

Name:

Class:

Grade 8 SCIENCE – GUIDED NOTES

Chapter 4 –Weather

Lesson: 2– Weather Patterns

Pages: 125 - 133

Page Number	Title/Sub-Title	Guided Notes
125	Pressure Systems	<p>What is air pressure?</p> <p>What type of pressure is associated with cool air masses?</p> <p>What type of pressure is associated with warm air masses?</p> <p>What is a <i>high-pressure system</i>?</p> <p>Draw Figure 7 “High-Pressure System” below. <u>Label all parts of your diagram.</u></p> <p>What type of weather does a high-pressure system usually bring?</p> <p>What is a <i>low-pressure system</i>?</p> <p>Draw Figure 7 “Low-Pressure System” below. <u>Label all parts of your diagram.</u></p> <p>What type of weather does a low-pressure system usually bring?</p>
126	Air Masses	<p>What are air masses?</p>

What 2 characteristics are air masses classified by?

- 1.
- 2.

What are air masses that form over land referred to as?

What are air masses that form over water referred to as?

What are air masses that form in equatorial region referred to as?

What are air masses that form in cold regions referred to as?

List the **5 types of air masses** that impact North America from the reading:

- | | |
|---|---|
| 1 | 2 |
| 3 | 4 |
| 5 | |

Where do arctic air masses form?

What type of air do Arctic Air masses bring with them?

Why are air masses that form over land drier than air masses that form over water.

Describe two features about Continental Polar air masses.

Where do Maritime Polar air masses form?

What type of air do Maritime Polar air masses bring with them?

What type of weather does Maritime Polar air masses bring with it?

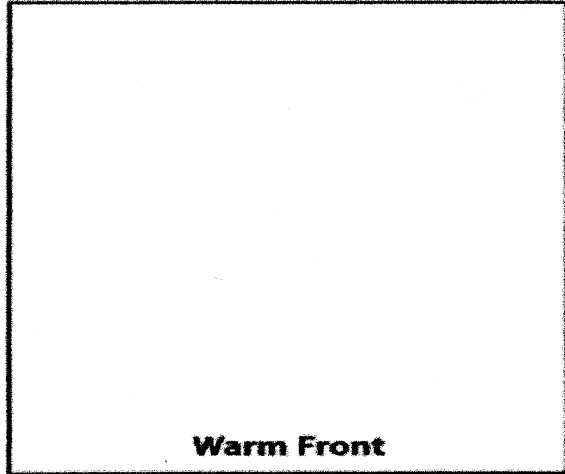
		<p>Why are tropical air masses hot and dry?</p> <p>What type of weather do Continental Tropical Air Masses usually bring?</p> <p>Where do Maritime Tropical air masses form?</p>						
128	Fronts	<p>Who is the scientist who recognized that specific types of weather occurs at boundaries of different air masses?</p> <p>What is a weather front?</p> <p>Drastic weather changes often occur at fronts. List the changes in weather variables that can occur at fronts:</p> <table> <tr> <td>1</td> <td>2</td> </tr> <tr> <td>3</td> <td>4</td> </tr> <tr> <td>5</td> <td></td> </tr> </table>	1	2	3	4	5	
1	2							
3	4							
5								
128	Cold Fronts	<p>When does a cold-front form?</p> <p>Draw and label Figure 9 “Cold Front”. Label your diagram. Use BLUE arrows to represent cold air and RED arrows to represent the warm air.</p> <div style="border: 1px solid black; padding: 20px; margin: 10px auto; width: fit-content;"> <p style="text-align: center;">Cold Front</p> </div> <p>List 3 things that may occur to the weather when a cold front passes through a region.</p> <ol style="list-style-type: none"> 1 2 3 						

129

Warm Fronts

When does a warm-front form?

Draw and label Figure 9 "Warm Front". Label your diagram. Use BLUE arrows to represent cold air and RED arrows to represent the warm air.



List 3 things that may occur to the weather when a warm front passes through a region.

- 1
- 2
- 3

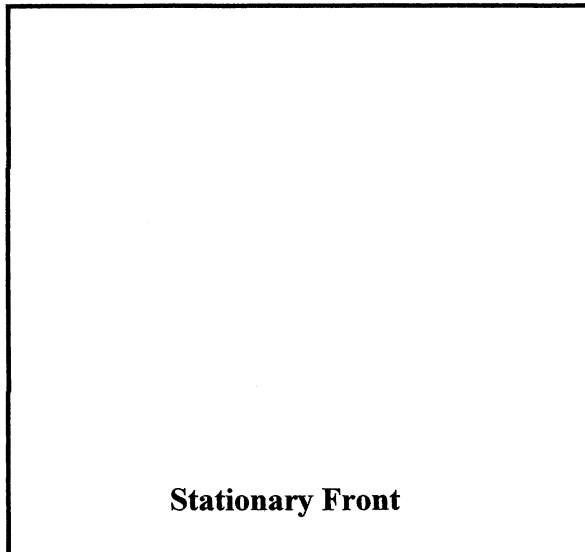
129

Stationary and Occluded Fronts

What is a stationary front?

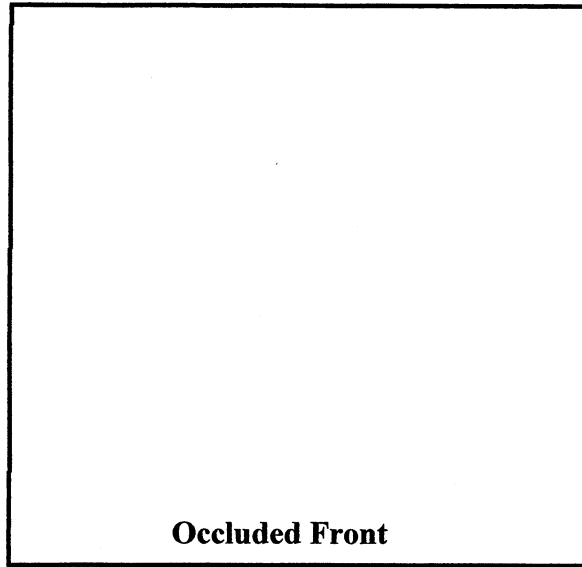
What type of weather is present along a stationary front?

Draw and label Figure 9 "Stationary Front". Label your diagram. Use BLUE arrows to represent cold air and RED arrows to represent the warm air



What is an occluded front?

Draw and label Figure 9 "Occluded Front". Label your diagram. Use BLUE arrows to represent cold air and RED arrows to represent the warm air



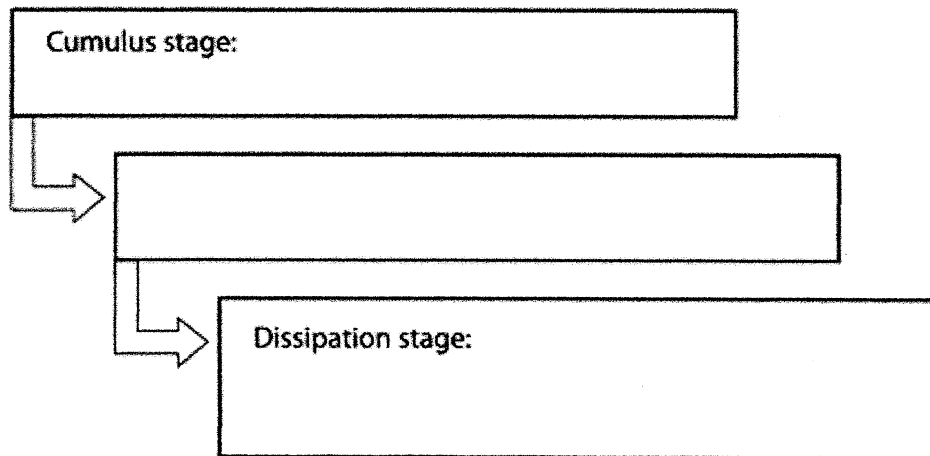
130 Severe Weather

Identify five examples of severe weather.

1. _____
2. _____
3. _____
4. _____
5. _____

130 Thunderstorms

Sequence the three-stage life cycle of a thunderstorm.



130 Tornadoes

What is a tornado?

How do tornadoes form?

Where do the most tornadoes occur on Earth?

Who developed a scale to classify tornadoes?

Fill in the **Fujita scale** below with the type of damage each tornado can cause:

Fujita Intensity	Damage
F0	
F1	
F2	
F3	
F4	
F5	

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Hurricanes

What is a hurricane?

Sequence the steps in the formation of a hurricane.

Warm, moist air _____ and _____. Water vapor _____ and clouds form. As more air rises, an area of _____ forms over the ocean.



As air _____, a _____ forms. Air begins to turn _____ because of the _____. Winds are between _____.



As air continues to rise and _____, the storm builds to a _____. Winds are greater than _____ but less than _____.



When winds reach _____, the storm becomes a _____.

133

Winter Storms

What is a blizzard?

133

Severe Weather Safety

What US government office issues watches and warnings for severe weather?

What does a Severe Weather "WATCH" mean?

What does a Severe Weather "WARNING" mean?