**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Core: \_\_\_\_\_\_\_\_\_**

**Atmospheric Gases**

**Background**: The air in the atmosphere is mixture of many gases. Two gases make up 99% of the volume of air: nitrogen and oxygen. Nitrogen composes 78% of air and oxygen makes up 21% of air. The other 1% includes gases such as carbon dioxide, argon, water vapor, ozone, neon, helium, hydrogen, carbon monoxide, sulfur dioxide and particles such as soot and dust. The following table provides the composition of air.

|  |  |
| --- | --- |
| **Gas** | **Percent by Volume** |
| Nitrogen | 78 |
| Oxygen | 21 |
| Argon | 0.93 |
| Carbon Dioxide | 0.03 |
| Neon | 0.0018 |
| Ozone | 0.0006 |
| Helium | 0.0005 |
| Hydrogen | 0.00005 |
| Other gases | 0.00005 |

**Directions**: Make two different graphs illustrating the makeup of gases in our atmosphere. The first graph is a bar graph, and the second is a pie chart. Use color pencils to illustrate the different gases.

**Bar Graph**: **Pie Chart**:

100

90

80

70

60

50

40

30

20

10

0

Nitrogen Oxygen Other Key: Nitrogen Oxygen Other

Questions:

1) Which gas makes up the greatest percentage of gas in the atmosphere?

2) Which gas do plants breathe in?

3) Which gas do we breathe in?

4) Describe the role ozone plays in the atmosphere.