



Seventh Grade Science



7th Grade Science: Activity 1

The Air Around You: What is the composition of the Earth's Atmosphere?

Directions: This handout goes with a KCS Teacher Video. If you have access to the video, watch the video before doing this activity. You can find the videos here

<https://www.knoxschools.org/Page/21816>

Lesson Objective:

Be able to understand a graph that represents the composition of Earth's atmosphere as a mixture of gases and discuss the potential for atmosphere changes.

Directions: Use the powerpoint for activity 1 to help you answer all of the quick review questions..

Quick Review #1 (Layers of the Earth:)

Match the layer with its description.

1. Mesosphere ___	A. this layer is above the mesosphere and many satellites stay in orbit here
2. Stratosphere ___	B. this layer is above the stratosphere and it is where most of all the meteor burns up in this layer
3. Troposphere ___	C. this layer is above the troposphere and below the mesosphere. the ozone layer exists here
4. Exosphere ___	D. the lowest layer of our atmosphere. We humans live here and about nearly all weather occurs here
5. Thermosphere ___	E. the outermost layer: a very thin layers that most scientist consider space



Quick Review 2: (What makes up air?)

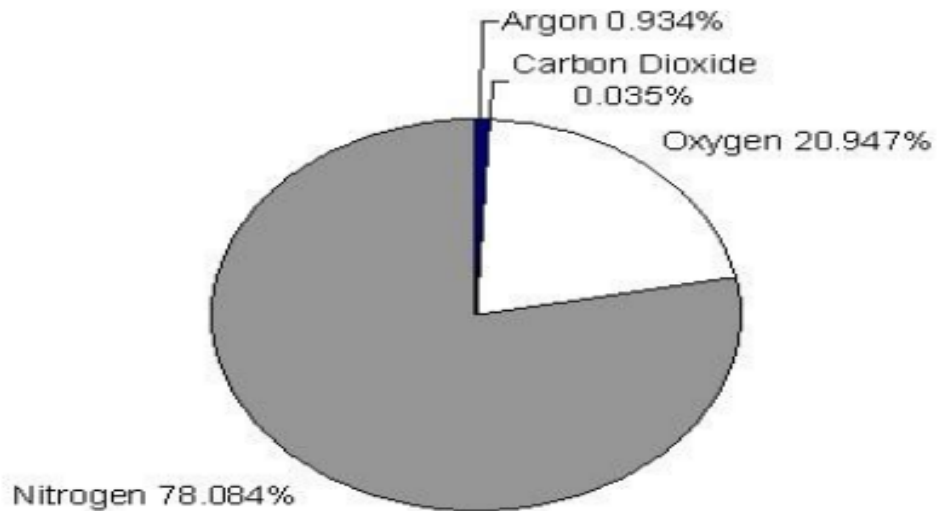
For each box write a short response.

6. What type of gases can be found in the Earth Atmosphere?	7. Besides gases, what other particles might be found in Earth Atmosphere?	8. What are some cycles that involve the movement of air?	9. Is CO2 important for life and

Quick Review 3

Air Composition Pie Chart Worksheet

Gaseous Composition of Dry Air



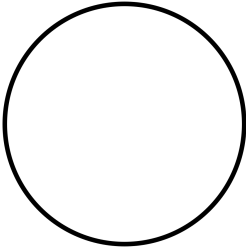
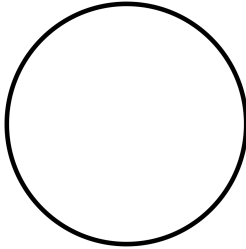
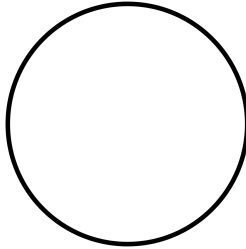
Gaseous Composition of Dry Air

Gas	Percentage
Total	



Quick Review 4:

Fill in the chart with information about each gas and color in the pie charts with correct percentages.

	Nitrogen	Oxygen	Trace Gases
Important Information			
Fill in the pie chart			

Quick Review 5

After watching the activity from the Activity 1 video, illustrate the pie chart below to represent what you think the composition of air might be like:

- around a coal burning power plant
- or heavily congested street.

Use three different colors to represent nitrogen, oxygen, and trace gases.

