

Lesson 6 Pre/Post-Test: Respiration

SCORING GUIDE

1. What does 'exhale' mean?

EXHALE MEANS TO BREATHE OUT.

2. Name the 'waste' gas that is exhaled from animals' lungs.

CARBON DIOXIDE

3 What is the formula (group of chemical symbols) for carbon dioxide?

CO₂

4. What 'waste' gas is made when a candle burns?

CARBON DIOXIDE OR CO₂

5. What is limewater?

LIMEWATER IS CLEAR, COLORLESS LIQUID. IT IS USED TO TEST FOR CARBON DIOXIDE.

6. What happens to limewater when it is mixed with carbon dioxide?

WHEN CARBON DIOXIDE IS BUBBLED THROUGH LIME WATER, THE LIMEWATER BECOMES CLOUDY OR MILKY WHITE.

7. Explain how a burning candle is similar to a person exhaling.

A PERSON EXHALING (THROUGH RAPID OXIDATION) AND A PERSON (THROUGH RESPIRATION) BOTH PRODUCE CARBON DIOXIDE OR CO_2 AS A BY-PRODUCT (OR WASTE PRODUCT).

8. Why does limewater change color when you breathe air into it through a straw?

THE LIMEWATER CHANGES COLOR WHEN WE BREATHE AIR INTO IT BECAUSE THE AIR WE EXHALE CONTAINS CARBON DIOXIDE.

9. Why does limewater change color when you mix it with the air left over in a jar that has a burning candle in it?

LIMEWATER CHANGES COLOR WHEN YOU MIX IT WITH THE AIR LEFT OVER IN A JAR BECAUSE A BURNING CANDLE PRODUCES CARBON DIOXIDE.

10. How does carbon dioxide get into our lungs?

CARBON DIOXIDE, A WASTE MATERIAL, IS ADDED TO OUR BLOOD BY THE BODY CELLS, AND IS CARRIED THROUGH OUR BLOOD INTO OUR LUNGS. IN THE LUNGS, CARBON DIOXIDE LEAVES THE BLOOD THROUGH THE WALLS OF THE ALVEOLI CELLS. THEN, WHEN WE EXHALE, CARBON DIOXIDE LEAVES OUR LUNGS.