

You need to answer the following questions:

How many molecules are in a glass of water? [114.56 g]

How many **atoms** are in a glass of water? [376.88 g]

How many atoms are in a piece of tin? [0.47 g]

How many molecules are in a spoonful of baking soda (sodium bicarbonate)? [1.36 g]

How many **atoms of each element** are in a spoonful of baking soda?

How many molecules are in a spoonful of sand (silicon dioxide)? [1.19 g]

How many atoms are in a pre-1982 penny (5% zinc/95% copper)? [2.45 g]

How many atoms are in a post-1982 penny (97.5% zinc/2.5% copper)? [3.02 g]

How many atoms are in a nickel (75% copper/25% nickel)? [4.98 g]

How many atoms are in a piece of aluminum foil?

What are the dimensions (all three sides) of the aluminum foil?

How many atoms thick is the aluminum foil?

Mass aluminum foil = 0.35 g

Length = 9.45 cm

Width = 8.65 cm

Thickness you must calculate. Think about ways to determine volume other than using dimensions. You may need your notes and Chemistry Handbook.