5E Lesson Plan Ideas

Subject area/course/grade level: Science- Parts of a Plant- Kindergarten

Standards (State and ISTE Standards for Students):

Alabama State Science:

- 3. Distinguish between living and nonliving things and verify what living things need to survive (e.g., animals needing food, water, and air; plants needing nutrients, water, sunlight, and air).
- 4. Gather evidence to support how plants and animals provide for their needs by altering their environment (e.g., tree roots breaking a sidewalk to provide space, red fox burrowing to create a den to raise young, humans growing gardens for food and building roads for transportation).

ITSE:

- 1c Students use technology to seek feedback that informs and improves their practice and to demonstrate their learning in a variety of ways.
- 3c Students curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions.
- **3d** Students build knowledge by actively exploring real-world issues and problems, developing ideas and theories and pursuing answers and solutions.

Objectives:

- Students will be able to identify the parts of a plant.
- Students will use technology (Seesaw, Picstitch, Kindle Tablets) to show their learning.

Differentiation Strategies:

- Lesson shows the parts of the plant in multiple ways for various learning styles including videos, pictures, real life models, and drawings.
- Students may work with a partner, if needed to accommodate special needs.

ENGAGEMENT:

- Build background- Say "Students, today we are going to be talking all about plants! Can anyone raise their hand and tell me an example of a plant?" As students answer, discuss whether the answer is correct or incorrect and write correct answers on the SMARTboard.
- Use the SMARTboard to let students take turns sorting pictures of plants and animals (http://www.foodafactoflife.org.uk/Activity.aspx?siteId=13§ionId=54&contentId=173).
- Play The Parts of the Plant song from YouTube (https://www.youtube.com/watch?v=ql6OL7_qFgU).

EXPLORATION:

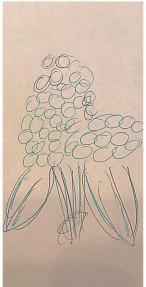
- Say "Today you get to be real scientists! We are going to go on a nature walk. Your job on this nature walk is to look around and find a plant. You will use your tablet to take a picture of the plant that you find and then we will come back to the classroom and talk about what you find." Remind students of tablet and rules, then take the class outside.
- Students will use the app, Seesaw, to take their picture and upload it to me (Activity 1).

Ex:



- When we come back in the room, allow students to show each other their photos and discuss the plants.
- Next, students will draw a picture of the plant they found. They will take a picture of the drawing and upload a side by side (real plant and drawing) using the app, PicStitch (Activity 2).
- Ex:





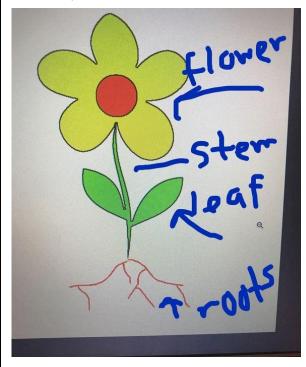
EXPLANATION:

- Say "Now that you all have found a plant and drawn it, we are going to talk about the parts of the plant. Each part is very important. There are 4 key parts: roots, stem, plants, and flower." Show Prezi presentation which tells about each part and shows a picture (https://prezi.com/view/JDolBxfDl9zKhEd3Z23k/).
- Discuss each part of the plant and ask questions to check for understanding. ex. "What do the roots do?" Let a few students answer." That's right! They suck up water and nutrients from the dirt! Can you think of something we use to suck things up?" answers could be things like a vacuum, straw, etc.
- Show a few examples on the SMARTboard of the plants that students found in Activity 1 and talk about the parts of the plants they can see.
- Have students act out each part of the plant and ask higher order thinking questions. Say "If you were the roots of a plant, what would you look like? What would you be doing for the plant? If you were the stem, what would you look like? What is your job?" Continue with leaves and flower.
- Ask questions such as "What would happen if someone cut the roots off of a plant?" "What do you think happens when you pick a flower?" "Why do people put plants like flowers in vases?" discuss answers.

ELABORATION:

Individual Assignment:

- Students will create a diagram showing the parts of the plant. I will have photos of different plants around the room. and the words "Stem", "Leaf", "Plants", "Roots" posted around the room. Students will take their Kindle and log into Seesaw. Students will take one picture of the plant of their choice. They will use the seesaw app and the words posted around the room to label the plant in the picture (drawing arrows or lines to each part). Then, they will upload it to me for evaluation.
- Ex:



Group Project:

- Students will use the Seesaw app to make video of themselves acting out or talking about each part of the plant. They will be in groups of 4, so each student must talk about one part of the plant. I will let the choose how they want to make their video. Examples are acting them out, showing examples and talking about them, drawing pictures and explaining, a skit, etc. They will use their video to teach the rest of class about the parts of the plant. They will then upload the video to me for evaluation.
- Ex: this video is a group presentation about cells (not plants), but it shows what I'm looking for since I don't have students at the moment (https://www.youtube.com/watch?v=HTYyYW1GqVo)

EVALUATION:

- Students will participate in a Kahoot quiz as a quick check for understanding.
- Kahoot Quiz: https://play.kahoot.it/#/k/1b8788be-6079-418b-b95f-90f4ab697efc

Individual Project Rubric:

https://docs.google.com/document/d/1jdNQpYPoa1BErBxVGQWEVdMj3Wt24-URJ2DhLme2XVw/edit?usp=sharing

Group Project Rubric:

https://docs.google.com/document/d/1gV9tYlJi8RYvnmh41RY-V-QuryNOeebi-66Kw P0Ee0/edit?usp=sharing