



THE KENYA NATIONAL EXAMINATIONS COUNCIL

SBA INTEGRATED SCIENCE GRADE 7 SCORING GUIDE

Question No.	Expected response	Scores	Comments
1(a)(i)	Amount/intensity of sunlight received by the plants.	1	Accept sunlight or light intensity.
1(a)(ii)	The plants were exposed to different amounts of sunlight while other factors were kept the same.	1	Must relate to change in sunlight.
1(b)(i)	Any two: same type of plant, same age of seedlings, same amount of water, same soil type, same container size.	2	1 mark each.
1(b)(ii)	To ensure that any difference in growth was caused only by sunlight.	1	Accept equivalent response.
1(c)(i)	Increased exposure to sunlight promotes plant growth.	1	Any valid conclusion from results.
1(c)(ii)	Plant A received the most sunlight and showed the greatest growth while Plant C received the least and grew the least.	1	Must use results as evidence.
1(d)	It would make the investigation unfair because water would become another variable affecting growth, making it difficult to determine the effect of sunlight alone.	2	1 mark for introducing another variable; 1 mark for effect on validity.
2(a)	No. Iron filings should first be removed using a magnet before adding water.	1	Accept any logical justification.
2(b)	Use a magnet to remove iron filings; add water to dissolve salt; skim/filter off floating plastic beads; filter to separate sand; evaporate water to recover salt.	2	Award for correct sequence.
3(a)	No. Solution R is neutral because neither blue nor red litmus changes colour.	1	Must identify neutral solution.
3(b)(i)	The mixture is likely to become neutral or less acidic/basic.	1	Accept neutralisation idea.
3(b)(ii)	P is acidic while Q is basic; mixing them causes neutralisation.	1	Must mention opposite properties.
3(c)	Tasting is unsafe because the solutions may be harmful; use indicators such as litmus paper, universal indicator or pH paper.	1	Both parts required.
3(d)	Litmus paper only shows whether a solution is acidic or basic and does not indicate its strength (pH).	1	Accept equivalent explanation.
4(a)	Growth of facial hair in boys or the start of menstruation in girls shows that the reproductive	1	Award for identifying either

	system has become active/mature during adolescence.		facial hair growth or menstruation and linking it to reproductive maturity
4(b)	Menstruation occurs only in girls because girls have female reproductive organs such as the uterus and ovaries, which are involved in the menstrual cycle. Boys do not have these organs.	1	Award for linking menstruation to the presence of female reproductive organs/uterus.
4(c)	Example: Ovary – produces ova (egg cells). OR Testis – produces sperm cells.	1	Accept any correct reproductive organ and a correct role that becomes active during adolescence.
5(a)	The kidney regulates water balance by controlling the amount of water reabsorbed and excreted.	1	Accept osmoregulation role.
5(b)	The kidneys reabsorbed more water into the bloodstream, producing a small amount of concentrated dark urine.	1	Must link dehydration to water reabsorption.
5(c)(i) & (ii)	No. The dark colour is due to concentrated urine caused by less water, not necessarily more waste.	1	Reason required.
5(d)	Any one: reduced sweating, increased thirst.	1	Accept any valid response.
6(a)	The conclusion is incorrect. The cell provides electrical energy while the switch only completes or breaks the circuit.	1	Distinguish roles.
6(b)	The bulb will not light because the cut wire breaks the circuit and prevents current flow.	1	Accept equivalent answer.
6(c)	Disagree. Repairing the wire while the cell is connected may complete the circuit and pose a safety risk.	1	Any valid safety reason.
7(a)	The magnets moved apart because the N-poles were facing each other . Like poles repel, so a magnetic force pushed the magnets away from each other even though they were not touching.	1	Must like poles repelling.
7(b)	The N-pole of one magnet should face the S-pole of the other magnet because unlike poles attract.	1	Arrangement and reason required.
7(c)	Place the third magnet behind either P or Q with like poles facing, so it pushes the magnet towards the other magnet. This increases the repulsive force between P and Q.	1	Any valid arrangement causing repulsion.

GRADE 7 ASSESSMENT RUBRICS

S/N	Tasks	Maximum Score	Score's Range	Performance Level	Description
1	Scientific Investigation	9	7-9	4	Exceeding Expectation
			5-6	3	Meeting Expectation
			3-4	2	Approaching Expectation
			0-2	1	Below Expectation
2	Matter	8	7-8	4	Exceeding Expectation
			4-6	3	Meeting Expectation
			2-3	2	Approaching Expectation
			0-1	1	Below Expectation
3	Living Things	7	6-7	4	Exceeding Expectation
			4-5	3	Meeting Expectation
			2-3	2	Approaching Expectation
			0-1	1	Below Expectation
4	Force and Energy	6	5-6	4	Exceeding Expectation
			3-4	3	Meeting Expectation
			2	2	Approaching Expectation
			0-1	1	Below Expectation

SCORE SHEET

S/ N	Assessment Number	Learner's Name	Task 1	Task 2	Task 3	Task 4
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