




STEAM Science Lesson:

Types of Clouds - Grades 6-8

We see clouds in the sky every day; what makes them look different and what can we learn about our environment from observing them? Get students exploring earth science with ongoing environmental observation! This lesson is designed for grades 6-8 but can be adapted for younger grade levels.

 Teacher Led	 Requires Computer OR Mobile Device	 Requires Spaces
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Spaces Prep

Create your Activity in Spaces before the lesson. Not sure how to create an Activity? Check out this [short video tutorial](#) on assigning and managing activities.

Learning Goals

1. Students will **understand** what the different main types of clouds are.
2. Students will **observe** different types of clouds over a set period of time and **record** their observations.
3. Students will **develop theories** about how types of clouds affect their environment.

Materials

 Student Handouts	<ul style="list-style-type: none"> ● Handout [A] - Cloud Types Observation Recordings for each student (page 4) ● Handout [B] - Cloud Types Theory for each student (page 5)
 Technology Requirements	<ul style="list-style-type: none"> ● Mobile device, tablet, or laptop ● Projector or Smartboard
 Video/Audio/ Visual Clips	<ul style="list-style-type: none"> ● Why So Many Cloud Types? video from PBS ● Cloud Resource Library from National Geographic ● S'COOL Cloud Identification Chart from NASA
 Additional Materials	<ul style="list-style-type: none"> ● Science journals (optional; can also use handouts provided) ● Pencils

Instructions

Introduction

1. Explain to students that over the next few weeks (or whatever period of time works for your class), they will be exploring different clouds and how clouds can tell us about the weather we are or will experience.
2. Show students the [Why So Many Cloud Types?](#) video from PBS.
 - a. You may want to make this accessible for students to view on their own if they have their own electronic devices.
3. Allow students time to view the [Cloud Resource Library](#) from National Geographic.
 - a. Again, it will be easiest to make this accessible for each student to view on their own, if possible.
4. Give each student a copy of the [S'COOL Cloud Identification Chart](#) from NASA to keep in their science journal or elsewhere.

Ongoing Observation

1. Over a week or a few weeks, have students observe the clouds daily during class time or for homework.
 - a. Encourage students to bring their [S'COOL Cloud Identification Chart](#) each observation time.

2. Allow students time to record their observations each day in their science journal or on **Handout [A] - Cloud Types Observation Recordings** for each student (page 4).

Developing a Theory

1. After students have observed cloud types and recorded their observations for a week or more, have them develop a theory about one or more cloud types and what it can tell them about their environment using **Handout [B] - Cloud Types Theory** for each student (page 5).

Handout

HANDOUT [A]: Cloud Types Observation Recordings

Name _____

Date & Time					
Cloud Drawing(s) & Label(s)					
Notes on Current Weather					
Notes on Later Weather					

