

CONCEPT DIAGRAM

Conversion Factor^① Solving Stoichiometry Problems^②

③ Key Words

quantity

unit of
measure

substance

formula

mole

molecule

gram

liter

equality

atom

① CONVEY CONCEPT

② OFFER OVERALL
CONCEPT

③ NOTE KEY WORDS

④ CLASSIFY
CHARACTERISTICS:

Always Present

Sometimes Present

Never Present

2 equal quantities

written as a fraction

only 1 quantity

each quantity has:

written as an equality

a number without a unit

a number (amount)

a number without a substance

a unit of measurement

a substance (name or formula)

⑤ EXPLORE EXAMPLES

Examples:

Non-Examples:

1 pound of chicken = 2.2 kg of
chicken

⑥

3 mol CO₂
4 mol H₂O

2 mol

1 mol Fe
55.8g Fe

28g
1 mol N₂

27

1 mole of water = 6.022x10
molecules of water

1 mol
35.5 g

1 mol CO₂
22.4 L CO₂

12
2

⑥ PRACTICE WITH NEW EXAMPLE

⑦ TIE DOWN
A DEFINITION

A conversion factor must have 2 quantities where each quantity has a number, unit and substance. Conversion factors are needed to solve stoichiometry problem because they allows you to compare different units of measurement.