



**Satellites, Weather and Climate**  
**Lesson plan summary: Clouds**  
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Grade Level: 9-12

Curriculum Target Benchmarks:

Subject keywords: Clouds, Weather

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## Clouds

Proficiencies: Earth Science: Weather: Clouds

Students will or can do the following:

- Name and describe clouds and the four processes of cloud formation.
- Identify clouds according to shape and distance from the earth.
- Associate cloud shape/size/distance from earth with current weather and future weather.

**Assignment: Complete the following using poster board or digital presentation of your choosing.**

1. What are clouds? Define/describe what a cloud is. (5 pts)
2. How/why do clouds form? Name and describe the four sources of lift in the process of cloud formation (10 pts)
3. Clouds come in various sizes, shapes and heights from the earth's surface. Describe and define the following four main types of clouds according to their shape and height from the earth. (8 pts)
  - Cumulus, stratus, cirrus, nimbus
4. What do the following prefixes/suffixes indicate if placed in front or after the above clouds? (2 pts)
  - a. Alto
5. At which height from the Earth's surface would you find the following clouds? Illustrate with a diagram, showing the distance in feet, for each of the following clouds. Write a brief description for each of the cloud types. (10 pts)

- a. Cirrus, cirrostratus, cirrocumulus, cumulonimbus, altocumulus, altostratus, stratocumulus, cumulus, stratus, nimbostratus
6. Include the type of weather associated with each of the clouds AND what weather can be predicted when these clouds appear. Include the time prior to precipitation that these clouds would predict as well. (5 pts)
7. Find one video that describes the types of clouds, how clouds are formed or how weather can be predicted based on cloud type (10 pts)  
(No longer than 5 minutes)

Total points = 50



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