

Science

Review the 1st Great Lesson or “The Story of the Universe” and the discussion of States of Matter. Try out the following experiments:

States of Matter: Which Way do they Push?

Liquids push sideways

Materials

Pitcher with holes taped, pitcher of water, large basin to catch the water

Presentation

Now we are going to talk about another law that liquids follow, which tells us that liquids push downwards and sideways.

1. Pour the water from the pitcher into the pitcher with the taped holes.
2. Point out the opening at the top of the pitcher to the children and ask them if the water is pushing upwards.
3. Take the tape off of the sides and the bottom of the pitcher and let the water run out over the tray.

Is the water pushing downwards? Yes! Is the water pushing sideways? Yes!

Solids Push Down Only

Materials

Brick, board to protect table

Presentation

1. Pick up brick and ask the child to put her hand under the solid and ask if it is pushing.
2. Repeat first step with putting hands on the sides.

Gases Push in All Directions

Materials

Spray bottle of perfume

Presentation

1. Invite the children to dance around holding onto to each other pretending to be a gas and the guide should be able to move through them easily.

Culture

- In class we are starting to learn songs and dances from other cultures. To begin, we have been singing “This Land is Your Land” and learning to dance “The Hustle”, as a way to connect with some American cultural songs and dances.
- <https://www.youtube.com/watch?v=AePCvFrggZM>
- https://www.youtube.com/watch?v=EqwFL_0Y_Zk&t=4s
- Here is a beautiful Japanese folk song we have been learning as well. Here is a link to recording as well the lyrics in Japanese and English.
- <https://www.youtube.com/watch?v=FSW6ihhckXQ>

Donguri Korokoro

Donguri korokoro donburiko.

Oikeni hamatte saa taihen.

Dojouga detekite konnichiwa.

Bocchan isshoni asobimasho.

(Acorn rolling, rolling over

Acorn fell into a pond.

Eel came out and said hi hello.

Hey, kid will you play with me)

Is air a gas? I can move my hand through it, can't I? I wonder which way it pushes?
2. Take the perfume and spray it by the children's feet. Ask the children to raise their hand as soon as they can start to smell the scent of the perfume.
Gas travels all over, doesn't it? It pushes in all direction, even upwards!

Follow-Up Work

The children may repeat the experiences

Write about what happens with each experience

Add pictures to the writing of what happens in each experience

Additional research (have books in the classroom about the three states of matter) on specific concepts

Animals

Review the 2nd Great Lesson, or "The Story of How Life Came on Earth" Continue along with your animal studies. See the document posted in the Birch Google Classroom for guidance. If you are having trouble, start by asked these 3 questions, and try to find the answers to them:

- Where does this animal live?
- What does this animal eat?
- What is this animals connection to humans?

Botany

See the Additional Materials section for "The Story of Plants". Like the other great stories, it is meant to be told, so have an adult or strong reader read it to you. Try the following experiment on what plants need.

The Needs of the Plant

Prerequisites:

To introduce the needs of the plant, students will have heard the plant story and there are plants throughout the indoor and outdoor environment.

The nomenclature for parts of the plant has already been discussed in primary in the simplest terms and can be repeated.

Materials

For this presentations you will need:

4 small glass bowls such as custard cups

4 cotton balls

Seeds which will germinate quickly (Grass)

Or simply 4 small potted plants

Water, Sun, Warmth

Procedure:

Invite a group of students to the lesson (Normally first or second year-but remember any lesson can be extended for older children)

- Have the children gather the materials with you.
- Explain to the children you think it would be a good experiment to sprinkle some seeds on each cotton ball. Do one and have them do the rest, or gather your 4 potted plants.
- Say, why don't we give some water to all but one. We should put a label on this bowl that says we gave these seeds "No water". Go ahead and place the bowl in the sun and tell the children we'll watch what happens.
- For the second bowl, we will not give the seeds light or put it in the sun. Have a child label this bowl with "No light" and let them decide where to put the bowl.
 - For the third one, we'll give it no warmth-so write a label for this one. Let's find a cold place to put it.
 - Now, there is just one left. Let's give this one everything-warmth, light and water. Write a label that says all three things.
 - Explain to the children they will need to watch the seeds for several days and observe what is happening. If they have a Science journal, they can record the observations in this.
 - After several days (And the seeds that can have sprouted,) gather the group again and discuss the observations. Be sure to give them time to draw some pictures and record their observations.