



2009 Science

Standard Grade – Foundation

Finalised Marking Instructions

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Foundation Level

Marking Scheme

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) 12 and 6 both required	PS1
	(b) Internal bleeding and shock	PS1 must say “internal” extra information, eg open wound, apply cancelling errors
2	(a) blue	KU1
	(b) Earth (wire)	KU1 <u>not</u> fuse or fuse wire
3	(a) C (The material has been treated so that it does not catch fire easily)	KU1
	(b) <u>Idea that</u> washing removes the flame-proofing	KU1 eg the washing wears it away the chemical fades away the treatment is taken out <u>NOT</u> they have been washed too much

		Space for Notes
4	Polystyrene Nylon Steel Copper All correct, 2 marks 2, 3 correct, 1 mark	KU2 <u>must</u> use given materials
5	(Uses) batteries (produces) sound (energy) television cooker All correct, 2 marks 2, 3 correct, 1 mark	PS2 Accept: TV for television
6	Any one from Coal Gas Oil Wood Peat Solar Ground heat or other reasonable answer	KU1 Ignore <u>extra</u> information eg coal fire solar panels gas heater <u>NOT</u> fire alone insulation electricity wind power/wave etc used to generate electricity

		Space for Notes
7	(a) (i) decreases	PS1
	(ii) D or 17 <u>and</u> 70	PS1
	(b) Any one from Paper/cardboard Plastic Metal Clothes Glass	KU1 <u>NOT</u> : Named plastics or metals <u>NOT</u> : Named objects only eg bottles, cans Ignore: Additional information eg glass (bottles) metal (cans)
8	(a) 60	KU1
	(b) (i) increased	KU1
	(ii) recovery	KU1
	(c) Strength/power or Suppleness/flexibility	KU1 do not accept “endurance” do not accept “speed” do not accept “agility”

		Space for Notes
9	(a) A (blood)	KU1
	(b) lower warmer (both required)	KU1
10	(a) Bees, wasps, termites All three required	PS1
	(b) Wasps	PS1
	(c) <u>Collect</u> food/ <u>get</u> food Look after the young Repair the nest All three required	PS1 Ignore “unable to reproduce”
	(d) Any two from Lay eggs or can reproduce/can lay (up to) 30 000 eggs (Much) bigger Can live for many years/can live for 50 years/can live longer Both required	PS1

			Space for Notes
11	Fine gravel Coarse gravel Plastic cup Perforated base All correct, 2 marks 2, 3 correct, 1 mark	PS2	
12	(a) Any two from Coal Oil (Natural) gas Peat	KU1	
	(b) Oxygen	KU1	
13	(a) 7800	PS1	Accept correct answer from space for working box Ignore transcription errors
	(b) 3200	PS1	Follow through from incorrect answers to part (1) ie 11000 – (a) Accept correct answer from space for working box Ignore transcription errors

			Space for Notes
14	(a) Carbon monoxide Tar Nicotine All correct, 2 marks 1, 2 correct, 1 mark	KU2	
	(b) Any one from Named cancer (apart from lung cancer) Bronchitis Emphysema Heart disease	KU1	Accept asthma Accept heart attack/heart failure not “cancer” only not “lung disease”
15	(a) As time increases, blood alcohol level decreases	PS1	Accept “hours” for “time”
	(b) 60	PS1	
	(c) Any one from Aggressive Violent Slow reactions Sleepiness	KU1	Accept also irresponsible behaviour or examples eg drunk driving fighting Accept also mental health problems or example eg depression

				Space for Notes
16	(a)	Leaves	KU1	
	(b)	Caterpillar	KU1	
	(c)	leaves → caterpillar → toad → fox or leaves → caterpillar → shrew → fox	KU1	
17	(a)	(Contains) triangles	KU1	
	(b)	Any two from Sand Grit Gravel/aggregate Stones/chuckies Cement Water	KU1	<u>NOT</u> mud soil clay lime

			Space for Notes
18	(a)	Water Land Air All correct, 2 marks 1, 2 correct, 1 mark	KU2 <u>Must</u> use given words
	(b)	A (Creating wildlife parks)	KU1
19	(a)	Any two from Hydro Wind Waves Geothermal Tidal Biomass or example Any two, 1 mark each	KU2 Accept “water” for “hydro” Ignore extra information eg wind turbine
	(b)	(i) As light/intensity increases, the voltage (produced) increases (and vice versa)	PS1 Accept “units” for light/intensity Accept “mv” for voltage
		(ii) 35	PS1

				Space for Notes
20	(a)	2 and 3	PS1	
	(b)	If the volume (of water) made any difference	PS1	<u>NOT</u> reference to volume <u>of alcohol</u>
21	(a)	Indian (Ocean)738000 Atlantic (Ocean)828000 Pacific (Ocean)1651 1000 All correct, 2 marks 6, 7, 8 correct, 1 mark	PS2	
	(b)	3 bars with labels correct, 2 marks 1/2 bars with labels correct, 1 mark	PS2	do not accept bars without labels do not accept labels without bars
22	(a)	Misha	PS1	
	(b)	Annie	PS1	

			Space for Notes
23	(a) 5, 6 points correctly plotted and joined, 2 marks 4 points correctly plotted and joined, 1 mark 5, 6 points correctly plotted but not joined, 1 mark	PS2	Bar graph zero marks
	(b) As length (of wire) increases, the resistance increases (or vice versa)	PS1	Accept “cm” for “length” Accept “ohms” for “resistance” Accept the resistance goes up (by 0.15) every time you add (10) cm
	(c) Any answer between 0.30 and 0.45	PS 1	
Totals			KU 30 PS 30

[END OF MARKING INSTRUCTIONS]