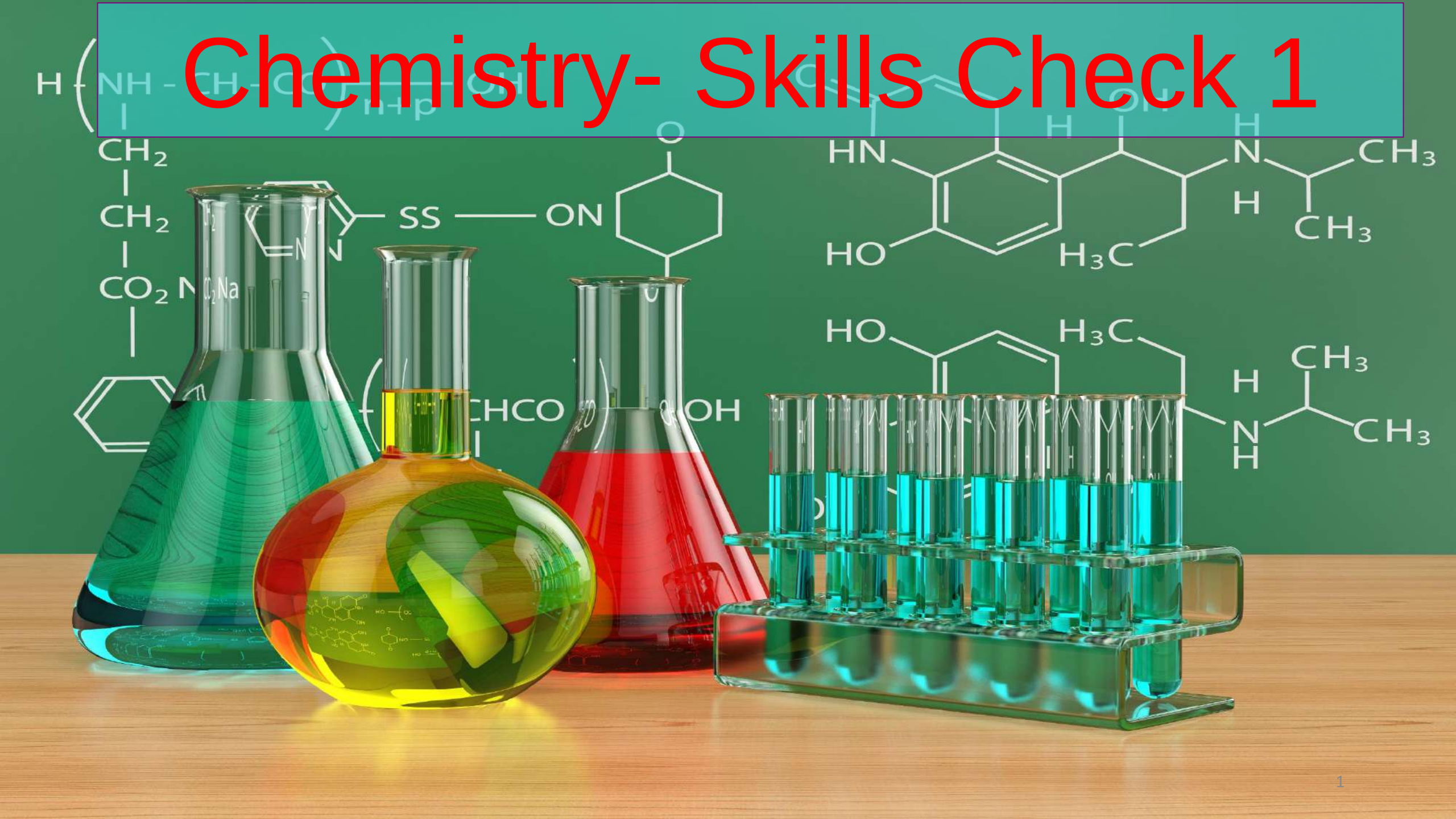
Chemistry- Skills Check 1



SKILLS CHECK ON THE FOLLOWING MIXTURES

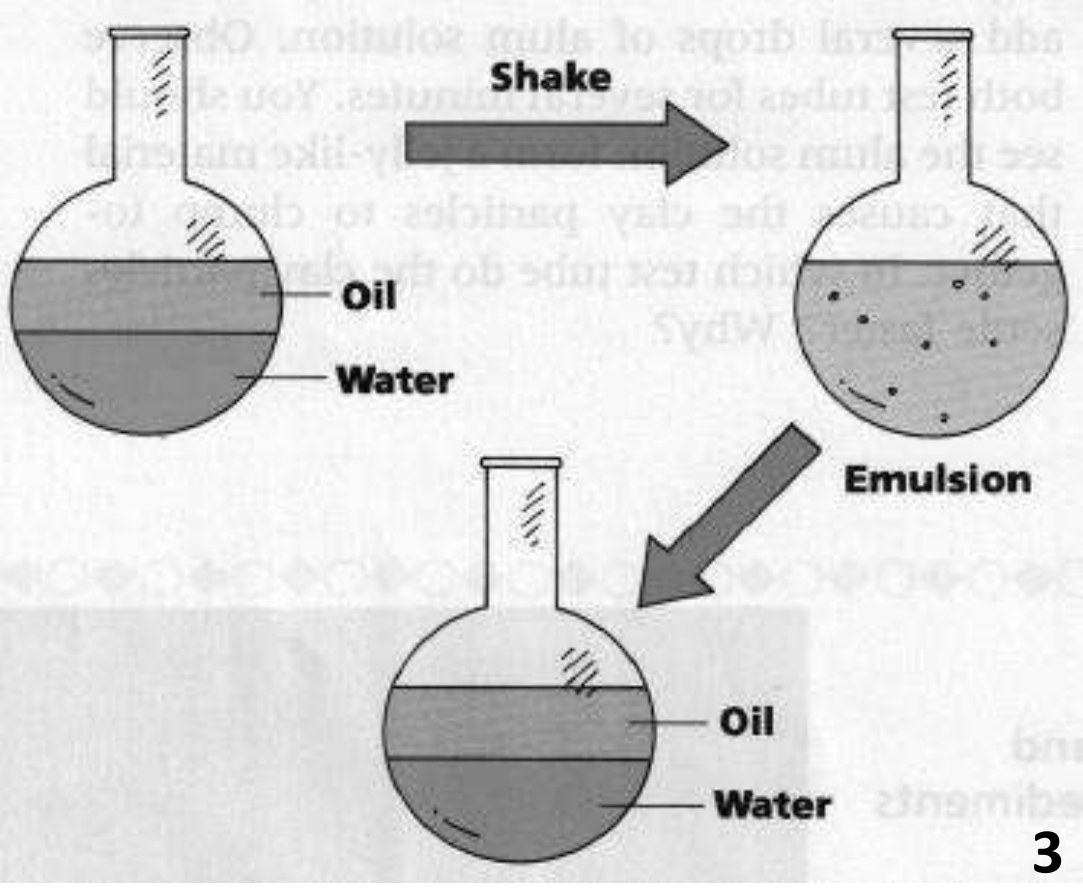
Homogeneous
Heterogeneous

Solutions
Suspensions
Colloids
Emulsions

Emulsions

When a liquid is suspended in another liquid the resulting mixture is called an emulsion.

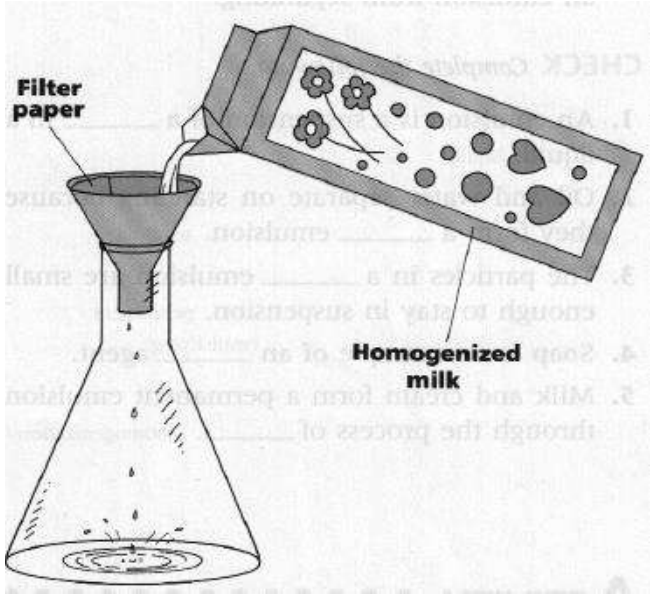
An emulsion is really just a specific type of colloid. Both are types of suspensions



Colloids

These are suspensions in which the particles are permanently suspended. Colloids do not separate when left standing. Some permanent emulsions are colloids. The particles in a colloid are larger than those of solution, however smaller than those of suspensions.

Another way to think of a colloid is a suspension that cannot be separated by filtration.



Homogeneous Mixture ? #1

Which of the following is a <u>homogeneous solution</u>?

A.

B.

C.

D.

Heterogeneous Mixture ? #2

Which of the following is a <u>heterogeneous mixture</u>?

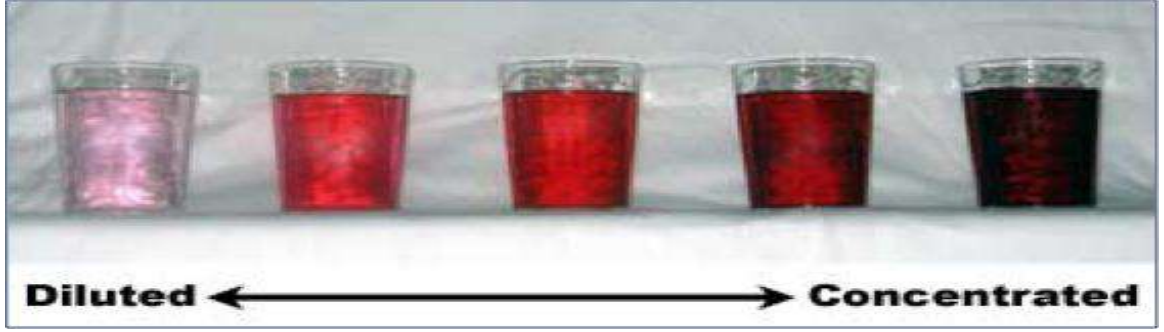
A.

B.

C.

D.

Solutions? #3



A measure of how much solute may be dissolved into a solvent is called _____ ?

A. dilute **B. concentrate**
C. solubility **D. mixture**

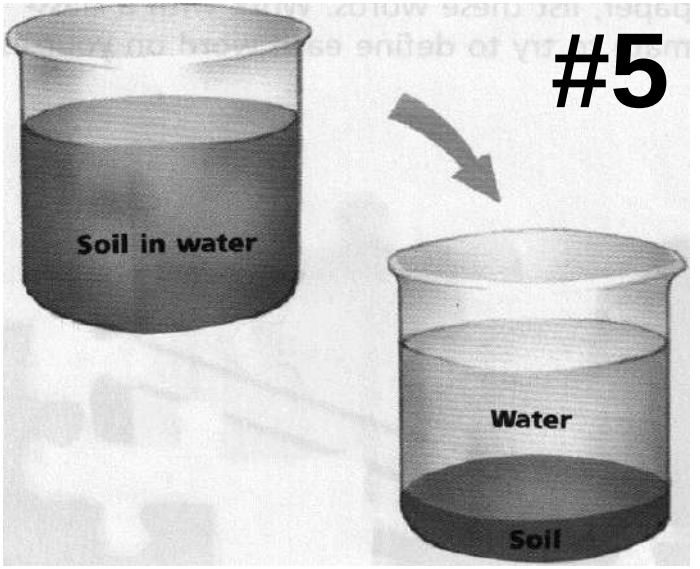
The image depicts a solution which can hold no more solute. Solute accumulates on the bottom. The solution is said to be _____

A. saturated **B. temperate**
C. soluble **D. unsaturated**

#4

Suspensions?

Suspensions differ from solutions in several ways. List all that apply.



a. Clear or **b.** cloudy

c. Particles settle or **d.** don't settle

e. Particles visible or **f.** not visible

g. ex: H_2O vapor or **h.** dust

i. Is a mixture or **j.** is not a mixture

Solutions?

#6

All of the following are ways to increase solubility of a solute except.

a. Increase heat

b. filtration

c. increase solvent

d. stirring

Suspensions/ Solutions?

#7

All of the following are specific ways to separate suspensions discussed in your text and demonstrated in class except one. This is the only example that will separate solutions from mixture.

a. Evaporation b. Settling c. Filtration
d. Coagulation e. Centrifuge

Example Kool-Aid Powder

#8

A. Solution
B. Solute
C. Suspension
D. Solvent

Homogeneous or Heterogeneous

Mixtures? #9
Example

A. Solution C. Suspension
B. Colloid D. Emulsion

Homogeneous or Heterogeneous

Mixtures? Example

#10

A. Solution **C. Suspension**

B. Colloid **D. Emulsion**

Homogeneous or Heterogeneous

Mixtures? Example

#11

A. Solution
B. Colloid
C. Suspension
D. Emulsion

Homogeneous or Heterogeneous

Mixture Example – homogenized milk

#12

A. Solution C. Solvent

B. Colloid D. Solute

Homogeneous or Heterogeneous

Bonus: (hint) this also a Temporary or Permanent _____

Mixtures?
Example – fresh milk

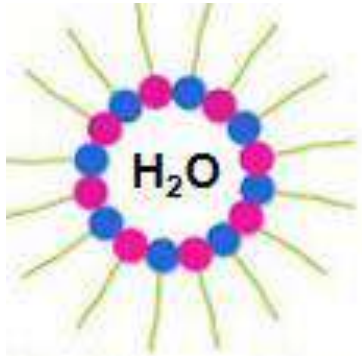
A. Solvent **C. Solute**

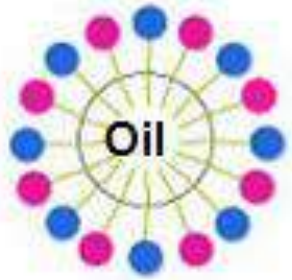
B. Colloid **D. Temporary Emulsion**

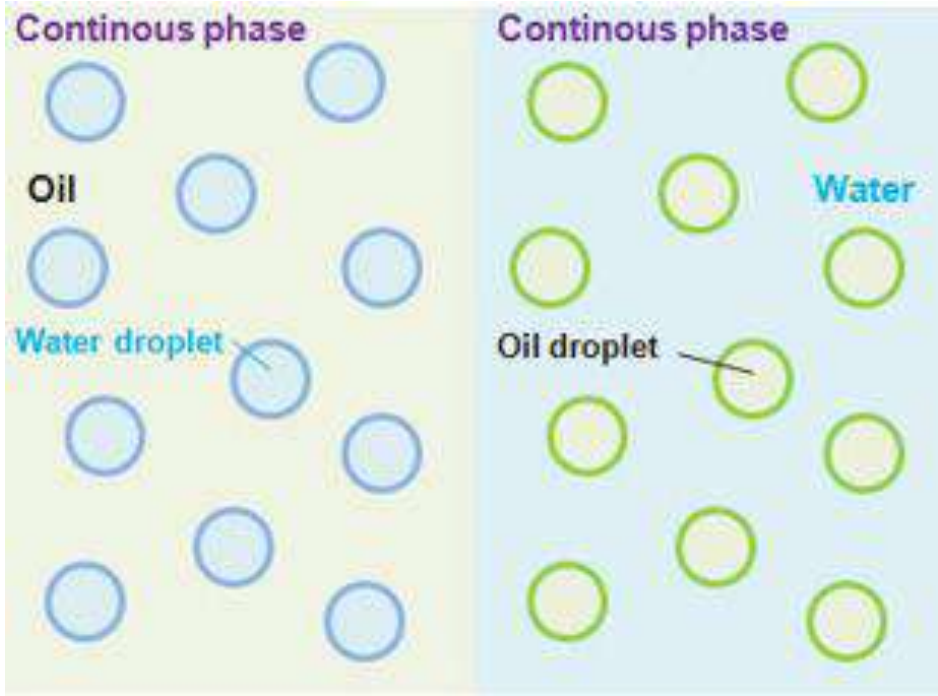
Homogeneous or Heterogeneous

Mixtures?
Example – oil & water

#14







A. Solution **C. Solvent**

B. Colloid **D. Emulsion**

Homogeneous **or** **Heterogeneous**

Mixtures?
Example – oil & vinegar shaken up

#15

A. Solution **C. Solvent**

B. Colloid **D. Emulsion**

Homogeneous or Heterogeneous

Mixtures?
Example – pure water

#16

A. Solvent **C. Suspension**
B. Colloid **D. Emulsion**

Homogeneous or Heterogeneous

Mixtures?
Example – fog
hint: Does fog settle?

#17

A. Solvent **C. Emulsion**

B. Colloid **D. All of the above**

Homogeneous or Heterogeneous

Mixtures? **#18**

Example – smoke

hint: Does smoke settle?

A. Solution **C. Suspension**

B. Solvent **D. Emulsion**

Homogeneous **or** **Heterogeneous**