


Grade 8 SCIENCE – GUIDED NOTES

Chapter 4 –Weather

Lesson: 1– Describing Weather

Pages: 117 - 121

Page Number	Title/Sub-Title	Guided Notes																					
117	What is Weather?	What is the definition of weather?																					
117	Weather Variables	<p>What is a variable? (look on side of page).</p> <p>What is a meteorologist?</p> <p>List 6 different weather variables from the reading:</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">1</td> <td style="width: 50%;">2</td> </tr> <tr> <td>3</td> <td>4</td> </tr> <tr> <td>5</td> <td>6</td> </tr> </table> <p> Describe these variables of weather.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 33%;">Variable</th> <th style="width: 33%;">Description</th> <th style="width: 33%;">How It Is Measured</th> </tr> </thead> <tbody> <tr> <td>air temperature</td> <td></td> <td>thermometer; measured in °C or °F</td> </tr> <tr> <td></td> <td></td> <td>barometer; measured in millibars (mb)</td> </tr> <tr> <td></td> <td></td> <td>anemometer; measured in mph or km/h</td> </tr> <tr> <td></td> <td></td> <td>measured in g/m³</td> </tr> </tbody> </table>	1	2	3	4	5	6	Variable	Description	How It Is Measured	air temperature		thermometer; measured in °C or °F			barometer; measured in millibars (mb)			anemometer; measured in mph or km/h			measured in g/m ³
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118	Air Temperature	What is the definition for air temperature?																					

		What does it mean if the humidity is high on a particular day?
9	Relative Humidity	<p>What does it mean when air is “saturated”?</p> <p>What determines the maximum amount of water vapor that air can hold?</p> <p>Does warm air or cold air contain more water vapor?</p> <p>What is relative humidity?</p> <p>What instrument is used to measure relative humidity?</p> <p>What happens when air has a relative humidity of 100 percent?</p> <p>Explain <i>what a relative humidity of 75 percent indicates.</i></p> <hr/> <hr/>
119	Dew Point	<p>When air near the ground becomes saturated with water, the water vapor will condense and form water droplets. If the temperature is above 0°C, what will form?</p> <p>When air near the ground becomes saturated with water, the water vapor will condense and form water droplets. If the temperature is below 0°C, what will form?</p> <p>What is dew point?</p>

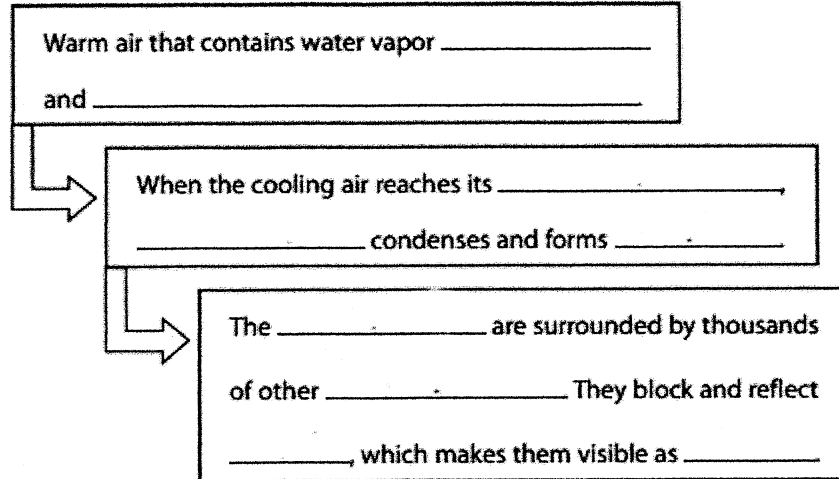
Identify the events that must occur in order for the dew point to be reached.

1. Air temperature _____
2. The amount of moisture in the air _____

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Clouds and Fog

Sequence the steps in cloud formation.



What two things are transported from one location to another via clouds?

What is fog?

Classify clouds. Describe the appearance of each type of cloud, and identify the altitude at which it is found.

Type of Cloud	Appearance	Altitude
Stratus		
Cumulus		
Cirrus		

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Precipitation

What is precipitation?

List 4 different types of precipitation:

- 1
- 2
- 3
- 4

What is rain?

What is snow?

What is sleet?

What is hail and **HOW** does it form?

What is the difference between snow and sleet?

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The Water Cycle

What is the water cycle?

How does most water vapor enter the atmosphere?

What "powers" the water cycle?

Label the water cycle in the illustration below, and then explain how the water cycle relates to weather.

