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| Topic/Objectives: 15-1 Earth's Atmosphere; (1) Describe the properties of the atmosphere, (2) Identify the four main layers of the atmosphere, (3) Explain heat transfer and the interaction of air masses in the troposphere. | | Name: Date: Period: |
| Essential Question: How can we describe Earth's atmosphere? | | |
| Questions: | Notes: | |
| | Properties of the Atmosphere <ul style="list-style-type: none"> The _____ is composed of nitrogen (78%), oxygen (21%), and other gases (1%) including carbon dioxide and water vapor. Water vapor may vary from the maximum amount allowed at the temperature (_____). _____ will vary over Earth's surface because the sun's rays strike some areas more directly than others. _____, the force exerted by air on the area below it, varies by altitude. | |
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| Questions: | Layers of the Atmosphere <ul style="list-style-type: none"> The _____ is the lowest layer and contains the oxygen we need to live. The _____ extends 7-31 miles above sea level and contains the ozone layer, which helps reduce UV rays that reach Earth's surface. The _____ extends 31-50 miles above sea level and has extremely low air pressure. The _____ is the top layer of Earth's atmosphere and has very high temperatures. | |
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| Questions: | The Troposphere and Weather <ul style="list-style-type: none"> Weather is affected by heat transfer and interactions between air masses. Energy from the sun heats Earth's atmosphere, where it transfers through _____, _____ and _____. Large bodies of air (_____) may differ from one another in temperature, pressure and humidity. Boundaries between air masses that differ in temperature and moisture are called a _____. A _____ occurs when warmer, moister air pushes against a mass of colder, drier air – may result in light rain. A _____ occurs when colder, drier air pushes against a mass of warmer, moister air – may result in heavy precipitation and thunderstorms. | |
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[illegible]