

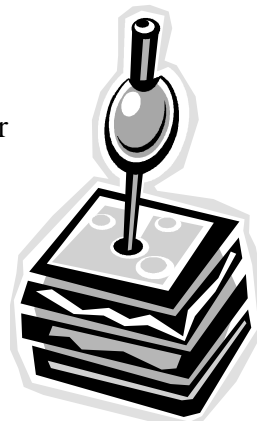
Stoichiometry 1

Cheese Sandwiches

INFORMATION

A local deli, **The Dappitz Room**, sells only cheese sandwiches. Despite their meager ingredients, they are of nationally renowned flavor and quality.

A cheese sandwich is made using two slices of bread and one slice of cheese. The deli sells only whole sandwiches.



KEY QUESTIONS

1. Write a balanced “chemical” equation for the process of making a cheese sandwich. The symbol for cheese is “Ch” and the symbol for bread is “Bd.” Be sure your product is representative of the combination of ingredients.
2. The deli has several sandwich orders to make for today’s lunch rush. Determine how many slices of bread and how many slices of cheese are required for each order:
 - a. 12 sandwiches
 - b. 23 sandwiches
 - c. 4 sandwiches
 - d. 31 sandwiches
3. At the end of the day, supplies of bread and cheese at the deli usually run pretty low. How many sandwiches can be made with the following amounts of ingredients? (If an amount of an ingredient is not given, assume you have as much of it as you need.)
 - a. 49 slices of cheese
 - b. 64 slices of bread
 - c. 30 slices of bread, 15 slices of cheese
 - d. 1 slice of cheese
 - e. 1 slice of bread
 - f. 40 slices of bread, 19 slices of cheese
 - g. 25 slices of bread
 - h. 17 slices of bread, 17 slices of cheese

Answer these questions in numbers of moles, not individual sandwiches:

- i. 1 mole of cheese slices (you’d need a big fridge)
- j. 2 moles of slices of bread
- k. 1 mole of slices of bread
- l. 5 moles of cheese slices
- m. 7 moles of bread slices