



Give the marks for the points in the marking scheme; an answer in other words that says the same is right.

1 Key words

1. sodium chloride
2. baking soda
3. sugarcane
4. sodium
5. metals
6. iron
7. malleability
8. ductility

K • 4

Each carries 0.5 mark.

2 Match the following

1. baking soda → d. makes bread and cakes rise
2. common salt → e. preserves fish, meat and pickles
3. phenol → g. disinfects floors and toilets
4. stain remover → b. removes ink and paint stains
5. copper → f. electric wires
6. detergent → c. washes clothes even in hard water

K • 3

Each carries 0.5 mark.

3 Multiple choice

- i. c. sodium bicarbonate

K • 1

Baking soda is sodium bicarbonate. Sodium chloride is common salt, and sodium carbonate is washing soda.

- ii. b. ghee, oil, salt and sugar

U • 1

Ghee, oil, salt and sugar are all used as food. Each of the other groups mixes in a cleaner (soap, phenol or stain remover).

- iii. d. bad conductor of heat

K • 1

Non-metals are bad conductors of heat. The other three are properties of metals.

- iv. c. oxygen

K • 1

Oxygen is a non-metal (a gas). Lead, zinc and gold are metals.

- v. c. Non-metals make a special ringing sound.

U • 1

It is metals that ring when struck (they are sonorous). Non-metals make a dull sound. The other three statements are true.

4 Very short answers

- a. MARKING SCHEME

K • 1

✓ Sucrose.

- b. MARKING SCHEME

K • 1

✓ Mercury.

- c. MARKING SCHEME

K • 1

✓ Any two of jewelry, coins, medals, tooth crowns, parts of phones.



5 Short answers

a. MARKING SCHEME

U • 2

- ✓ When heated or mixed with something sour, baking soda gives off carbon dioxide gas.
- ✓ The gas bubbles are trapped in the dough, so it rises and becomes soft and spongy.

b. MARKING SCHEME

U • 2

- ✓ Any one difference, e.g. a solid bar; a powder or liquid.
- ✓ Any second difference, e.g. little lather in hard water; cleans well in hard water.

c. MARKING SCHEME

U • 2

- ✓ Metals are good conductors of heat, so the fire's heat passes quickly to the food.
- ✓ Metals are malleable, so they can be beaten into the shape of pots (they are also strong and don't melt in the fire).

d. MARKING SCHEME

A • 2

- ✓ The metal coin conducts electricity, so current flows; the rubber doesn't, so the bulb stays dark.
- ✓ Metals are good conductors of electricity and non-metals bad conductors.

6 Long answer

ANSWER

U • 4

Metals have luster; non-metals have none (except iodine and graphite). Metals are usually hard; non-metals usually soft. Metals ring when struck; non-metals don't. Metals are malleable and ductile; non-metals are neither. Metals are good conductors of heat and electricity; non-metals are bad conductors (except graphite).

MARKING SCHEME

- ✓ A first correct difference, e.g. luster; no luster.
- ✓ A second, e.g. hard; soft.
- ✓ A third, e.g. malleable and ductile; neither.
- ✓ A fourth, e.g. good conductors; bad conductors (or sonorous; not sonorous).

7 Think

ANSWER

HA • 2

Soap and water can't dissolve this ink. Use a **stain remover**: put a little on the stain, rub gently, leave it for a few minutes, then wash the cloth with detergent and rinse it. (A little rubbing alcohol, such as hand sanitizer, also loosens ballpoint ink.) Treat the stain soon, before it dries in.

MARKING SCHEME

- ✓ Soap and water can't dissolve this ink, so a stain remover is needed.
- ✓ Put a little stain remover on the stain, rub gently, leave it for a few minutes, then wash with detergent and rinse.

8 Activity: Metal or non-metal?

(not marked)

WHAT STUDENTS SHOULD FIND

The iron nail, copper wire and aluminium foil shine, flatten when hammered and ring when tapped: metals. The coal (carbon) is dull, breaks into pieces and makes a dull sound: a non-metal.

Marks by level	Knowledge	Understanding	Application	Higher ability	Total
Marks	13	12	2	2	29

