

3.1 Growth and Change Mind Map

Story Extension for This Lesson:

The class has heard a lot of new words in the story related to plant life. Start the class off with a mind-map, where they can identify words used in the story, as well as their own prior knowledge.

Grade: 3

Strand: Growth and Changes in Plants

Big Ideas:

- Plants have distinct characteristics. (Overall expectations 2 and 3)
- Plants are the primary source of food for humans. (Overall expectation 1)
- Plants are important to the planet. (Overall expectation 1)

Overall Expectations:

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

Specific Expectations:

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)

Inquiry Skills :

Observing, Gathering Data, Discussing

Other 21st Century Skills

Collaboration, Mind Mapping

Instructions:

As a class, the students will brainstorm what they already know about living things. Students will list what they know about plants, and will identify what they want to learn by writing down a set of questions.

After a class discussion, students will have an opportunity to independently fill in their own version of the mind map or something similar to a KWL chart. The students will add to the mind map throughout the unit as more information is gathered, and it will help them complete the Final Assessment by the end of the unit. This activity will assist the teacher in determining the students' levels of prior knowledge.

How to

Using a large display area (black board, white board, chart paper, Padlet app), have the students take in term to brainstorm and give ideas in a group mind-map. This activity will allow everyone to share and build ideas off others. If using a White/Black board or Chart paper, the students could copy the information down after it was complete to keep as their own personal record. Where possible, If the classroom has a “Word Wall” or other display area, keep the Mind-map up for the duration of the unit to help students to refer to the terminology, and ideas. If you are using an app of some kind, they should have access to the app for future reference

The Learning Process

Begin any investigation with asking the students to think about what they believe is the main idea of the assignment is. 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.

The Ta Da portion then only displays $\frac{1}{4}$ of the overall value of the students understanding.

Prior Knowledge

Big ideas and Overall Expectations from the Understanding Life Systems units from Grades 1 and 2.

Subject Area:

Science, Math, Art

Connects to:

Grade 1, Grade 2, Grade 3, Grade 4, Grade 5, Grade 6

Materials List:

- white board
- padlet

Notes to Teachers

This could also be done as a Think-Pair- Share Activity to begin with, and from that develop.

This could be combined with an expert, as a first introduction where everyone adds the ideas and the expert helps guide them