

3.4 Plant Menu Card

Story Extension for This Lesson:

Each of the activities on the Menu allows the students to further their understanding of the issues the plants are having in the forest.

Grade: 3

Strand: Growth and Changes in Plants

Big Ideas:

- Plants have distinct characteristics. (Overall expectations 2 and 3)
- There are similarities and differences among various types of plants. (Overall expectation 2)
- Plants are the primary source of food for humans. (Overall expectation 1)
- Humans need to protect plants and their habitats. (Overall expectation 1)
- Plants are important to the planet. (Overall expectation 1)

Overall Expectations:

1. assess ways in which plants have an impact on society and the environment, and ways in which human activity has an impact on plants and plant habitats
2. investigate similarities and differences in the characteristics of various plants, and ways in which the characteristics of plants relate to the environment in which they grow
3. demonstrate an understanding that plants grow and change and have distinct characteristics

Specific Expectations:

1.1 assess ways in which plants are important to humans and other living things, taking different points of view into consideration (e.g., the point of view of home builders, gardeners, nursery owners, vegetarians), and suggest ways in which humans can protect plants

1.2 assess the impact of different human activities on plants, and list personal actions they can engage in to minimize harmful effects and enhance good effects

2.2 observe and compare the parts of a variety of plants (e.g., roots of grass, carrot, dandelion; stem of cactus, carnation, tree; leaves of geranium, spider plant, pine tree)

2.6 use appropriate science and technology vocabulary, including stem, leaf, root, pistil, stamen, flower, adaptation, and germination, in oral and written communication

2.7 use a variety of forms (e.g., oral, written, graphic, multimedia) to communicate with different audiences and for a variety of purposes (e.g., make illustrated entries in a personal science journal to describe plant characteristics and adaptations to harsh environments)

3.1 describe the basic needs of plants, including air, water, light, warmth, and space

3.2 identify the major parts of plants, including root, stem, flower, stamen, pistil, leaf, seed, and fruit, and describe how each contributes to the plant's survival within the plant's environment

3.3 describe the changes that different plants undergo in their life cycles

3.5 describe ways in which humans from various cultures, including Aboriginal people, use plants for food, shelter, medicine, and clothing

3.7 describe the different ways in which plants are grown for food, and explain the advantages and disadvantages of locally grown and organically produced food, including environmental benefits

3.8 identify examples of environmental conditions that may threaten plant and animal survival

Inquiry Skills:

Selecting, Gathering Data,
Outlining, Reporting

Instructions:

By the end of this activity, students must complete at least two of activities from the menu below that total at least eight points. They must place a checkmark in the box next to the activity and staple each of the activities to the menu card when it is complete. This is a menu card. The choice is up to the student. However, while using The Learning Process sheets, a teacher can control the content of the project.

Materials List:

- access to digital and/or text resources
- access to experts
- pencils
- pens
- paper
- computer
- printer
- Learning Process sheet

Connections:

This assignment is one of a series that helps develop the student's general knowledge of plant physiology and plant interaction with the environment.

Subject Area:

Environmental, Science

Connects to:

Grade 3, Grade 4, Grade 7

Assessment Strategy

The Learning Process

Begin the investigation by asking the students to consider what they believe is the main idea of the assignment. This creates an opportunity for the students to take charge of their learning. The students will create their own main topic sentence. This can be done using The Learning Process Sheet. The student can write down the "Big Idea" and then conference with the teacher about whether or not this is accurate. On The Learning Process sheet there is room for the student to write down any new information or suggestions that come up during the conference. Once the student has the correct concept, they are ready to move forward.

From the teacher's perspective, you could level (grade) the depth of their understanding of the big idea from the content of their conversation. This process is repeated at each of the four stages of The Learning Process: Introduction; Searching; Outline; and Ta Da. In this way, the teacher has observed the thinking of the students throughout the process of creation and can identify the actual learning of the student. Each stage can receive a level (grade), which the student can see and improve upon, or move forward (if the work is only defined as Level 2 work quality, does the child accept that or want to do better?).

Handouts:

- Learning Process

The Learning Process

Inquiry Process: Introduce – *What is the BIG idea?*

Traits

- Where should I look?
- Draw and write ideas down
- Works with groups to create a plan
- Main (“Big”) Ideas
- Completed a meeting about Main (“Big”) Ideas

Step 1: The BIG Question

Step 3: Meeting Notes

Level:

Excellence = 4, Better = 3, Okay = 2, Needs work = 1

Inquiry Process: Search – *Developing Questions, Searching for Information and Answers*

Traits

- Listens, talks, views, and reads
- Uses the Q-chart
- Works with teams
- Completed a meeting to improve questions

Guiding Questions (One (1) guiding questions from each column and each row.)

	Is/Is not	Do\Did(not)	Can (not)	Would/Should	Will	Might/Could
Who						
What						
Where						
When						
How						
Why						

Write out the completed questions in full. (You may change these or add new ones.)

Who	
What	
Where	
When	
How	
Why	

Step 3: Meeting Notes

Level:

Excellence = 4, Better = 3, Okay = 2, Needs work = 1

Inquiry Process: Outline – *Intensify research, Synthesize Information, Connect Knowledge*

Traits

- Engages in deeper reading and researching: Books, articles, and websites.

• Checks sources, are they truthful • Joins information • Cooperates • Use appropriate technology • Completed a meeting with teacher about notes	
<i>Step 3: Conference Notes</i>	
Level:	
Excellence = 4, Better = 3, Okay = 2, Needs work = 1	
Inquiry Process: "Ta Da!" – <i>Sharing Learning</i>	
Traits	
• Completed a meeting • Demonstrates their thinking • Teaching others • Reflects upon the learning process • Works well and sharing with teams to complete project	
<i>Step 3: Conference Notes</i>	
Level:	
Excellence = 4, Better = 3, Okay = 2, Needs work = 1	