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

**Pre-Assessment: Atmosphere Unit**

**Directions** – Answer each question in the final answer column. When you are finished answering, place a checkmark (√) in the box that represents your confidence level (did you know the answer or was it a guess).

Final Answers:

|  |  |  |  |
| --- | --- | --- | --- |
| Problem Number | Answer | I know the answer! | Guessed on it! |
| 1 |  |  |  |
| 2 |  |  |  |
| 3 |  |  |  |
| 4 |  |  |  |
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| 17 |  |  |  |
| 18 |  |  |  |
| 19 |  |  |  |
| 20 |  |  |  |

**Multiple Choice** – Select the BEST answer from the choices given.

1. Looking at the mountain in the picture, which point has the greatest density?

A



C

a. Point C

B

b. Point B

c. Point A

d. They all have the same density

2. What are the two gases that appear the most in our atmosphere?

1. oxygen and helium c. nitrogen and oxygen
2. oxygen and water vapor d. nitrogen and carbon dioxide

3. The atmosphere supports life on Earth for which of the following reasons?

a. keeps Earth cool

b. transports energy around planet (heat, light)

c. produces meteors

d. blocks out all solar radiation

**Matching** – Match the following descriptions with the layer of the atmosphere that follows.

4. where we live

5. aurora borealis

6. satellites orbit Earth

7. meteors burn up

8. ozone layer

Earth

d

c

b

a

1. mesosphere
2. troposphere
3. stratosphere
4. ionosphere
5. thermosphere

**Matching** – Match each layer of the

Atmosphere with its name.

1. Thermosphere
2. Stratosphere
3. Mesosphere
4. Troposphere

**Multiple Choice** – Select the BEST answer from the choices given.

13) Would it be more difficult to breathe at in the Sahara Desert or the top of Mount Everest?

a) Sahara Desert b) it would be the same

c) Mount Everest d) need more information

14) What particles can be found in the atmosphere?

a) dust b) smoke

c) pollen d) all of the above

15) Why does air pressure decrease from the troposphere to the exosphere?

a) because there are fewer air molecules as altitude increases

b) because there are more air molecules as altitude increases

c) because there are higher temperatures as altitude increases

d) because there are lower temperatures as altitude increases

16) How does the temperature of the stratosphere compare to the mesosphere?

a) It is colder than the mesosphere because the stratosphere contains the ozone layer.

b) It is warmer than the mesosphere because the stratosphere contains the ozone layer.

c) It is colder than the mesosphere because the stratosphere contains the ionosphere.

d) It is warmer than the mesosphere because the stratosphere contains the ionosphere

17) What process moves energy from Earth’s surface to high in the troposphere?

a) Solar Energy b) Conduction

c) Convection d) the nitrogen cycle

18) In which of the atmosphere’s layers does the temperature decrease as the altitude increases?

a) troposphere to stratosphere b) troposphere to mesosphere

c) stratosphere to mesosphere d) stratosphere to thermosphere

19) Which gas absorbs ultraviolet radiation?

a) carbon dioxide b) ozone

c)methane d) water vapor

20) What keeps the Earth’s surface warm?

a) conduction b) convection

c) the ozone layer d) the greenhouse effect