Matter and its states

Date _____ Topic 1/3

CUES · QUESTIONS

1. Definition of matter?
2. The 4 common states?
3. Which state is compressible?
4. Liquid: shape and volume?

Cover the notes. Answer each cue from memory.

NOTES

1 · Worked example Copy one example from the page. Next to each line write WHY in a few words.

2 · Fill in the blanks Cover the steps and redo it. Leave a gap where you are unsure.

3 · Your turn A new question. Then check it against the answer.

SUMMARY — IN MY OWN WORDS, TWO SENTENCES

🧊 Hardness, malleability, ductility, lustre, viscosity, diffusion, vapour

Date _____ Topic

2/3

CUES · QUESTIONS

1. Malleability?
2. Ductility?
3. Hardness?
4. Viscosity: honey vs water?

Cover the notes. Answer each cue from memory.

NOTES

1 · Worked example Copy one example from the page. Next to each line write WHY in a few words.

2 · Fill in the blanks Cover the steps and redo it. Leave a gap where you are unsure.

3 · Your turn A new question. Then check it against the answer.

SUMMARY — IN MY OWN WORDS, TWO SENTENCES

System vs phase

Date _____ Topic 3/3

CUES · QUESTIONS

1. System?
2. Phase?
3. Phases in oil + water? In salt water?
4. A mixture of two gases: how many phases?

Cover the notes. Answer each cue from memory.

NOTES

1 · Worked example Copy one example from the page. Next to each line write WHY in a few words.

2 · Fill in the blanks Cover the steps and redo it. Leave a gap where you are unsure.

3 · Your turn A new question. Then check it against the answer.

SUMMARY — IN MY OWN WORDS, TWO SENTENCES

🧊 Physical Properties of Matter · Formula and trap sheet

Everything you need before a test, on the fewest pages. Fold it and keep it in your binder.

Matter and its states

REMEMBER

- Matter = has mass + takes up space. 4 states: solid, liquid, gas, plasma.
- Solid: definite shape and volume. Liquid: indefinite shape, definite volume. Gas: both indefinite.

WATCH OUT

- Liquid has indefinite volume → it is the shape that changes; volume is definite.

Hardness, malleability, ductility, lustre, viscosity, diffusion, vapour

REMEMBER

- Malleable = sheets; ductile = wires; hardness = resists scratching; lustre = shiny vs dull.
- Viscosity = resistance to flow (honey high). Diffusion = high → low concentration to equilibrium.

WATCH OUT

- Malleable = wire → no: malleable = sheet, ductile = wire.
- High viscosity = runny → high viscosity = thick, slow.

System vs phase

REMEMBER

- System = what you are studying. Phase = a uniform part of the system.
- Different states or layers = different phases. Gas mixtures = 1 phase. Solutions = 1 phase.

WATCH OUT

- Two gases = 2 phases → gases always mix into 1 phase.
- Salt water = 2 phases (two substances) → 1 phase.