

Key Concept Builder 

LESSON 1

Describing Earth's Atmosphere

Key Concept How did Earth's atmosphere form?

Directions: Number the events from Earth's history to indicate the order in which they occurred to produce the atmosphere we have today. On each line, write a number from 1 to 10, with 1 being the earliest event.

_____ Photosynthesizing organisms develop.

_____ The atmosphere becomes mostly water vapor and CO₂.

_____ Earth is a molten ball.

_____ The atmosphere becomes mostly nitrogen.

_____ The ancient oceans absorb CO₂ from the atmosphere.

_____ Earth's surface hardens.

_____ Oxygen and nitrogen make up 99 percent of the atmosphere.

_____ Heavy rains fall for thousands of years to form oceans.

_____ Volcanoes spew gases from Earth's interior into the atmosphere.

_____ Oxygen slowly builds up in the atmosphere.

Key Concept Builder **LESSON 1**

Describing Earth's Atmosphere

Key Concept What is Earth's atmosphere made of?

Directions: On each line, write the term from the word bank that correctly completes each sentence. Some terms might be used more than once.

acids **ash** **carbon dioxide** **nitrogen**
oxygen **ozone** **pollen** **water vapor**

1. About 78 percent of Earth's atmosphere is _____.
2. Another 21 percent is _____.
3. The gases making up the remaining 1 percent include three, in varying amounts:
_____, _____, and
_____.
4. The gas _____ is in the stratosphere; closer to Earth's surface in urban areas, it is considered to be a pollutant.
5. The atmosphere also contains solid particles, including _____ from plants and _____ from volcanoes.
6. Liquids in the air include _____ from evaporation and _____ from the burning of fossil fuels.

Key Concept Builder 

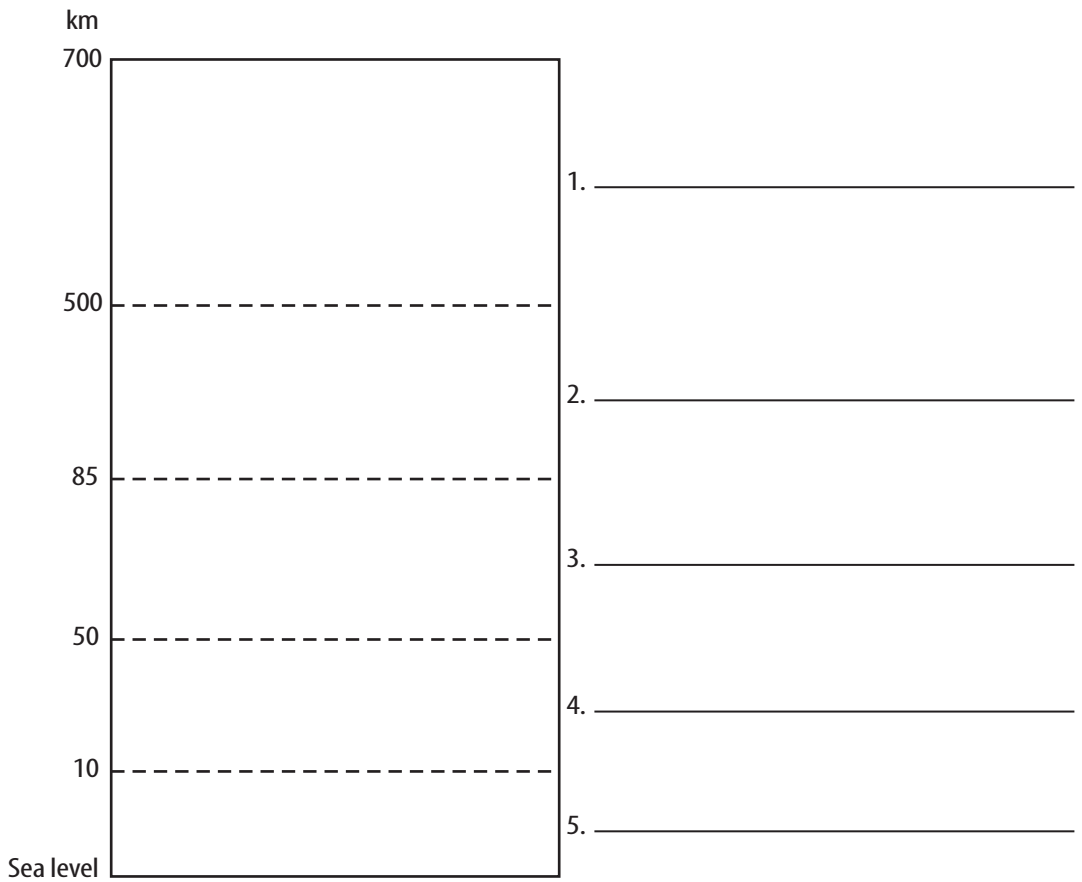
LESSON 1

Describing Earth's Atmosphere

Key Concept What are the layers of the atmosphere?

Directions: Label this diagram by writing the correct term from the word bank on each line.

- | | | |
|--------------|-------------|--------------|
| exosphere | mesosphere | stratosphere |
| thermosphere | troposphere | |



Directions: On the lines in the diagram above, write the letter to indicate where each of the following things would most likely be located: small meteors (M), airplanes (A), satellites (S), clouds (C), and weather balloons (B).

Key Concept Builder **LESSON 1*****Describing Earth's Atmosphere*****Key Concept** How do air pressure and temperature change as altitude increases?**Directions:** On each line, write the term from the word bank that correctly completes each sentence. Some terms may be used more than once.

air pressure **density** **exosphere** **gravity** **mesosphere**
ozone **stratosphere** **thermosphere** **troposphere**

1. The force that pulls the atmosphere toward Earth is _____.
2. This pull causes the atmosphere to exert a force called _____.
3. The more gas molecules that are in a given volume of air, the greater the _____ of the air will be.
4. In the _____ and the _____, temperature decreases with increasing altitude.
5. In the _____, the _____, and the _____, just the opposite occurs.
6. Temperature increases in the _____ are caused by the presence of _____, which readily absorbs solar radiation.