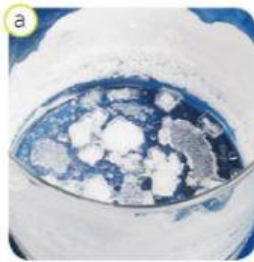


1. Match the photos to the methods of separation.

1 magnetic separation 2 distillation 3 evaporation 4 filtration



2. Classify the objects in the photos into pure substances or mixtures.



3. In your own words, explain the difference between a homogeneous mixture and a heterogeneous mixture. Use the examples below as part of your explanation.

air

cement

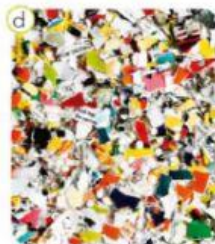
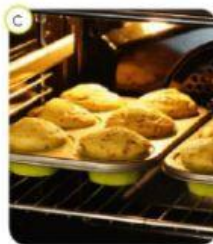
salad dressing

sand

steel

vinegar

4. Look at the pictures and say if the changes to materials are physical or chemical.



5. In your own words, explain the main difference between physical and chemical changes. Give two examples of each.

6. Match the sentence halves.

- | | |
|-------------------------------|---|
| 1 Mass is... | a specific properties. |
| 2 Volume is... | b the amount of matter in an object. |
| 3 We measure mass in... | c general properties. |
| 4 We measure volume in... | d the amount of space an object occupies. |
| 5 Mass and volume are... | e grams and kilograms. |
| 6 Hardness and density are... | f cubic centimetres and cubic metres. |

7. Apply the formula to calculate the density of the Wood in g/cm³.

$$\text{Density (}\rho\text{)} = \frac{\text{Mass (}m\text{)}}{\text{Volume (}V\text{)}}$$



mass = 50 g, volume = 70 cm³

8. In your own words, explain the difference between *reversible* and *irreversible* changes. Give two examples of each.
