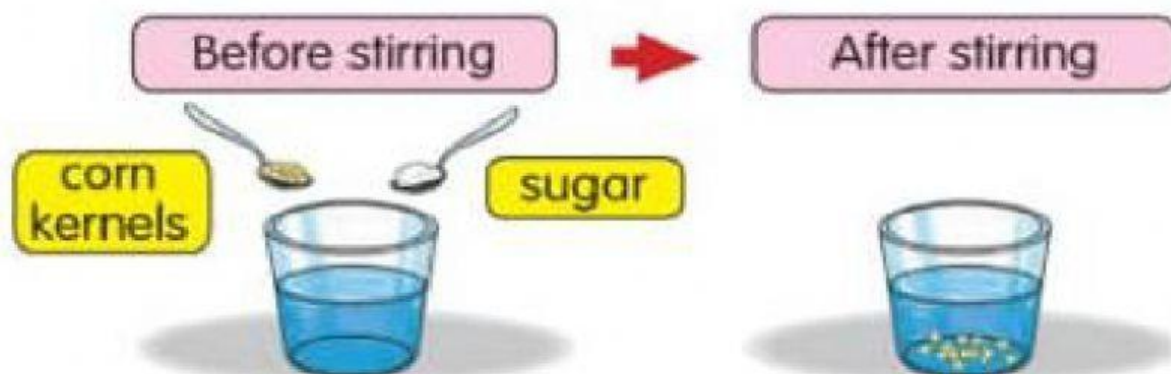




Soluble and Insoluble Materials

Nisa adds two materials into a glass of water and stirs.



Eh! Where is the sugar?
Why are the corn kernels
still visible?

The sugar is still there, but it
has dissolved in the water.
The corn kernels are still
visible because they don't
dissolve in the water.

8.1.3

Activity Book

Page:

Type your answers in the table and complete the questions.

Visible
Salt

Not visible
Green beans

Dissolve
Rice

Do not dissolve

4. Record your observation in the table as shown below.

Beaker	Materials	Visible/Not visible	Dissolve/ Do not dissolve
A	Salt		
B	Green beans		
C	Rice		

Question

dissolves in water. and do not dissolve in water.



Materials That Dissolve More Quickly

Situation 1



Which water can dissolve sugar more quickly?



I Investigate

>> 1

Investigating the Solubility of Sugar in Hot and Cold Water

Apparatus and Materials

- cold water
- hot water
- 2 beakers
- sugar
- spoon
- glass rods

Group Activity

Steps



1. Pour 200 ml of cold water into beaker A and 200 ml of hot water into beaker B.



2. Add one teaspoon of sugar into each beaker.

Type your answers in the blanks.

Cold

Hot



3. Stir the water in both beakers at the same time.

4. Observe the sugar in beaker A and beaker B. Which dissolves first?
5. Record your observation.

Question

Materials can dissolve more quickly in water than water.

Situation 2



Why is the tea still not sweet even after sugar has been added?



I Investigate

2

Investigating the Solubility of Sugar through Stirring

Apparatus and Materials

- water
- 2 beakers
- coarse sugar
- glass rod
- spoon

Group Activity

Steps



1. Pour 200 ml of water into each beaker.

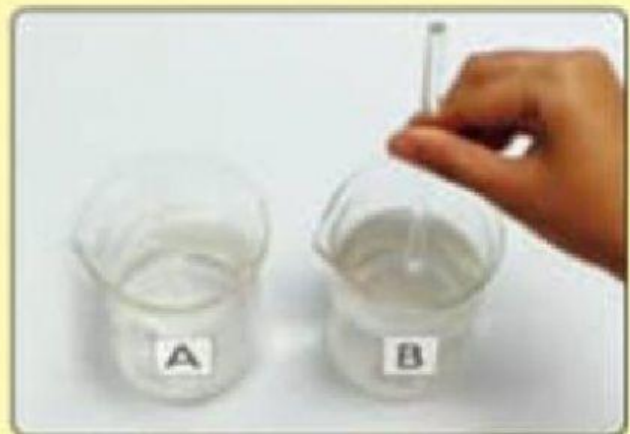
Type your answers in the blanks.

Stirred

Not stirred



2. Put one teaspoon of sugar into each beaker.
4. Record your observation.



3. Stir the water in beaker B only.

Question

Materials can dissolve more quickly in water if  (stirred/not stirred).

Situation 3



Why is this coffee still not sweet even though I've stirred it?



I Investigate

3

Investigating the Solubility of Coarse Sugar and Sugar Cubes

Apparatus and Materials

- water
- 2 beakers
- spoons
- glass rods



coarse sugar



sugar cubes

Type your answers in the blanks.

Big

Small



1. Pour 200 ml of water into each beaker.



2. Add one teaspoon of coarse sugar and one cube of sugar into each beaker.



3. Stir the water in both beakers at the same time.

4. Record your observation.

Question

 (Big/Small) sized materials dissolve more quickly than (big/small) sized materials.