Assessment Schedule 9B 2006

/ means OR eg. green / blue – answer needs green OR blue

() means additional, not really required eg. Gauze (mat) – gauze would be sufficient

: means AND eg. red : hot - answer needs red and hot.

Question		Evidence	Marks
		All 7 correct 5-6	3marks 2marks
One	a)	3-4	1mark
		Beaker Conical flask Filter funnel	
		Evaporating dish Test tube Gauze mat Tripod	
	b)	Filter funnel (filter paper), beaker (optional)	1mark
	i) ii)	Measuring cylinder	1mark
	iii)	Tongs, Bunsen burner.	1mark
	c)	Beaker, gauze, tripod, Bunsen burner, thermometer, heat mat If heat mat omitted then allow 1mark Perfect diagram no labels	2marks 1 mark

	1		4 1
		• All 4 points plotted accurately (bar or line graph).	1 mark
		Axis labelled accurately and unit specified (cm).	1 mark
		Axes numbered accurately.	1 mark
Two	a)	Height of tray above desk (cm) 20 - 10 - 0 1 2 3	
		Number of blocks	
		For any statement such as: For every block added the rubber band	1 mark
	b)	stretches 10 cm. (There is a linear relationship between the number of	
		blocks and the stretch of the rubber band).	
	c)	6	1 mark
TI.		If the colour of a cup makes a difference to how fast the water in it heats	1 mark
Three	a)	up.	
		Any 4 of:	2 marks
			(for all 4
		• 2 cups of different colours (at least).	correct)
	b)	• Thermometer.	or
		Water.Timer or measuring cylinder	1 mark (for 2 or
		[NOTE: "a sunny day" was not included as equipment]	3
		[11012. a sunity day was not included as equipment]	correct)
		The 5 main factors: • Amount of water.	2marks
		• Size of cups.	(for 3- <mark>5</mark>
		• Time each cup is left in the sun/temperature	correct)
	c)	taken at same intervals.	
		 Cups left in same position/conditions. 	1mark
		 Same initial water temperature in cups. 	(for 1-2
			correct)
	d)	Temperature of water AND time to heat up	1mark
		i) freeze	2marks
		ii) melt	(all
Four	a)	iii) boil	correct)
1 Oul	(a)	iv) condense	1mark
			(2-3
			right)

	b)	One idea given: particles vibrate more as it gets hotter until they can move about and slide past each other / correctly drawn diagram	1mark
Five		a) iron b) salt c) aluminium and iron d) gas	2marks (3-4 right) 1mark (1-2 right)
	e)	The idea that: iron is a liquid over the range 1600, so it must be a gas.	1 mark
Six	a)	2050 kJ	1mark
	b)	Yes Martins diet is fairly balanced. It contains foods from each of the areas needed. Any idea about balanced food groups. The food pyramid. Lots of healthy food, or fruit and veges mentioned.	1mark Reason must be given
	c)	i)Sugar, Benedicts turns yellow, orange or brick red. ii)Starch. Iodine	1mark 1mark
	d)	We cannot make our own protein we must eat food containing protein. We digest eaten protein and restructure it into our protein. We need protein for our body tissues, muscle, hair skin etc. We use it for growth and repair in these areas.	1mark
	e)	Sugar	1mark
	f)	Sugar molecules / glucose/ fructose	1mark
		Mouth → stomach→small & large intestines→anus 1mark if they mention at least 4 in the correct order.	1mark
	g)	Chewing in mouth to break down into smaller pieces by enzymes. Food being digested. Stomach churns and mixes food, acid killing bacteria. Soluble food passes out of small intestine and absorbed into the blood. Large intestine passes insoluble food through anus. 1 Mark if at least 4 mentioned in order. 2 Marks if fully explained about digestion.	1mark
Seven	a)	VenusEarthWars or MarsEarthVenus	Both for 1 mark
	b)	 1 Earth day = 24 hours (or 12 hours day and 12 hours night) We get night and day because the Earth turns/rotates on its axis. The part of the Earth that has light changes/the part that faces the 	1mark 1mark
		Sun has day (or the opposite). Had to mention axis rotation to get 2 marks.	1mark

	c)	Answer shows an understanding that bodies block the light from the Sun and therefore it cannot reach the ground.	1mark
	d)	The Earth is on a tilt and the areas tilted towards the Sun have summer (or similar). We get different seasons as the Sun's light is not so direct/more direct at different times of the year.	2marks for full answer. 1mark for
Eight	a)	Lens has to focus the light onto the retina.	partial 1mark
	b)	The optic nerve carries the information from the eye to the brain so we can "See" the image	1mark
	c)	The Iris controls the amount of light entering the eye by contracting and expanding to make the pupil smaller or bigger.	1mark
Nine	a)	Boxes correctly labeled as incident ray, normal and incident angle / angle of incidence	1mark 1mark 1mark
	b)	Reflected ray drawn at same angle to normal as incident ray.	1mark
	c)	The angle of incidence = the angle of reflection	1mark
	d)	Correct drawing laterally inverted AND at same distance and size behind mirror.(Use professional judgement)	1mark
Ten	a)	1- cell membrane,2- cytoplasm3- nucleus	2marks (all 3 right) 1mark (1-2 right)
	b)	Animal cell because no cell wall or vacuole or chloroplasts OR reference to the irregular shape of the cell	1mark
Eleven	a)	Leaves carry out photosynthesis providing plants with food.	1mark
	b)	Stem hold leaves & flowers upright so leaves can receive sunlight necessary for photosynthesis and flowers can be pollinated. OR stem transports water & nutrients from roots to leaves.	1mark
	c)	Roots anchor plant in soil. OR roots take up water OR roots take up nutrients.	1mark
Twelve	a)	Hearing and balance	1mark
	b)	Decibel	1mark

	1		T
	c)	Sound waves leave a person's mouth Bounce off/are reflected from the wall Return to person's ears	2marks for full answer. 1mark for partial answer.
Thirteen	a)	Left-handed, straight hair, brown eyes, not blond	1mark
	b)	5	1mark
	c) d)	Zoe and Chris Freckles	1mark Both req
Fourteen	a)	Trees, plants, humans	1mark
	b)	Sand, hammock, water or similar	1mark
	c)	MRS GREN (Movement, Reproduction, Sensitivity, growth, respiration, excretion, nutrition) Not accepting nutrients nutrience, repopulation, nourish. Illegible words and made up ones not accepted either so learn to spell!	3mark (all right) 2marks (5-6) 1mark (3-4)
Fifteen	a)	The idea that <u>weather is the here and now</u> and climate is what you would expect the weather to be in a particular area on the basis of what has happened in the past.	2marks(1 for each idea)
	b)	The idea that the wind becomes stronger as it is channeled / funnelled into the Cook Strait (1). Arrows on the map should show this – smaller to bigger (1) (or some indication of isobar squeezing)	2marks
	c)	Boat – rough seas accepted sea sickness caused by airsick rocky flight also accepted fog (in news recently you see) Air – turbulence both parts needed for 1 mark	1mark
			2marks (5-6) 1mark (3-4)

	precipitation transpiration infiltration evaporation	
Sixteen	1 & U 4 &W 6 & Y	1mark 1mark 1mark 1mark 1mark
		80