

Name: _____ Date: _____

Unlocking the Magic Dozen: Mole Counting Quiz for 3rd Graders

Students practice basic recall and identification of grouping units, translating abstract chemical counting into concrete, everyday sets to build early conceptual scaffolding.

1. In a bakery, if you buy 12 cupcakes, what do we call that group?

- A. A pair
- B. A dozen
- C. A mole
- D. A fleet

2. True or False: Scientists use the 'mole' to count things that are so small we can't see them with our eyes.

- A. True
- B. False

3. One mole of sugar and one mole of salt have the same _____ of tiny pieces.

- A. Color
- B. Taste
- C. Number
- D. Shape

4. If you have a group of something called a 'mole,' are there a lot of pieces or just a few?

- A. Only 2 pieces
- B. Exactly 10 pieces
- C. A huge amount of pieces
- D. Zero pieces

5. The word _____ refers to how we measure and balance recipes in a science lab.

- A. Stoichiometry
- B. Starlight
- C. Subtraction
- D. Speedway

6. True or False: A 'mole' in chemistry is a furry animal that lives underground.

- A. True
- B. False

7. When scientists follow a 'recipe' for a reaction, they use a balanced equation. This is like a recipe for:

- A. Baking a cake
- B. Playing tag

Name: _____ Date: _____

- C. Taking a nap
- D. Painting a wall

8. If you have 1 mole of iron and 1 mole of gold, they have different weights because their _____ are different.

- A. Names
- B. Atoms
- C. Prices
- D. Containers

9. Which of these is a way to group things, just like a mole?

- A. A slice of bread
- B. A pair of shoes
- C. One single crayon
- D. The color blue

10. True or False: Stoichiometry helps scientists predict how much 'stuff' they will make in a reaction.

- A. True
- B. False