THE KENYA NATIONAL EXAMINATIONS COUNCIL

SBA INTEGRATED SCIENCE GRADE 8 SCORING GUIDE

Question No.	Expected Response	Scores	Comments
1(a)	Disagree. Mixing iron and oxygen forms a mixture, while substance Z is formed by chemical reaction and is a compound.	1	Accept equivalent explanation.
1(b)	Substance Z contains iron and oxygen chemically combined in a fixed ratio.	1	Must mention chemical combination.
1(c)(i)	Iron and oxygen.	1	Both required.
1(c)(ii)	Substance Z is a compound made of two elements chemically combined.	1	Accept "can be decomposed into elements".
2(a)	Ice melting is a physical change because no new substance is formed. Paper burning is a chemical change because new substances (ash and smoke) are formed.	2	1 mark each.
2(b)	Learner B is correct because rusting forms a new substance (rust).	1	Must mention new substance.
2(c)	Evaporate the water and recover sugar crystals unchanged.	1	Accept any valid recovery method.
3(a)	Water can cause the burning oil to splash and spread the fire.	1	Accept equivalent response.
3(b)	Cover with a fire blanket/lid or use a suitable extinguisher.	1	One suitable method only.
3(c)(i)	To ensure the correct extinguisher is selected.	1	Accept equivalent response.
3(c)(ii)	Using the wrong extinguisher may worsen the fire or cause injury.	1	Any valid reason.
4(a)(i)	Learner A.	1	Correct identification.
4(a)(ii)	Any two: presence of cell wall, chloroplasts, large vacuole, regular shape.	2	1 mark each.
4(c)	Cell membrane / cytoplasm / nucleus.	1	Any one.
5(a)	Water moved out of the tissue by osmosis into the concentrated salt solution, causing the tissue to shrink.	2	1 mark osmosis; 1 mark shrinkage explanation.
5(b)	The tissue would swell/become larger.	1	Accept "gain water".
6(a)(i)	Menstruation does not mean all eggs are lost; usually one ovum is released during a cycle.	1	Accept scientifically correct explanation.
6(a)(ii)	Ovulation would stop and the menstrual cycle would be disrupted/stop.	1	Accept equivalent response.
6(b)(i)	Learner 2.	1	Correct learner identified.

6(b)(ii)	Fertilisation occurs only when male and female gametes meet under suitable conditions.	1	Must mention meeting of gametes.
7(a)	The torch will not light because the circuit is incomplete without dry cells.	1	Accept equivalent response.
7(b)	The torch gets energy from chemicals in dry cells while the lamp gets energy from sunlight.	1	Initial energy sources required.
7(c)	Chemical energy → electrical energy → heat energy.	1	Accept correct transformation.
7(d)	Yes. A solar lamp uses renewable solar energy and reduces dependence on stored chemical energy.	1	Accept justified alternative view.
8(a)	The pin has a smaller contact area and therefore exerts greater pressure on the clay.	1	Pressure concept required.
8(b)	The wooden block would sink deeper into the clay.	1	Accept equivalent prediction.
8(c)	Reduce the contact area, e.g. place the block on a smaller face/edge.	1	Any valid method that increases pressure.

GRADE 8 ASSESSMENT RUBRICS

S/N	Tasks	Maximum Score	Score's Range	Performance Level	Description
2	**Matter**	12	10-12	4	Exceeding Expectation
			6-9	3	Meeting Expectation
			4-5	2	Approaching Expectation
			0-3	1	Below Expectation
3	**Living Things**	11	10-11	4	Exceeding Expectation
			6-9	3	Meeting Expectation
			4-5	2	Approaching Expectation
			0-3	1	Below Expectation
4	**Force and Energy**	7	6-7	4	Exceeding Expectation
			4-5	3	Meeting Expectation
			2-3	2	Approaching Expectation
			0-1	1	Below Expectation

SCORE SHEET

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