Separating Mixtures

Worksheet 1: Understanding Mixtures



A **mixture** is made when two or more **materials** are combined and can often be separated.

Examples:



Trail Mix



Cereal and Milk



Sand and Pebbles

A. Circle the mixtures.

Which of these are mixtures? Circle them.



Glass of Water



Fruit Salad



Block of Wood



Trail Mix



Sand and Pebbles

B. Answer the Questions.

1. Why is trail mix a mixture? _____
2. Can sand and pebbles be separated? How? _____

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Worksheet 2: Separating Solids and Filtration



Some solids can be separated by hand-picking or sieving. **Filtration** separates an insoluble solid from a liquid.



A. Match the Mixtures to the Best Method.

Draw a line to match each mixture with the correct method.

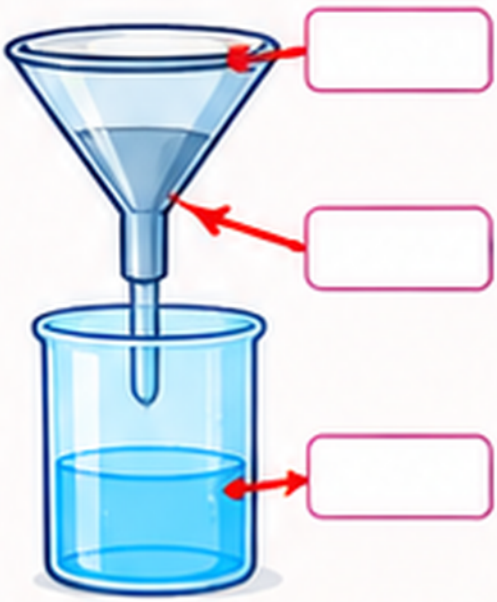
Sand and Water	Filtration
Stones and Sand	Sieving
Large Pieces in Trail Mix	Hand-Picking

B. Fill in the Blanks.

1. Filtration helps us separate an _____ solid from a liquid.
2. We can separate larger solids by _____.

C. Label the Diagram.

Write the correct words: (funnel, filter paper, beaker)



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Worksheet 3: Magnetism



Magnets attract some materials, especially **iron** and **steel**.

A. Sort the Objects.

Place each item in the correct column.


Iron Nail


Paper Clip


Steel Pin


Plastic Spoon


Wooden Block


Rubber Eraser


Glass Marble

Magnetic Materials	Non-Magnetic Materials

B. Circle the Magnetic Materials.

Circle the items that a magnet can attract.











C. Answer the Questions.

1. Why do magnets attract iron and steel?

_____

_____

2. Which items are not magnetic?

_____

_____









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Worksheet 4: Simple Separation Experiments

A. Sand and Water Filtration Experiment

Materials:

- Sand
- Water
- Funnel
- Filter Paper
- Beaker or Cup



Steps:

1. Put filter paper in a funnel.
2. Add sand and water.
3. Let the water pass through.

What did you observe? _____

B. Magnet Experiment

Materials: Magnet, Mix of iron filings and sand.

Steps:

1. Move the magnet over the mixture.
2. Watch what happens.



C. Answer the Questions.

1. How did filtration help us?

_____

_____

2. How did the magnet help us?

_____

_____

D. Reflection

Name one other way to separate a mixture.

_____