

Material Preparation

MATERIALS

- scissors
- small portable container
- dropper
- water
- 9" waxed paper plate
- crayons
- 5-oz. plastic cup
- ECHOS Book: *What Falls from a Cloud?*

For each child:

- clipboard, or make a clipboard by attaching a 2" binder clip to a sheet of 9" x 12" flat cardboard
- piece of white chalk
- piece of grey chalk
- two sheets of 9" x 12" blue construction paper
- *Ask Me About Rain* sticker

PREPARE IN ADVANCE

- Fill the plastic cup with water and set dropper in it.
- Use crayons to draw on the waxed paper plate. Draw a cloud shape over a city landscape or grassy ground.
- Prepare one *Cloud Watcher* clipboard for each child by attaching two sheets of blue construction paper to each clipboard.
- Place white and grey chalk in a portable container.



SET UP THE LESSON AREA

- Gather the ECHOS book, paper plate with cloud drawing, cup with water, and dropper.
- Place *Cloud Watcher* clipboards in a tote bag or container. Place them by the door to take outside along with the container of chalk.



OBJECTIVE

Children will observe clouds in the sky and learn how clouds make rain.

EXCITE

Gather the children in the ECHOS lesson area. **Sometimes when it rains, the rain sounds like this...** Tap your hands on your knees loudly or quickly to make the sound of loud rain. Repeat: ***pitter-patter, pitter-patter*** loudly while tapping. Overdramatize: **But WHERE does rain come from?**

INTRODUCE

1. **Today, we are going to learn about *clouds*. I am going to read you a story about clouds.** Hold up the ECHOS book: *What Falls from a Cloud?* to show the cover. **The title of the book is *What Falls from a Cloud?*** Read the story to the children.
2. Place the book to the side. Hold up the drawing on the paper plate for the children to see. **What did we just read about in the story?** Listen to the children's responses. **Do you see a cloud in this picture?** Point to the cloud in the drawing.
3. As you hold up the paper plate in one hand, slightly tilted, use the dropper to slowly add small drops of water to the cloud shape. **Clouds are made up of tiny *water droplets*, smaller than the ones you see here.**
4. **A rain cloud is made of droplets of water. The droplets are so small that there are lots and lots of them in a single cloud.** Use the dropper to add more water to the drops on the cloud shape.
5. Continue adding drops of water until the drops get so big they begin to fall down the plate. **What is happening to the water droplets?** Listen to the children's responses. **Yes, they are getting bigger and falling down. What do we call it when water falls from the clouds? Yes, we call it *rain*.**

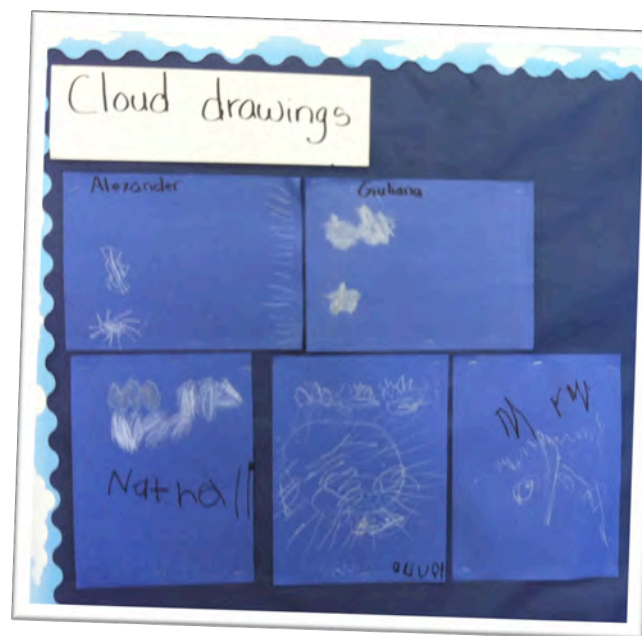


EXPLORE

1. **What do you think clouds look like when it is *rainy* outside?** Listen to the children's responses. **Yes, clouds sometimes look dark or gray when it is raining. What do you think a cloud looks like when it is *sunny*?** Listen to the children's responses. **Yes, clouds may look white.**
2. **Is there rainy *weather* outside today?** Listen to the children's responses. **It is *not* a rainy day, so we will go outside to observe clouds. Outside you will observe the clouds in the sky and draw what you see.**
3. Hold up a clipboard. **This is a clipboard. Scientists sometimes use clipboards to help them record information. We will be scientists today and use a clipboard to hold the paper for our drawings of clouds.**
4. **Sometimes the shape of a cloud can look like other things. I wonder what shapes we will see today.** Prepare the children to go outdoors. If any children have sunglasses, they should wear them outside. Bring the clipboards with paper and the container of chalk with you.
5. Take the children to an area outside where the sky and clouds are clearly visible, but not in direct sunshine. Once you arrive, give each child a clipboard, a piece of white chalk and a piece of grey chalk. **Okay, cloud watchers, let's draw!**
6. Discuss what the children see as they look up at the sky. Prompt them to notice the shape and color of the clouds. While they are observing the clouds, ask:
 - **What shapes do you see?**
 - **Are the clouds puffy, like cotton balls?**
 - **Are the clouds thin, like stripes in the sky?**
 - **Can you find a cloud that reminds you of something?**



7. After 10 minutes, collect the children's chalk and return to the classroom. Allow the children to hold their own clipboards until they regroup inside the classroom.
8. Regroup the children in the ECHOS lesson area. **You were all great cloud watchers! Let's talk about what we saw while we were outside.** Ask the children, one at a time, to hold up their drawing and tell the group something about it. To prompt the children to respond, ask: **Did any of the clouds you observed remind you of a familiar shape? Which shapes did you see?** Write each child's name and statement on their drawing after their turn. **We'll hang our cloud drawings in the classroom for everyone to see.**




INTERACT

Interact to accommodate children's individual needs and strengths. Use these suggested strategies as needed:

- Some children may need some verbal clues to describe the clouds they see in the sky during the cloud watch. Use descriptive language to enhance their vocabulary.
- While children are drawing what they see in the sky, allow them to express themselves creatively. Any and all visual concepts they have should be accepted.
- As an extension of this activity, take the children outside to view the clouds at different times of the day and compare what they see at each visit.



OUTCOMES

1. Regroup the children in the ECHOS lesson area. **What did we discover today?**
Listen to the children's responses. If needed, use suggested prompts to elicit key concepts and vocabulary. Encourage responses from everyone.
 - **Where does rain come from?**
 - **What do the clouds look like when it is sunny?**
 - **What do the clouds look like when it is rainy?**
 - **What did you see when you looked at the sky?**
 - **Did the clouds remind you of anything?**
2. Give each child an *Ask Me About Rain* sticker. 
Remind the children to tell their family something they have learned about rain.
3. After you have completed *Lesson #1: Cloud Watchers* with all the children in your classroom, add the ECHOS materials suggested below to your science area to encourage exploration.

VOCABULARY

- cloud(s)
- rain/rainy
- sunny
- water droplets
- weather



clipboards and chalk



ECHOS Book: *What Falls from a Cloud?*



cloud drawings