2013 Science

Standard Grade Foundation

Finalised Marking Instructions

Part One: General Marking Principles for Science Standard Grade Foundation

This information is provided to help you understand the general principles you must apply when marking candidate responses to questions in this Paper. These principles must be read in conjunction with the specific Marking Instructions for each question.

(a) Marks for each candidate response must always be assigned in line with these general marking principles and the specific Marking Instructions for the relevant question. If a specific candidate response does not seem to be covered by either the principles or detailed Marking Instructions, and you are uncertain how to assess it, you must seek guidance from your Team Leader/Principal Assessor.

(b) Marking should always be positive ie, marks should be awarded for what is correct and not deducted for errors or omissions.

GENERAL MARKING ADVICE: Science Standard Grade Foundation

The marking schemes are written to assist in determining the "minimal acceptable answer" rather than listing every possible correct and incorrect answer. The following notes are offered to support Markers in making judgements on candidates' evidence, and apply to marking both end of unit assessments and course assessments.

Marking

The utmost care must be taken when entering and totalling marks. Where appropriate, all summations for totals must be carefully checked and confirmed.

Where a candidate has scored zero marks for any question attempted, "0" should be entered against the answer.

Recording of Marks

Where papers assess more than one element, care must be taken to ensure that marks are entered in the correct column.

The **Total** mark for each paper or element should be entered (in red ink) in the box provided in the top-right corner of the front cover of the answer book (or question/answer book).

Always enter the **Total** mark as a **whole number**, where necessary by the process of rounding up.

The transcription of marks, within booklets and to the Mark Sheet, should always be checked.

Markers are reminded that they must not write comments on scripts – comments include words or acronyms.

Ticks, crosses, lines and numbers are acceptable.

Part Two: Marking Instructions for each Question

Please note that **FRACTIONAL** marks should **NOT** be awarded for responses to questions on this paper.
Please note that where a question specifies circling or underlining, other forms of clearly indicating a response are acceptable.

				Space for Notes
1	**a**	34 and 31 both required, any order	**PS1**	
1	**b**	Alaskan pipeline **and** Oil transportation	**PS1**	All four words required with no additional information accepted e.g. Alaskan pipeline **,** Oil production **and** transportation, zero marks
2	**a**	meat/meat products or alternatives **1 mark** fruit and/or vegetables **1 mark**	**KU2**	**Accept** fish, poultry, chicken, nuts/beans/pulses for meat alternatives **Accept** meat and/or vegetables/fruit on one line for 2 marks **if no other answer given**; if another answer is given, e.g. water, maximum 1 mark **Not** cheese/dairy/ protein for meat **Not** single named fruit or vegetable/salad **Not** any answer which includes any of the given information e.g. meat **and** carbohydrates
2	**b**	Anorexia	**KU1**	Apply cancelling errors

					Space for Notes
3	**a**	**Producers** grass pondweed	**Consumers** beetle sparrow **All required**	**KU1**	
3	**b**	(The) Sun		**KU1**	Apply cancelling errors
4		move rocks upwards Love (waves)	body (waves) Secondary (waves) **All correct, 2 marks** **2,3 correct, 1 mark**	**PS2**	For 'move rocks upwards' **<u>Accept</u>** • move up(wards) • rocks up(wards) **<u>Not</u>** • up • upwards • move rocks

				Space for Notes
5	**a**	Any **one** from Suppleness (flexibility) Stamina (endurance)	**KU1**	**<u>Not</u>** • Speed • Power • Strength (given in question)
5	**b**	**Idea of** <u>Regular</u> exercise/training/visit to gym/sport Exercise <u>for longer</u> Exercise <u>more</u> <u>Intense</u> exercise	**KU1**	**<u>Not</u>** • Exercise alone e.g. go to gym • Healthy eating ideas • Stop smoking
6	**a**	Walls	**PS1**	
6	**b**	floor and windows **Both required**	**PS1**	
6	**c**	60	**PS1**	Accept answer from space for working
7		Arch, triangles **1 mark each**	**KU2**	

				Space for Notes
8	**a**	Any **one** from Oil, gas, wood, peat or other named fuel	**KU1**	**NOT** coal (given in stem) electricity
8	**b**	Any **one** from Idea of operating electrical appliances (or named example), light(ing), cook(ing), heating water	**KU1**	**NOT** electricity heating (given in question)
9		**Use of material** — **Property** concrete supports in a bridge stainless steel sink brass pins on an electric plug copper pans good electrical conductivity good thermal conductivity good strength good resistance to corrosion **3 correct , 2 marks** **1,2 correct, 1 mark**	**KU2**	

				Space for Notes
10	**a**	2 and 3	**PS1**	
10	**b**	Idea of If the thickness (of the mineral/wool) made any difference	**PS1**	
11	**a**	125	**PS1**	
11	**b**	100	**PS1**	
11	**c**	Accept answers 380-400 inclusive	**PS1**	
12	**a**	Shelter Water **Both required**	**KU1**	
12	**b**	C conservation	**KU1**	

				Space for Notes
13		Lung cancer, heart disease, bronchitis **All correct, 2 marks** **1,2 correct, 1 mark**	**KU2**	Four responses 3 correct and 1 incorrect, 1 mark
14	**a**	Fox and weasel	**KU1**	
14	**b**	Any **one** from Hedgehog or toad	**KU1**	
14	**c**	Any **one** from Green plant → caterpillar → hedgehog → fox Green plant → slug → hedgehog → fox Green plant → slug → toad → fox	**KU1**	

				Space for Notes
15	**a**	Giraffe 4 Sloth 20 Hamster 14 Guinea pig 7 **8 correct, 2 marks** **5,6,7 correct, 1 mark**	**PS2**	Information can be shown in any order
15	**b**	3 bars correct height and full label or key **2 marks** 2 bars correct height and full label or key **1 mark**	**PS2**	Information can be shown in any order Accept follow through error from part (a) Top of bar for guinea pig must be shown between lines i.e. not 6.8 or 7.2

				Space for Notes
16	**a**	Oxygen	**KU1**	
16	**b**	Idea that they are finite, running out, non-renewable	**KU1**	
17		Glass beads Liebig condenser Distillation flask Conical flask **All correct 2 marks** **2/3 correct 1 mark**	**PS2**	
18	**a**	3	**KU1**	
18	**b**	1	**KU1**	

				Space for Notes
19	**a**	1200(°C)	**PS1**	
19	**b**	Silicic (magma)	**PS1**	
19	**c**	underwater	**PS1**	
19	**d**	Any **two** from Silicic (magma) Slow moving (Temperature) 700(°C)	**PS1**	
20	**a**	Idea that it can be used again	**KU1**	
20	**b**	Any **one** from Glass, paper, cardboard, clothing, wood, food waste, metal (or named example of material but not object alone)	**KU1**	**Accept** glass bottles **Not** plastic (given in stem) bottles cans

				Space for Notes
21	Earth (wire), fuse **1 mark each**		**KU2**	**Not** safety wire green/yellow wire
22 **a**	**i** decreases		**PS1**	
22 **a**	**ii** Idea of As volume (of water) increases, the time (to boil) increases (or vice versa)		**PS1**	**Not** conclusions relating to power rating **Accept** litres/l for volume seconds/s for time
22 **b**	Any value **between** 225 and 460		**PS1**	
23 **a**	zinc		**KU1**	
23 **b**	cement and sand **both required**		**KU1**	

				Space for Notes
24	**a**	Idea of As temperature increases, resistance decreases (or vice versa)	**PS1**	**Accept** ohms for resistance ^{o}C for temperature
24	**b**	220	**PS1**	
25	**a**	560	**PS1**	Accept answer from space for working
25	**b**	1280 **2 marks** 1680 and 400 extracted from table **1 mark**	**PS2**	Accept answer from space for working

[END OF MARKING INSTRUCTIONS]