

Name \_\_\_\_\_

Date \_\_\_\_\_

# SEPARATING MIXTURES

## Exercise

### 1. QUESTION

Connect the terms of the two columns.

#### SORT ELEMENTS

- With a magnet.
- distilling
- Heating until water vaporizes
- Heating until water vaporizes
- with a sieve

How can you separate oil from water?

How can you separate a mixture of alcohol and water?

How can you obtain salt from sea water?

How can you separate a mixture of sand and stones?

How can you separate a mixture of sulfur and iron filings?

### 2. QUESTION

True or false? Write **T** if the statement is **True** or **F** if the statement is **False**.

Mixtures are always a combination of compounds that are in different states of matter.

You can separate all mixtures by the process of filtration.

All mixtures are solutions.

Hand picking is not a method of separation.

Chromatography is a physical method of separation.

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**3. QUESTION**

All solutions are \_\_\_\_\_.

heterogeneous

homogeneous

**4. QUESTION**

Determine whether the following is a solution or a mixture.

Concrete block	
a cup of tea	

**5. QUESTION**

Small pieces of iron fell in salt. What is the best method to separate the pieces of iron from the salt? Explain.

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**6. QUESTION**

The ocean is an example of a \_\_\_\_.

soluble

solute

solution

**7. QUESTION**

A substance which dissolves in a solvent, such as salt, is called a \_\_\_\_.

solvent

solution

solute

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**8. QUESTION**

Which method is used to treat water for drinking by removing solid particles?

- chromatography                       filtration                       evaporation

**9. QUESTION**

This is the method for separating different components of a liquid.

- filtration                       magnetization                       chromatography

**10. QUESTION**

Which of the following is not a pure substance?

- distilled water                       table salt  
 aerated water                       baking soda

**11. QUESTION**

Which objects below would a magnet attract?

- chalk                       screws                       key  
 pencil                       paper clip                       button

**12. QUESTION**

Which of the following is an insoluble substance in water?

- salt                       flour  
 sugar                       chocolate powder

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**13. QUESTION**

How would you separate the following?

rice and stones –

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sand and rice –

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nails and pebbles –

**14. QUESTION**

You want to separate a large amount of salt from sand. Which two things should you do?

- Place the sand-salt mixture in water to dissolve the salt.
- Sieve the sand-salt mixture.
- Filter the saltwater.
- Use magnet to separate the mixture.
- Use a centrifugal device to separate the two mixtures.

**15. QUESTION**

How would you separate the following beads by colour?



- filtering
- hand sorting
- Sieving
- magnetism