GRADE 7 INTERGRATED SCIENCE

Marking scheme integrated science Grade 7

1. Chemistry
2. (a) A – Carcinogenic B - Harmful to the environment

   (b) A – Causes cancer exposure B – Could cause damage to the biotic environment
3. (a) Heterogenous mixture/Non uniform mixture

   (b) By hand picking/ picking
4. Hot liquid, Laboratory chemicals and Naked flames.
5. (a) A – A boy or an Adolescent B – Father

   (b) Observation skills and Prediction skills
6. (a) A wire gauze

   (b) Ensures even distribution of heat. This prevents cracking of glass apparatus. It holds small apparatus that cannot reach the edge of a tripod stand.
7. Tartaric acid reacts with sodium hydrogencarbonate present in the baking powder. This produces carbon (IV) oxide which causes the dough to rise.
8. (a) To condense the vapour of the liquid with higher boiling point and allow it to flow back to the flask before its boiling point is reached.

   (b) Methanol. Its boiling point is lower than that of propanol.

   (c) They have different melting points but close boiling points.
9. Plant extracts are unstable and they keep changing with time. This makes commercially prepared acid- base indicators such as litmus papers, methyl orange and phenolphthalein indicators more stable and reliable.
10. Stinging nettle plant produces an acidic substance.

    Aqueuous ammonia solution is basic hence neutralizes the acidic product.
11. (a) Chromatography

    (b) (i) Q – It has no spot corresponding to those of mixture T.

    (ii) S - It moved the shortest distance from the baseline hence it is most sticky and least soluble.