🔥 Physical vs chemical properties

Date _____ Topic 1/3

CUES · QUESTIONS

1. What is matter?
2. Physical property — definition?
3. Chemical property — definition?
4. "Mercury is a liquid at room temperature" — P or C?

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

🔥 Extensive vs intensive properties

Date _____ Topic 2/3

CUES · QUESTIONS

1. Extensive property?
2. Intensive property?
3. Fastest test?
4. Temperature — E or I?

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 vs chemical change

Date _____ Topic 3/3

CUES · QUESTIONS

1. Chemical change?
2. Physical change?
3. Are phase changes physical or chemical?
4. Clues of a chemical change?

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

🔥 Properties & Changes • Formula and trap sheet

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

Physical vs chemical properties

REMEMBER

- Physical property: observe or measure, substance unchanged (colour, density, mp, bp, hardness).
- Chemical property: how it reacts to form a new substance (rusts, burns, reacts with acid, tarnishes).

WATCH OUT

- "Gasoline is flammable" → physical (nothing is burning) ✕ → chemical (ability to burn) ✓

Extensive vs intensive properties

FORMULAS

$D = \frac{m}{V}$ — Density = mass ÷ volume: extensive ÷ extensive gives an intensive property

REMEMBER

- Extensive = depends on amount (mass, volume, length, surface area).
- Intensive = amount does not matter (density, mp, bp, colour, temperature, viscosity).

WATCH OUT

- Temperature → extensive ✕ → intensive ✓ (a cup and a tub can both be 40 °C)

Physical vs chemical change

REMEMBER

- Chemical change: new substance forms; hard to get the original back.
- Physical change: same substance; only form, phase or appearance changes.

WATCH OUT

- Boiling makes gas → chemical ✕ → water vapour is still water → physical ✓
- Broken glass cannot be undone → chemical ✕ → still glass → physical ✓