

A student wants to test how sunlight affects plant growth. She places one Daisy on a windowsill and another Daisy in a cupboard. She waters the plant on windowsill everyday and the one in the cupboard once a week. After a month she records the number petals on each plant.

1) What is the dependent variable in this experiment?

↳ # of petals

2) Why is the experiment not fair?

watered plants different amounts.

3) How could she make the experiment fair?

→ water the plants the same amount each day.



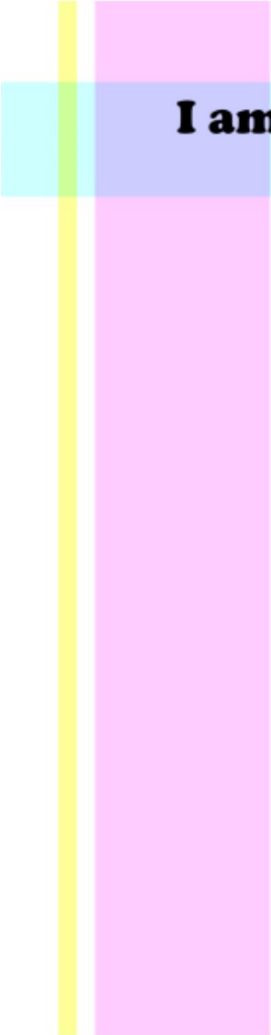


I am the Substance that dissolves a solute?

A. Solution

B. Solvent

C. Solubility



I am a mixture of two or more materials that merge to form one set of Properties?

A. Solution

B. Solvent

C. Solubility

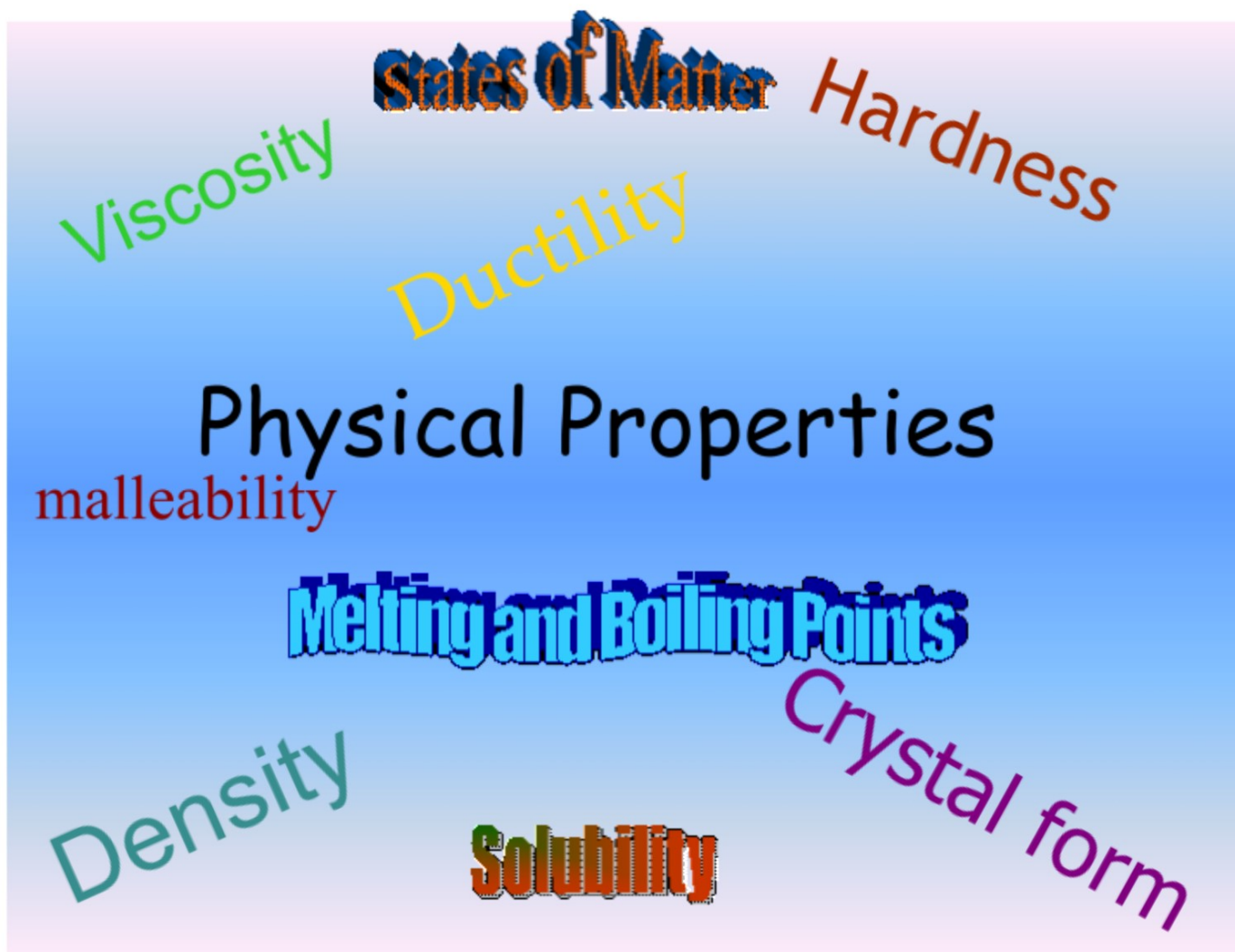


The ability of a substance to dissolve?

A. Solution

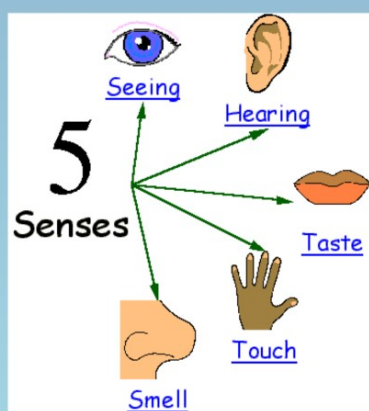
B. Solvent

C. Soluble



One of the physical properties of matter is its state.

Another way to describe physical properties is using our senses.



Physical Properties

What could we observe with from each of the 5 senses?

Examples

- i) Sight: color, bright, dull
- ii) Hearing: Bubbling, crackling, snapping
- iii) Taste: sweet, salty, bitter
- iv) Touch: Rough, soft, slimy,
- v) Smell: Sweet, rotten,

Some you can see But some you have to measure with devices.

Physical Properties

Property	Describing the Property
Colour	Is it black, white, colourless, red, greenish-yellow?
<u>Texture</u>	feels Rough or smooth, slimy....
Odour	Is it odourless, spicy, sharp, burnt...?
→ <u>Lustre</u>	Is it <u>shinny</u> , <u>dull</u> ..?
<u>Clarity</u>	Is it <u>clear</u> , <u>cloudy</u> , opaque....?
Taste	Is it sweet, sour, salty, bitter...?

Fill in from your knowledge the blanks

Name of Substance	Physical Properties	State of matter
a) Oxygen	colorless, smooth, odorless,cloudy	gas
b) Cocoa Powder	brown, fine powder, bitter dull	solid
c) Water with food coloring	red, smooth, odorless, dull	liquid
d) Olive Oil	yellowish, oily, cloudy	liquid



Oxygen that
we breathe



Water and food coloring



olive oil



Coco powder

2) Hardness

The measure of the resistance of a solid to being scratched or dented.



[Diamonds 101: How They Form and How They're Found - YouTube](#)
[How Do They Mine Diamonds? - YouTube](#)



Cool Fact: The Millennium Star (above) is the second largest flawless diamond at 203 carats. These types of diamonds are considered the rarest and the most valuable set of diamonds created. One of these only 10 carat diamonds cost in excess of 10 million dollars.