skills necessary to function productively as problem-solvers in a scientific and technological world.

- Elementary school students learn science best when—
  1. they are involved in first-hand exploration and investigation and inquiry/process skills are nurtured.
  2. instruction builds directly on the student's conceptual framework.
  3. content is organized on the basis of broad conceptual themes common to all science disciplines.
  4. mathematics and communication skills are an integral part of science instruction.

- The learning environment for elementary science must foster positive attitudes towards self and society, as well as science.

- Elementary school students value science best when—
  1. a variety of presentation modes are used to accommodate different learning styles, and students are given opportunities to interact and share ideas with their peers.
  2. the scientific contributions of individuals from all ethnic origins are recognized and valued.
  3. other subject areas are infused into science.
  4. inquiry skills and positive attitudes are modeled by the teacher and others involved in the education process.

—Adopted by the Board of Directors
July 2002
### TABLE 6.8. CONTENT STANDARDS, GRADES K-4

<table>
<thead>
<tr>
<th>UNIFYING CONCEPTS AND PROCESSES</th>
<th>SCIENCE AS INQUIRY</th>
<th>PHYSICAL SCIENCE</th>
<th>LIFE SCIENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Systems, order, and organization</td>
<td>Abilities necessary to do scientific inquiry</td>
<td>Properties of objects and materials</td>
<td>Characteristics of organisms</td>
</tr>
<tr>
<td>Evidence, models, and explanation</td>
<td>Understandings about scientific inquiry</td>
<td>Position and motion of objects</td>
<td>Life cycles of organisms</td>
</tr>
<tr>
<td>Change, constancy, and measurement</td>
<td></td>
<td>Light, heat, electricity, and magnetism</td>
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<tr>
<td>Evolution and equilibrium</td>
<td></td>
<td>Organisms and environments</td>
<td></td>
</tr>
<tr>
<td>Form and function</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>EARTH AND SPACE SCIENCE</th>
<th>SCIENCE AND TECHNOLOGY</th>
<th>SCIENCE IN PERSONAL AND SOCIAL PERSPECTIVES</th>
<th>HISTORY AND NATURE OF SCIENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Properties of earth materials</td>
<td>Abilities of technological design</td>
<td>Personal health</td>
<td>Science as a human endeavor</td>
</tr>
<tr>
<td>Objects in the sky</td>
<td>Understandings about science and technology</td>
<td>Characteristics and changes in populations</td>
<td></td>
</tr>
<tr>
<td>Changes in earth and sky</td>
<td>Abilities to distinguish between natural objects and objects made by humans</td>
<td>Types of resources</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Changes in environments</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Science and technology in local challenges</td>
<td></td>
</tr>
</tbody>
</table>
Today we talked about water. We learned about how it can change and that objects can float or sink in it. We did an experiment to learn more.

¿Se Hunde o Flota?

Se Hunde

Flota

El ciclo del agua
Explorando el mundo de las ciencias
Tenemos preguntas y respuestas.
Aquí hay un dibujo de las cosas en mi laboratorio.

Mi propia energía viene de...
Los Cinco Sentidos

El olfato

El Gusto

El Tacto

La Vista

El Oído
Today we reviewed the five senses and talked about “El Olfato” (smell). Students learned to say “Yo huelo...” (I smell...) and experimented by guessing different objects by scent using our noses. We are continuing to work on our Cinco Sentidos journals which will go home on our last day. Here are some things you can try at home:

- Play a game. Ask your child to find things around the house or outside and say “huele mal” or “huele bien” (It smells bad / good.) Take turns guessing objects by their smells.

- Show your child that even your sense of taste “gusto” is affected by your sense of smell “olfato”. Let them try tasting something while holding their nose.

  Hasta la proxima vez...
**El Tiempo del Otoño**

**Dibuja y describe el tiempo cada día.**

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<tr>
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</thead>
<tbody>
<tr>
<td>Hace viento – It is windy</td>
<td>Hace frío – It is cold</td>
<td>Hace calor – It is hot</td>
<td></td>
</tr>
<tr>
<td>Hace sol – It is sunny</td>
<td>Está lluvioso – It is rainy</td>
<td>Está nublado – It is cloud</td>
<td></td>
</tr>
</tbody>
</table>

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