



The Classification of Matter

Scientists like to classify things into groups, This makes it easier for us to understand them.

Matter can be classified into Pure substances and mixtures.



Classification of matter

Pure substances

- A pure substance consists of only one substance. It can be either an **element** or a **compound**.

Impure substances

- Impure substances are made up of different substances that are mixed together.
- They are known as **mixtures**.

Pure substances

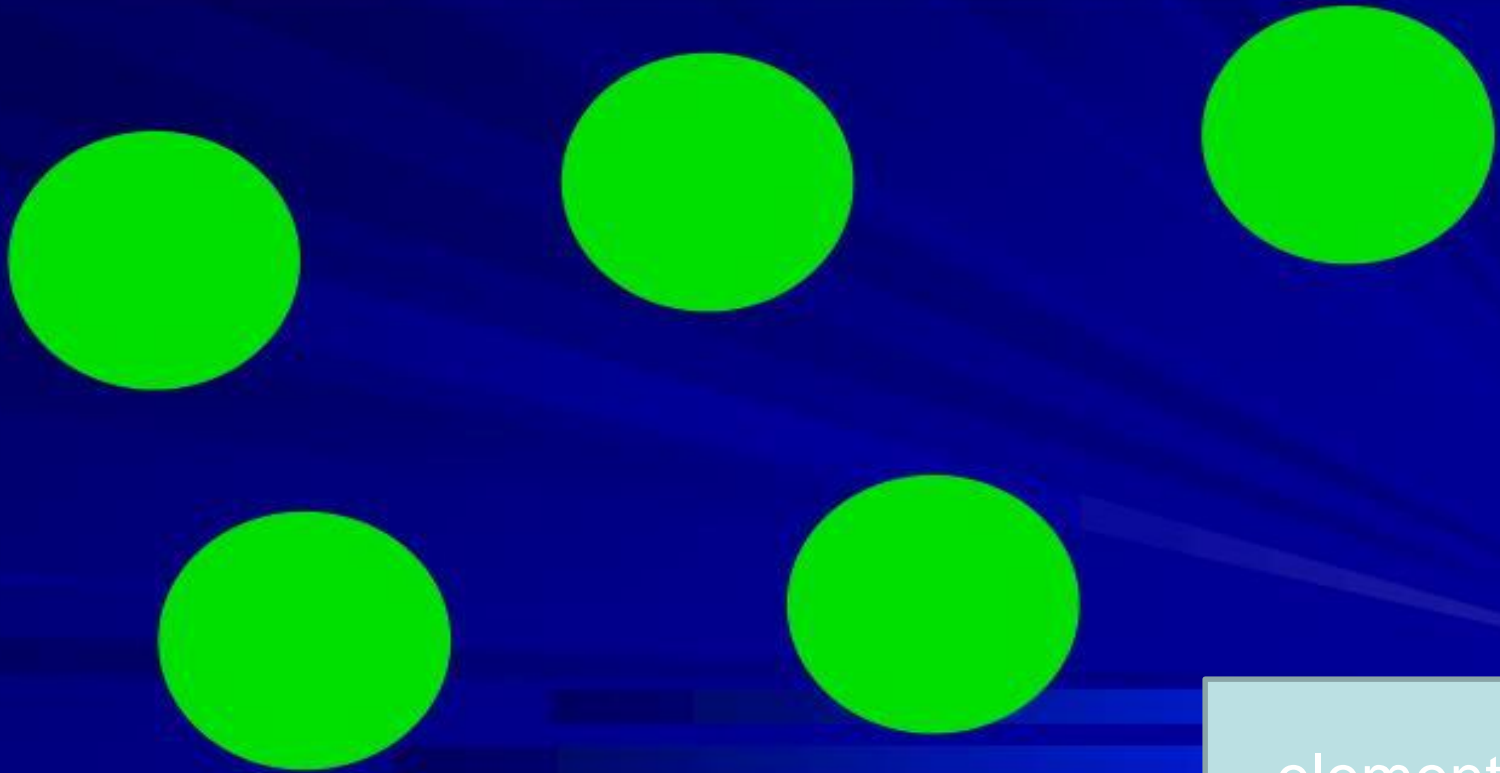
Elements

- Most elements can exist as a single atom
- But some elements (mostly gases) usually exist as molecules

Compounds

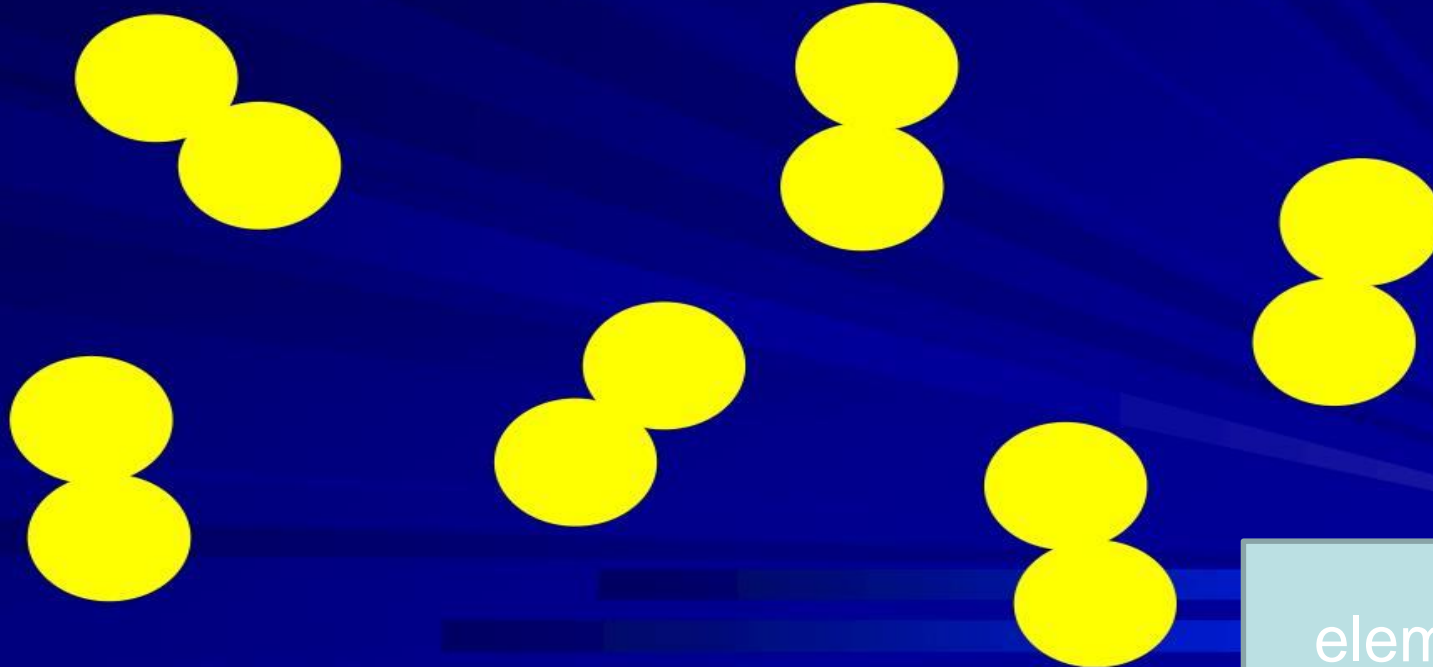
- They are composed of different types of elements (2 or more), chemically bonded to one another.

IDENTIFY THE FOLLOWING DIAGRAM

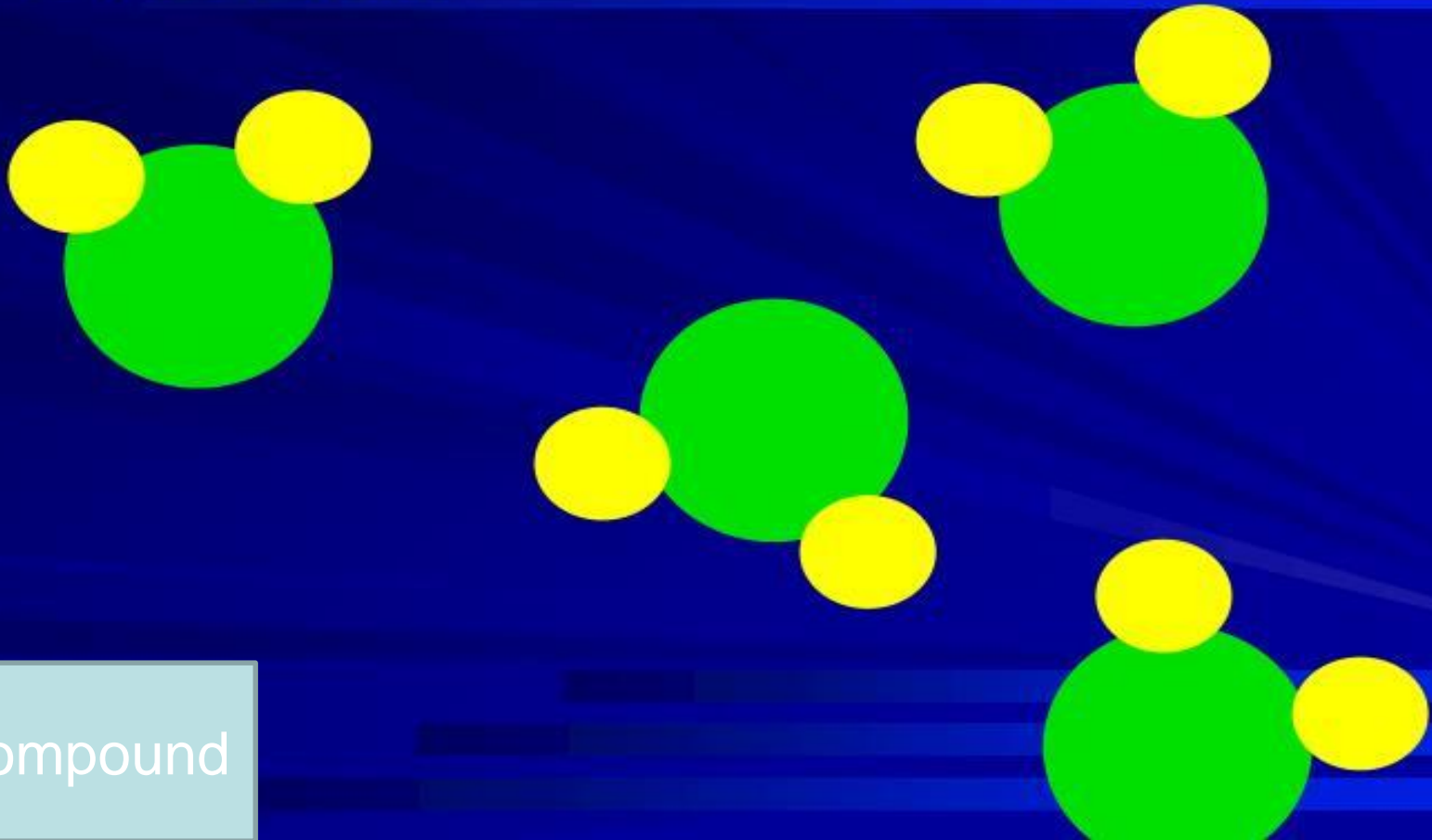


element

IDENTIFY THE FOLLOWING DIAGRAM

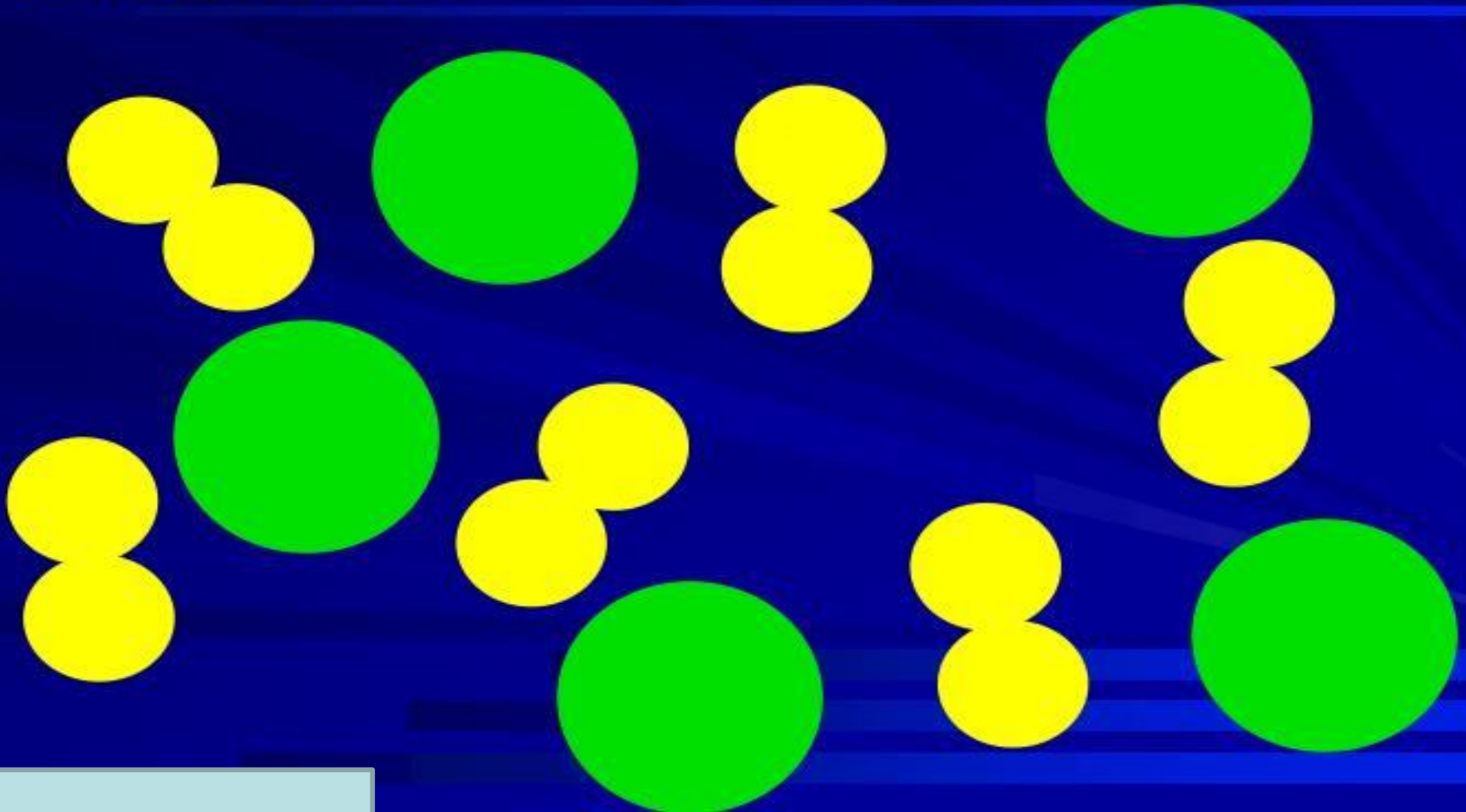


IDENTIFY THE FOLLOWING DIAGRAM



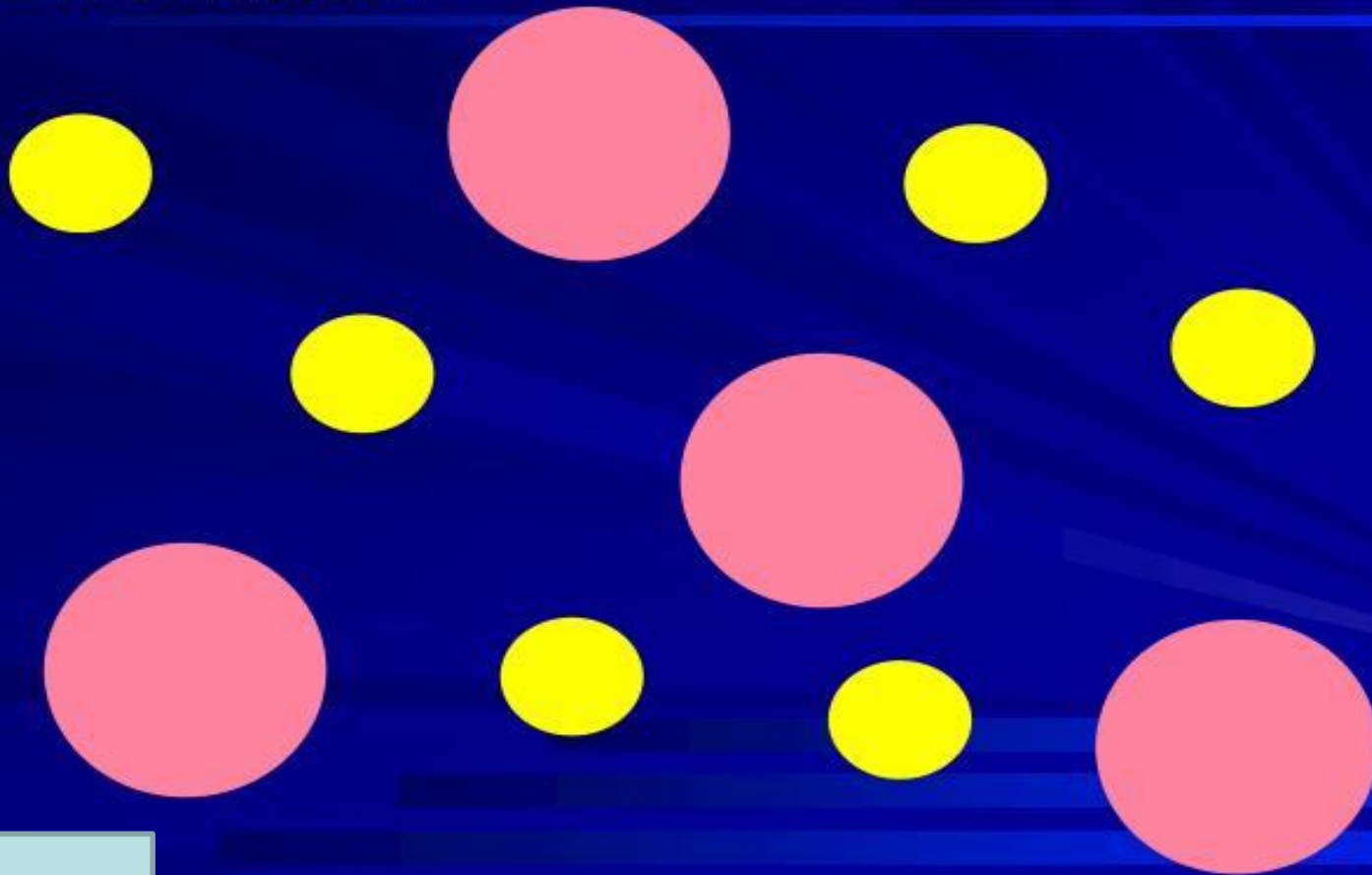
Compound

IDENTIFY THE FOLLOWING DIAGRAM



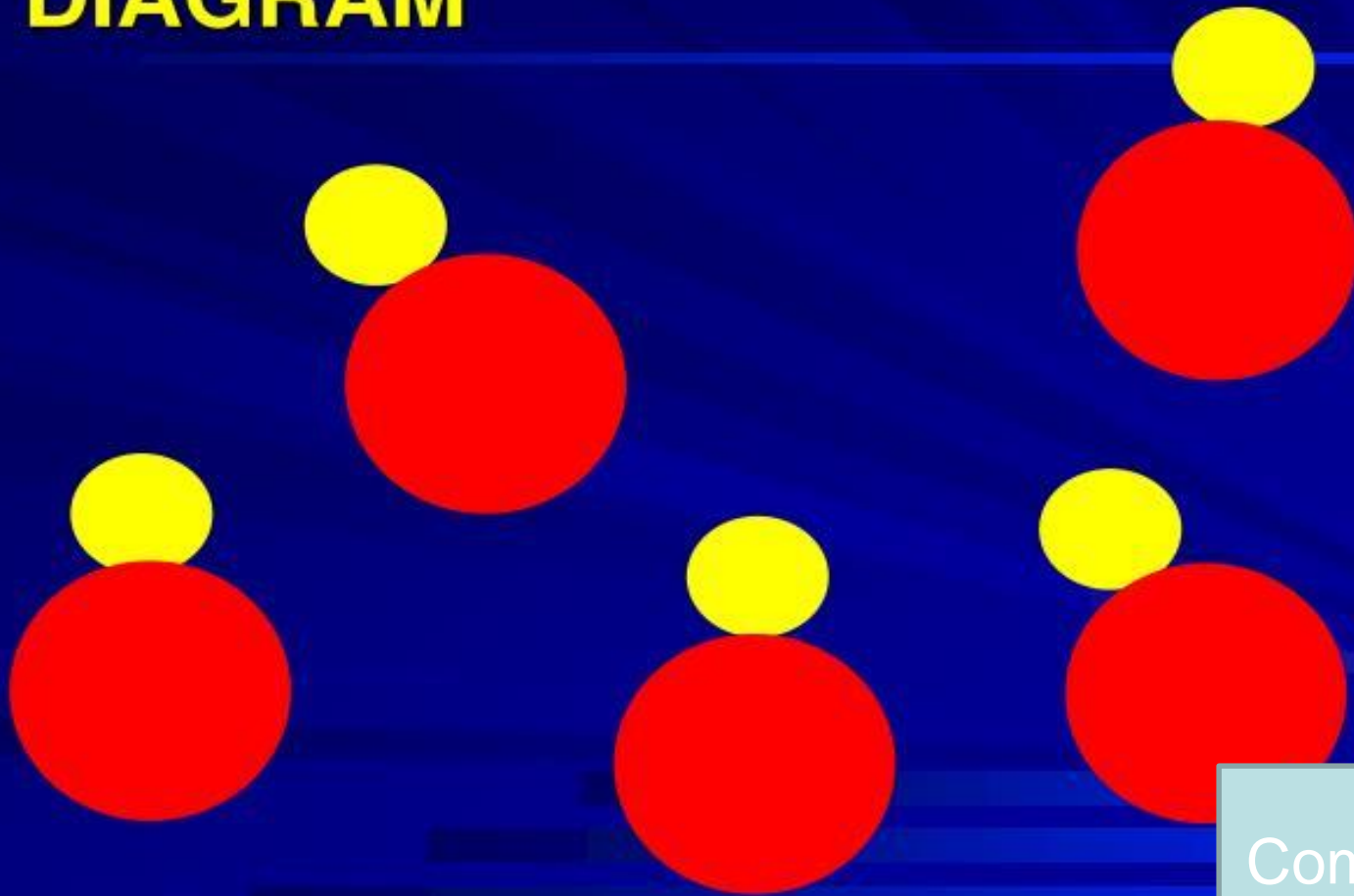
Mixture

IDENTIFY THE FOLLOWING DIAGRAM



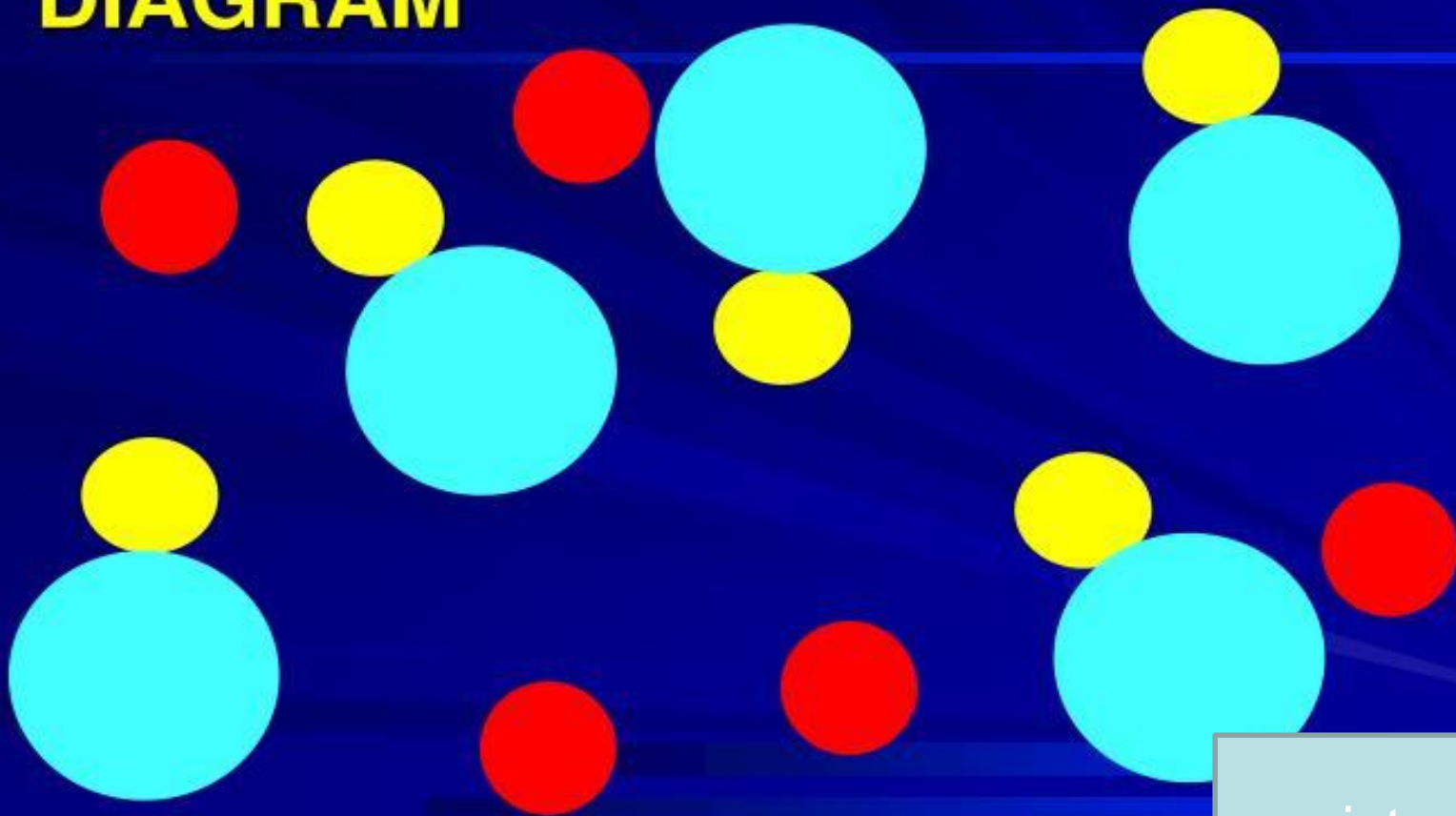
mixture

IDENTIFY THE FOLLOWING DIAGRAM



Compound

IDENTIFY THE FOLLOWING DIAGRAM



mixture

MIXTURES

A mixture is a substance made up of mixing two or more substances together, without any chemical reaction.

Purity describes how much of a substance is in a mixture.

To find out if a substance is pure or not, check its melting point & boiling point.

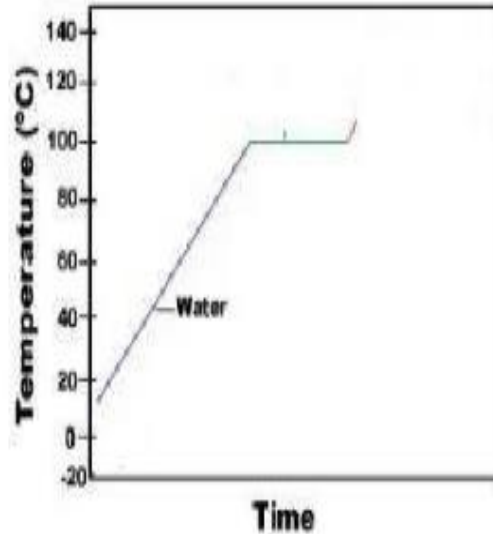
Purity

describes how much of a substance is in a mixture.

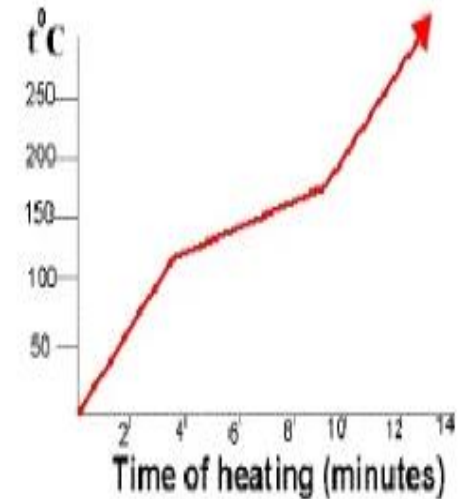
To find out if a substance is pure or not, check its melting point & boiling point.

<https://www.youtube.com/watch?v=3oJxWwcnfjY>

(FORMULATION IS NOT INCLUDED)



Pure substance:
Fixed boiling point



Mixture:
Unclear boiling point