

Science Log - 4th

Topic: Weather

Learning Goals:

- I. Identify different cloud types.
- 2. Use weather instruments and observations of sky conditions to collect and record weather data.
- 3. Differentiate among the types of weather associated with high-pressure and low-pressure air masses.

| What do you already know about the topic? | What do you want to know about the topic? | What did you learn about the topic? |
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Vocabulary

| Temperature | The measure of the amount of thermal energy in the |
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| | atmosphere |
| Air pressure | Due to the weight of the air |
| Front | Boundary between air masses of different |
| | temperature and humidity (cold front = |
| | <pre>cones/icicles; warm front = semi-circles/suns)</pre> |
| Cumulus clouds | Fluffy white, indicate fair weather |
| Cumulo-nimbus clouds | Produce thunderstorms |
| Stratus clouds | Smooth, gray clouds; associated with light rain and |
| | drizzle |
| Cirrus clouds | Feathery clouds; associated with fair weather, rain |
| | or snow will fall soon |
| Barometer | Measures air pressure |
| Anemometer | Measures wind speed |
| Rain Gauge | Measures the amount of precipitation |
| Thermometer | Measures the temperature of the air |
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Rain In A Cup

Supplies: one clear cup or jar, one paper towel, water, blue food coloring, pipette, rubber band, pencil or pen

Directions:

- 1. Place a double layer of paper towels over the top of a clear cup or jar, and add a rubber band to hold the paper towel in place.
- 2. Fill a second cup with water and mix in a few drops of blue food coloring.
- 3. Use a pipette to add drops of blue water to the top of the paper towel.
- 4. Once the paper towel has absorbed too much water, the water will begin to drip into the jar or cup.
- 5. Record your observations of the changes to the paper towel as more drops of water are added.

| Cloud Viewer |
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| Extension: Listen to the story <u>Cloudette</u> by Tom Lichtenheld to better understand your rain investigation. |
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| l observed |
| Laboration d |

Supplies: one paper plate, one Cloud Types printout, scissors, glue or tape, (optional) crayons or markers

Directions:

- I. Cut the center out of a paper plate.
- 2. [Optional] Color and decorate your plate.
- 3. Cut out the labels and pictures from the Cloud Types printout.
- 4. Glue or tape the labels and pictures around the border of the plate.
- 5. Hold your cloud viewer up and look through it at the sky to figure out which type of clouds are present today.
- 6. Record and draw what you observed below.

| Cloud Type: | | | |
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