

Materials Around Us — Worksheet Set B

Name: _____ Class & Section: _____ Date: _____

Section 1: Multiple Choice Questions (1 mark each)

1. Which property tells us whether a material can be scratched easily?

- (a) Hardness (b) Transparency (c) Solubility (d) Lustre

2. Which of these materials is soluble in water?

- (a) Sand (b) Chalk powder (c) Salt (d) Sawdust

3. Which object is opaque?

- (a) Clean glass (b) Wooden door (c) Butter paper (d) Polythene sheet

4. A cork placed in water will:

- (a) Sink (b) Float (c) Dissolve (d) Break

5. Which of the following is a rough material?

- (a) Silk cloth (b) Sandpaper (c) Glass (d) Mirror

6. Diamond is an example of a material that is:

- (a) Very soft (b) Very hard (c) Soluble (d) Translucent

7. A sheet of paper is an example of a material that is:

- (a) Hard (b) Soft and can be torn easily (c) Metal (d) Liquid

8. Which of these pairs of liquids are miscible?

- (a) Milk and water (b) Oil and water (c) Kerosene and water (d) Petrol and water

9. A window pane made of clear glass is an example of a material that is:

- (a) Opaque (b) Translucent (c) Transparent (d) Insoluble

10. Which of the following properties helps us group similar objects together?

- (a) Their price (b) Their common properties (c) Their owner's name (d) Their weight in kilograms only

Section 2: Fill in the Blanks (1 mark each)

1. Rubber is an example of a material that is soft and _____.

2. A material that can be seen through clearly is called _____.

3. Materials such as iron and gold that shine are called _____ materials.

4. Sand does not dissolve in water; it is _____ in water.

5. An object that is heavier than water will _____ in water.

6. Sandpaper has a _____ surface, unlike smooth glass.

7. Materials are grouped together based on their similar _____.

8. A frosted glass sheet is an example of a _____ material.
9. Salt dissolves in water, so it is a _____ substance.
10. The same object, like a spoon, can be made from more than one _____.

Section 3: True or False (1 mark each)

1. Hardness helps us decide whether a material can be cut easily.
2. Milk mixes completely with water.
3. Sand is soluble in water.
4. Cork is heavier than water, so it sinks.
5. Sandpaper has a rough surface used to smoothen wood.
6. All transparent materials are also soluble in water.
7. Objects can be made of a combination of more than one material.
8. Gold and silver are non-lustrous materials.
9. A wooden door is an opaque object.
10. Materials are sorted into groups only to make them look attractive.

Section 4: Match the Following (1 mark each)

Match the items in Column A with the correct items in Column B.

Column A	Column B
1. Sandpaper	A. Miscible liquids
2. Cork	B. Very hard material
3. Salt	C. Rough surface
4. Frosted glass	D. Floats on water
5. Diamond	E. Soluble in water
6. Rubber band	F. Elastic material
7. Wooden door	G. Translucent material
8. Milk and water	H. Opaque object
9. Oil and water	I. Immiscible liquids
10. Silk cloth	J. Smooth surface

Section 5: Answer in Two Lines (2 marks each)

1. What is meant by the hardness of a material?
2. Why is sandpaper used to smoothen rough wood?
3. Give an example of two liquids that do not mix with each other.
4. Why do we use transparent glass for windows?
5. Name any two materials that are soluble in water.
6. How can you find out if an object will float or sink in water?
7. What is the difference between a smooth and a rough surface?
8. Why are rubber bands considered elastic materials?
9. Name one lustrous and one non-lustrous material.
10. Why is it useful to know whether a material dissolves in water?

Section 6: Write Short Notes (5–8 lines) (3 marks each)

1. Explain what is meant by transparent, translucent, and opaque materials with examples.
2. Describe the property of solubility with a simple activity to demonstrate it.
3. Why do some materials float on water while others sink? Explain with the help of examples.
4. What is meant by miscible and immiscible liquids? Give examples.
5. Explain, with examples, how a single object can be made of more than one material.

Section 7: Answer in One Word (1 mark each)

1. The property of a material that lets us scratch or cut it easily is the opposite of _____.
2. A surface that feels even and flat is called _____.
3. A surface that feels uneven and grainy is called _____.
4. The ability of an object to return to its original shape after stretching is _____.
5. Materials that shine, like metals, are said to have _____.
6. When a substance dissolves completely in a liquid, the liquid is called a _____.
7. The property of an object to stay on top of water is called _____.
8. Two liquids that form separate layers instead of mixing are called _____.
9. A material like wood that does not shine is called _____.
10. Sorting objects into groups based on shared features is called _____.

Answer Key — Worksheet Set B

Section 1: Multiple Choice Questions

1. Hardness
2. Salt
3. Wooden door
4. Float
5. Sandpaper
6. Very hard
7. Soft and can be torn easily
8. Milk and water
9. Transparent
10. Their common properties

Section 2: Fill in the Blanks

1. elastic
2. transparent
3. lustrous
4. insoluble
5. sink
6. rough
7. properties
8. translucent
9. soluble
10. material

Section 3: True or False

1. True
2. True
3. False
4. False
5. True
6. False
7. True
8. False
9. True
10. False

Section 4: Match the Following

1. Sandpaper → Rough surface
2. Cork → Floats on water
3. Salt → Soluble in water
4. Frosted glass → Translucent material
5. Diamond → Very hard material
6. Rubber band → Elastic material
7. Wooden door → Opaque object
8. Milk and water → Miscible liquids

9. Oil and water → Immiscible liquids

10. Silk cloth → Smooth surface

Section 5: Answer in Two Lines

1. Hardness is the property of a material that tells us how difficult it is to scratch, cut, or press it out of shape; hard materials resist such changes.
2. Sandpaper has a rough, gritty surface that rubs off small bits of wood, gradually making the wooden surface smooth.
3. Oil and water do not mix with each other; the oil floats as a separate layer above the water.
4. Transparent glass allows light to pass through clearly, letting sunlight into the room while still protecting it from dust and wind.
5. Salt and sugar are two common materials that dissolve completely in water.
6. We can place the object gently on the surface of water in a container and observe whether it stays on top (floats) or goes down (sinks).
7. A smooth surface feels even and flat when touched, like glass, while a rough surface feels uneven and grainy when touched, like sandpaper.
8. Rubber bands stretch when pulled and return to their original shape and size when released, which is the property of elasticity.
9. Silver is a lustrous material because it shines, while chalk is a non-lustrous material because it does not shine.
10. Knowing solubility helps us decide how to use or store a material, such as keeping salt and sugar away from water and understanding how medicines dissolve in the body.

Section 6: Short Notes

1. Transparent materials allow light to pass through clearly so that objects on the other side can be seen distinctly, such as clean glass and water. Translucent materials allow only some light to pass through, so objects appear blurred or unclear, such as butter paper and frosted glass. Opaque materials do not allow any light to pass through them at all, so nothing can be seen through them, such as wood and metal sheets. This property is important while choosing materials for windows, curtains, and packaging.
2. Solubility is the ability of a substance to dissolve completely in a liquid to form a uniform mixture. To demonstrate this, take two glasses of water. Add a spoon of salt to one and a spoon of sand to the other, and stir both well. The salt will dissolve completely and disappear, showing it is soluble, while the sand will settle at the bottom and remain visible, showing it is insoluble. This simple activity helps us classify substances as soluble or insoluble.
3. Whether a material floats or sinks in water depends on its density compared to water. Materials that are lighter than water for their size, such as wood, cork, and dry leaves, float on the surface. Materials that are heavier than water for their size, such as iron, stone, and glass marbles, sink to the bottom. This property is used in real life to design boats, ships, and life jackets, which are made of materials that help them stay afloat.
4. Miscible liquids are liquids that mix completely with each other to form a single uniform solution, such as water and milk, or water and sugar syrup. Immiscible liquids do not mix with each other and instead form separate layers, such as oil and water, or kerosene and water. This property is important in daily life, for example, in separating oil from water using a separating funnel, or understanding why oil floats above water.
5. Many everyday objects are made using more than one material, with each material chosen for a specific property it provides. For example, a pencil has a wooden body for easy holding and a graphite core for writing, along with a rubber eraser and a metal band. Similarly, a bicycle uses metal for its strong frame, rubber for its flexible tyres, and plastic for its light handle grips. Combining materials in this way allows objects to be strong, useful, and comfortable at the same time.

Section 7: Answer in One Word

1. Hardness (i.e., Softness)
2. Smooth
3. Rough
4. Elasticity
5. Lustre
6. Solution
7. Floating (Buoyancy)

8. Immiscible liquids

9. Non-lustrous / dull

10. Classification