

TYPES OF CLOUDS



Time: approximately 45 minutes

Instructional Goals:

- The student will use the PebbleGo Earth and Space online database to research four types of clouds (nimbus, stratus, cirrus, and cumulus).
- The student will use keyword searching to locate needed information.
- The student will recognize four types of clouds.
- The student will complete a three-dimensional model of four types of clouds.
- The student will be introduced to the concept of citing sources using a simplified bibliography.

Materials/Resources:

- PebbleGo Earth and Space online database
- Types of Clouds sheet (copy on cardstock)
- Black or gray markers
- Glue
- Cotton balls (at least four per student)

Directions:

Focus

1. Take students outside to observe clouds. Ask the students to describe the different shapes of the clouds. What are the shapes of the clouds? How high are the clouds? What do the cloud shapes remind them of?
2. Discuss with the class that different types of clouds have different shapes. Clouds can also help people predict what the weather will be. Explain to the students that they will be researching four types of clouds—cirrus, stratus, cumulus, and nimbus.

Teach/Model

3. Walk students through the process of accessing the PebbleGo Earth and Space online database.
4. Show students how keyword searching works by searching for a keyword (clouds) in PebbleGo Earth and Space, and choosing from the drop-down options.
5. Demonstrate the read-aloud function by clicking on the appropriate button and listening to the text being read aloud.
6. Show students the tabs above the article that allow them to scroll through the information about types of clouds.
7. Demonstrate how students can use the Video button(s) to see a video of clouds. Explain they will need to watch the cloud videos, look at the cloud pictures, and use the information in the text to help them complete their research.

Guided Practice



8. Select a cloud to use as an example for the class. Have students lead you through the process of clicking on the read-aloud and Video buttons.
9. Demonstrate how students will use PebbleGo Earth and Space to locate a type of cloud and create a three-dimensional model of that cloud with a cotton ball. Glue the example to a Types of Clouds page and label the cloud. (Students may use the markers to color the nimbus and stratus clouds the appropriate color.)
10. Explain to students that researchers must tell which source(s) they used to find their research information. The list of their information sources is called a bibliography. Demonstrate where they can locate the citation for this source by clicking on the Cite This Article button.

Independent Practice

11. Either divide students into pairs or have them work independently. Give each student a Types of Clouds sheet, at least four cotton balls, and a marker.
12. Monitor student progress as they work to complete the Types of Clouds sheet.

Closure

13. Bring students together as a whole group to discuss the Types of Clouds sheet. Go through the worksheet to ensure everyone has the information completed correctly.

Extend/Enrich

- Students may continue to research clouds to determine what types of weather are associated with each type of cloud. They may illustrate their Types of Clouds sheet with the appropriate weather (i.e., sunshine, rain, or lightning).
- Students may research what clouds are and how they are made using the What Are Clouds? article in PebbleGo Earth and Space.
- Using the database, students may research the water cycle to determine the role clouds play in the water cycle.

