

The Mole

Poster Project

Introduction:

In chemistry a mole represents a number. Much like other words you know that represent numbers, it has a specific value.

For example,

A pair = 2 items

A trio = 3 items

A dozen = 12 items

A mole represents the number 6.02×10^{23} items or things

Or 602,000,000,000,000,000,000,000 items or things

HOW LARGE IS A MOLE?

- A mole of marshmallows would cover the Earth 12 miles high
- A mole of seconds would last so long, the universe would die out before it was done
- A mole of marbles would fill the entire Grand Canyon and there would still be enough to replace all the water in Lake Michigan
- Computers can count as fast as 800 million counts per second. At that rate it would take a computer 25 million years to count to a mole
- A mole of hockey pucks would be equal to the mass of our Moon
- If one mole of pennies were divided up amongst the Earth's current population, each person would receive 1×10^{14} pennies. If you spent that amount of money at \$1 million A DAY, it would take you 3000 years to spend it.
- That same amount of pennies would cover the Earth in a layer of pennies 400 meters thick

ASSIGNMENT:

You are to create a poster that represents one of the fun facts regarding a mole. See above (you can also do another one not listed, but it must be approved first). You will sign up with your teacher.

Your poster must have:

- An appropriate title
- Show the number that a mole represents
- Use the word Mole
- Be understandable to the fun fact you are describing
- Be in color.
- NOT USE BINDER PAPER
- Extra Credit will go to the individual(s) that get their posters placed on the wall.

Have fun!