

Lesson 6: The Clouds Above Us

Getting Started

? Questions to Explore

- How does the weather affect living things?
- Why does the weather change?
- Why do we study and observe weather?
- How is weather measured?
- What are clouds?



Facts and Definitions

- A cloud is a collection of condensed water droplets or ice crystals that you can see. Clouds float in the sky.



Skills

- Describe weather using quantitative measures of temperature, wind direction, wind speed, and precipitation. (S)



Materials

- *The Kids' Book of Weather Forecasting* by Mark Breen and Kathleen Friestad
- cotton balls (kit)
- glue
- light blue construction paper (kit)
- markers
- scissors

Introduction

During this lesson, your child will learn about clouds and how different types of clouds are used to predict the weather.

Ask your child to explain what a cloud is. Then, conduct the quick demonstration described on p. 79 in *The Kids' Book of Weather Forecasting*. Explain that he's going to be learning about clouds during this lesson.

Reminder:

1. Fill out your weather log each day as outlined in Lesson 1.
2. Record the air pressure as outlined in Lesson 2.
3. Take four temperature readings during the day for the daily temperature experiment as outlined in Lesson 3.
4. Record the speed and direction of the wind as outlined in Lesson 4.

Reading and Questions

Ask your child to read the following pages in *The Kids' Book of Weather Forecasting*:

pp. 78-79 ("Clouds: The Key to Weather Forecasting" and "There's a Cloud in the Kitchen!")

p. 86 ("Clouds: Big Clues for Weather Forecasters")

pp. 88-89 ("A Key for Cloudwatchers")

Then he should answer the following questions.

1. What is a cloud?

A cloud is a collection of water vapor droplets that floats in the sky

2. What do we call a cloud near the ground?

Fog

3. To forecast weather, what should we observe about a cloud?

We should observe its shape and where it is in the sky.

4. What type of cloud can be found about 3 miles high in the sky?

Cumulus

Activities

Activity 1: Types of Clouds

Provide time for your child to watch the video at the following web link. While he does so, cut out the boxes on the second "Types of Clouds" page.



Types of Clouds

www.beyondthepage.com/link/12858/

Give your child the first "Types of Clouds" page and the boxes that you cut out (mix them up), and tell him to place the clouds where they belong on the first page. Allow him to refer to pp. 88 and 89 in the book as he works. Once he's placed the clouds correctly, he can glue them to the page.

He should place them as follows:

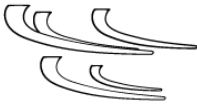
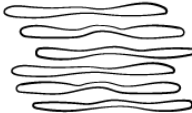
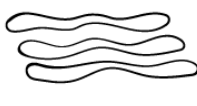
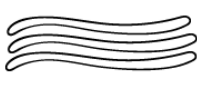
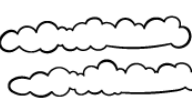
Low clouds: stratus, cumulus, stratocumulus

Mid clouds: altocumulus, altostratus, nimbostratus

High clouds: cirrus, cirrocumulus, cirrostratus

Note: Though the book shows nimbostratus low in the sky, it's actually considered a mid-level cloud. You may want to replay the video starting at 2:35 to review this with your child.

"Types of Clouds" Answer Key

TYPES OF CLOUDS			
High Clouds	 cirrus	 cirrocumulus	 cirrostratus
Mid Clouds	 altocumulus	 altostratus	 nimbostratus
Low Clouds	 stratus	 cumulus	 stratocumulus

Activity 2: Cotton Clouds

Tell your child to read the information about cloud types provided in the green boxes on pp. 90-92 in the book.

Give your child the light blue construction paper, cotton balls, glue, and markers, and tell him to make small posters showing the different types of clouds. He may want to make one for each cloud level. He should label each cloud type. Encourage him to draw raindrops below clouds that typically bring rain.

Wrapping Up

Ask your child to describe the different types of clouds and where they can be found in the sky. Which are his favorite and why?

Life Application

Take your child outside to observe the clouds in the sky. What types of clouds does he see?

Types of Clouds

High Clouds	Mid Clouds	Low Clouds

