

Water Mix-Up

Read for evidence about how solids and liquids mix with water.

3.3.a “solids and liquids mix with water in different ways; and”

NAME _____

DATE _____

1 READ AND MARK _____ Read it twice

YOUR JOB Underline each material that dissolved or spread evenly through water. Circle each material that stayed visible or formed a layer, then number the four materials.

Maya's Water Tests

- ① At the science table, Maya filled four clear cups with the same amount of water. She added a spoonful of salt to the first cup and stirred. Soon she could not see the salt. The salt had dissolved, or spread through the water in tiny pieces. The water still looked clear, but it tasted salty. Dissolving is one way some solids mix with water.
- ② In a second cup, Maya stirred in sand. The water turned cloudy for a short time. Then the sand grains sank to the bottom. The grains did not dissolve, so they stayed easy to see. Maya could pour the water through a filter to catch the sand. This solid mixed with water differently from salt.
- ③ Maya also tested two liquids. Blue food coloring spread through a cup of water when she stirred it. The color became even all through the cup. In another cup, she added cooking oil. Even after stirring, the oil formed drops and then rose into a layer on top. The oil did not dissolve in the water. Liquids can mix with water in different ways, too.

2

ANSWER WITH EVIDENCE

Use the passage

1

What two changes did Maya observe after she stirred salt into water?

2

Why did Maya know that sand did not dissolve in water?

3

How did blue food coloring and cooking oil behave differently in water?

4

Name one solid and one liquid that mixed all through water. Then name one solid and one liquid that did not mix all through water.

3

YOUR TURN

Your own words

Plan a water test with one solid and one liquid that are not named in the passage. For each material, write what you predict will happen after you stir it into water.

MATERIAL	SOLID OR LIQUID?	PREDICTION AFTER STIRRING IN WATER

PART 1 • READ AND MARK

Underline each material that dissolved or spread evenly through water. Circle each material that stayed visible or formed a layer, then number the four materials. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	What two changes did Maya observe after she stirred salt into water?	She could not see the salt, and the water stayed clear but tasted salty.
2	Why did Maya know that sand did not dissolve in water?	The sand grains sank to the bottom and stayed easy to see.
3	How did blue food coloring and cooking oil behave differently in water?	Food coloring spread evenly through the water. Cooking oil formed drops and then a layer on top.
4	Name one solid and one liquid that mixed all through water. Then name one solid and one liquid that did not mix all through water.	Salt and blue food coloring mixed all through water. Sand and cooking oil did not mix all through water.

PART 3 • YOUR TURN (SAMPLE ANSWER)

MATERIAL	SOLID OR LIQUID?	PREDICTION AFTER STIRRING IN WATER
sugar	solid	I predict it will dissolve and spread through the water when stirred.
vinegar	liquid	I predict it will mix evenly with the water.

Accept predictions that match a reasonable way the chosen material may mix with water. The student should choose one solid and one liquid not named in the passage and give a clear prediction for each.