Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_\_\_

**Chapter A2 – Weather Patterns: Study Guide/Review Sheet**

**Vocabulary:**

|  |  |
| --- | --- |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | 1. The force of air molecules pressing on an area |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | 1. The condition of Earth’s atmosphere at a certain time and place |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | 1. Wind patterns that flow thousands of km over Earth |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | 1. When water changes from a liquid to a gas |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | 1. When water changes from a gas to a liquid |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | 1. Any form of liquid or solid water that falls from the sky |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | 1. The amount of water vapor in the air |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | 1. The temperature at which the air is saturated with water vapor |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | 1. The influence of Earth’s rotation on winds |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | 1. Air that moves horizontal to the ground. |

**Short Answer:**

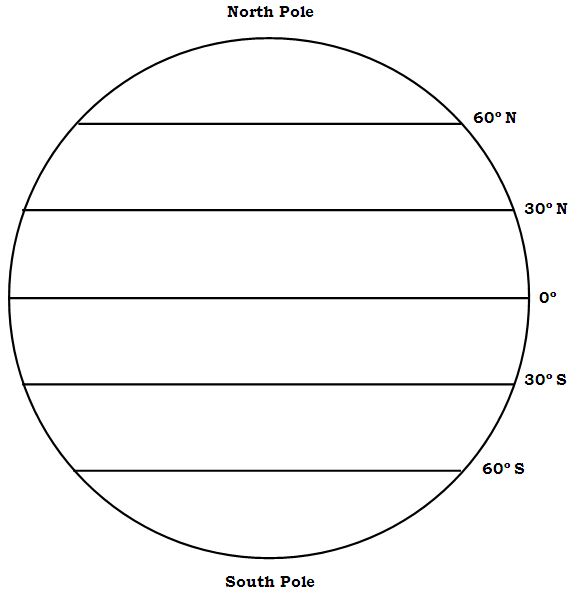
1. Wind moves from areas of \_\_\_\_\_\_\_\_\_\_\_\_ pressure to areas of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ pressure.
2. What tool is used to measure air pressure? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. Clouds form when \_\_\_\_\_\_\_\_\_\_\_ air rises, \_\_\_\_\_\_\_\_\_\_\_\_, and condenses on \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
4. Relative humidity compares the amount of water vapor in the air to the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ amount of water vapor in the air.
5. Air that sinks is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ than the surrounding air.
6. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ clouds are most likely to bring thunderstorms.
7. The two calm regions that separate wind belts are called the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
8. We live in the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ layer of the atmosphere.

**True/False.** Circle whether you each statement is **true** or **false**. If it is **false**, underline the part that is incorrect.

|  |
| --- |
| 1. Wind is caused by uneven heating of Earth’s surface causing pressure differences. \_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 1. Cold air has a lower pressure than warm air. \_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 1. As density of the air decreases, air pressure decreases. \_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 1. As altitude increases, air pressure decreases. \_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 1. Large pressure differences between areas cause strong, fast winds. \_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 1. Cirrus clouds form in warm areas close to Earth’s surface. \_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 1. Freezing rain is rain that freezes when it hits the ground, while sleet freezes as it falls. \_\_\_\_\_\_\_\_\_ |

**Vocabulary (Clouds and Precipitation):**

|  |  |
| --- | --- |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | 1. Forms when ice pellets move up and down in clouds, gaining layers of ice. |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | 1. The most common form of precipitation |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | 1. Type of cloud that forms in layers; smooth. |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | 1. Type of precipitation that forms from ice crystals merging in clouds |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | 1. A cloud that rests on the ground or water |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | 1. Rain that freezes when it hits the ground or other surfaces |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | 1. Type of cloud that are puffy with darker bases. |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | 1. Type of cloud that forms in very cold air at high altitudes. |

**Wind Patterns:** On the diagram to the right, label:

1. Trade winds
2. Westerlies
3. Polar Easterlies
4. Horse Latitudes
5. Doldrums
6. Circulation Cell

**Part 6: Short Answer.**

1. Describe the steps of the water cycle.