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Lesson Name: Build Your Own Plant

Ages: 3-6 year old

Time: 1 hour

Lesson Goals:

- Students will learn the basic parts of a plant and their functions.
- Students will practice working together in a shared environment.
- Students will engage in hands-on exploration while learning more about plant science.
- Through the collaborative build, students will develop communication skills and learn how to share ideas and contribute to a group effort.

Activity Requirements:

1. Picture/ Book about plants and needs of plants
2. The teacher invites students to circle. Goes over ground rules.
3. Students will each be given their own flat lego platform which they will be using during the lesson.
4. Students will only receive LEGO pieces designed for the lesson (brown legos, green legos, etc).
5. Circle Time: 5-10 minutes: Students must sit in a circle around the teacher and respect personal space, staying within their own area and working on their own flat lego platform.
6. Students must remain on-task throughout the time and listen to the teacher. Allow students to get up and move while doing this activity. Young children cannot sit in one place for long periods (quick 5 minute stretch break).

Activity Description:

Individual Build (~15-20 minutes):

Each student will build their own plant using LEGO pieces. The teacher will talk about the structure of a plant (roots, stem, leaves, etc), and invite any questions or comments the students may have. The teacher can also briefly explain general scientific concepts related to plants (i.e how the leaves of the plant absorb energy from the sun). At the end of this session, each student will briefly talk about what they built.

Collaborative Build (~20 minutes):

- After completing their individual plants, students will work together to create an ecosystem. They will combine their individual plants by lining up their platforms together. Afterwards, they may add additional features (trees, animals, weather, etc) to the large platform. The teacher can explain general concepts on how plants interact with their environment.

Clean up: 10 minutes - Students return to circle to discuss their creations

- Everyone cleans up and gets ready for dismissal



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Scientific Concepts to talk about:

1. Plant parts: Roots which take in water, Stem which holds plants up and moves water, leaves which use sunlight to make food. All this allows the plant to live and grow.
2. Plants need sunlight, water, air, and soil. This should be repeated so that students remember this.
3. Plants make their own food using sunlight + water + air

Group:

1. Ecosystems: plants live with animals, insects, and weather, and everything works together.
2. Sun and rain help plants to grow. Plants breathe in carbon dioxide and breathe out oxygen, opposite of people. This means that plants help us survive since we need oxygen.