

Name _____

Date _____

SOLUBLE AND INSOLUBLE

Soluble and insoluble are properties of matter.

There are substances that **dissolve** in water. When a substance dissolves in water, it cannot be seen anymore. The substance is mixed with the water. We call this mixture a **solution**. The substance that dissolved is called a **soluble**. A substance that does not dissolve in water is called **insoluble**.



Now, for this experiment you will need the following:

1. Transparent containers (glass) or beakers (to hold 100-250 ml of water)
2. Water (warm and cold)
3. Substances – salt, sand, oil, pebbles, small leaves, brown sugar, caster sugar, ground coffee, black pepper, flour, food colouring, gelatine powder, and baking soda,

Add a teaspoon a substance to a transparent container of cold water and a glass of warm water, stir and observe the difference.

Watch to see if the substance dissolves in the warm water and cold water and if one is better than the other.

Record you findings in a chart. When you are done make notes as to what happens to each. Does the water remain transparent, get cloudy after stirring. Then determine if the substance is soluble or insoluble.

1. QUESTION

A solute dissolves in a _____.

☐ solution

☐ solvent

2. QUESTION

Write **soluble** or **insoluble** for each of the following substance.

salt –
oil –

sugar –
pebbles –

sand –
small leaves

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3. QUESTION

A substance that cannot dissolve in water is referred to as _____.

☒ soluble

☒ insoluble

4. QUESTION

Copper metal is _____.

☒ magnetic

☒ floats in water

☒ soluble in water

5. QUESTION

Select the material that is insoluble in water.

☒ sugar

☒ flour

☒ instant coffee

6. QUESTION

Select the two things that affect the speed a solid dissolves in water.

☐ type of containment

☐ amount of the solute

☐ size of grain

☐ temperature