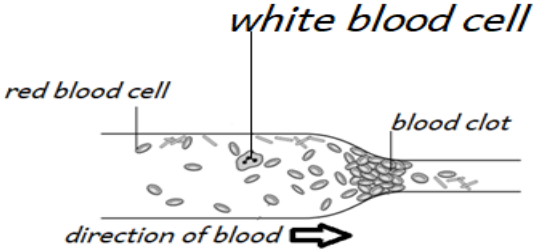
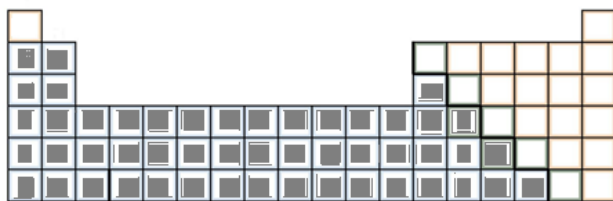
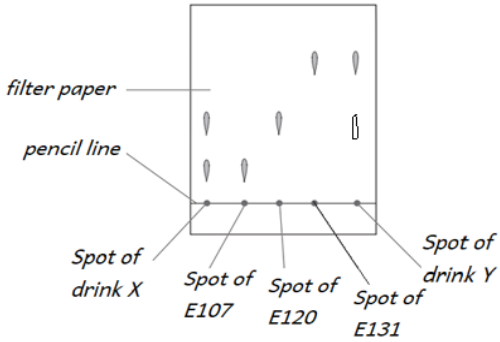
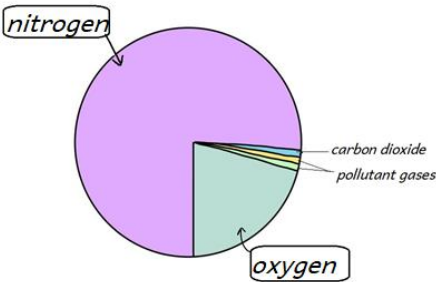


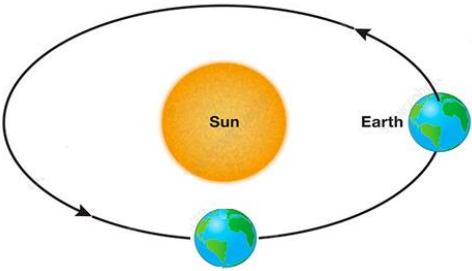
Year 8	INTEGRATED SCIENCE	MARKING SCHEME
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Question			Answer	Mark
1	a		Breathing system	1
	b	i	A: windpipe (accept rings of cartilage) <i>Accept also trachea</i>	1
		ii	B: ribs	1
	c		Help during breathing Protect lungs and heart (any one)	1
	d		Carbon dioxide	1
	e		Filtration	1
	f	i	He would inhale other people's smoke / passive smoking.	1
		ii	<ul style="list-style-type: none"> Nicotine; addictive/ makes heart beat faster Carbon monoxide; binds to rbc instead of oxygen/makes you breathless, or Tar; stains lungs, teeth, nails (any two)	1, 1 1, 1
			Total	11
2	a		heart	1
	b			1
	c		Protect us against germs / produce antibodies/ kill germs (any one)	1
	d		No blood/oxygen arrives to the organ	1
	e		Avoid fatty foods Avoid worry and stress Regular exercise (any two)	1 1
	f	i	Platelets	1
		ii	Prevents germs entering the body/stops loss of blood (any one)	1
		iii	Acid in the stomach/formation of tears/hairs in the nose/sneezing/formation of antibodies (any one)	1
			Total	9

3	a		Alien species	1																				
	b		Camouflage, sticky and long tongue (or any other correct adaptation)	1																				
	c		Positive: planting new trees Negative: use of insecticides (accept any other correct answer)	1 1																				
	d	i	Simar / Foresta 2000	1																				
		ii	Conservation of species/ no hunting in the area (accept any other correct answer)	1																				
			Total	6																				
4	a		<table><thead><tr><th>Metal</th><th>Use</th><th>Property</th></tr></thead><tbody><tr><td>Aluminium</td><td>To make bridges</td><td>Shiny and does not react with air</td></tr><tr><td>Gold</td><td>To make ladders</td><td>Easy to shape and it is lightweight.</td></tr><tr><td>Iron</td><td>Jewellery</td><td>Strong, malleable, and cheap</td></tr></tbody></table>	Metal	Use	Property	Aluminium	To make bridges	Shiny and does not react with air	Gold	To make ladders	Easy to shape and it is lightweight.	Iron	Jewellery	Strong, malleable, and cheap	6								
Metal	Use	Property																						
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Gold	To make ladders	Easy to shape and it is lightweight.																						
Iron	Jewellery	Strong, malleable, and cheap																						
	b		It is a good conductor of electricity.	1																				
	c		It is an insulator.	1																				
	d			1																				
	e		(any 2) Oxygen – O; Nitrogen – N; Chlorine – Cl; Carbon – C; Sulfur - S	1 1																				
	f		Copper sulfate is a compound.	1																				
			Total	12																				
5	a		<table><tbody><tr><td>i.</td><td>The tyre marks on the ground.</td><td>☒</td><td>1</td></tr><tr><td>ii.</td><td>The direction of the wind on that day.</td><td>☐</td><td>1</td></tr><tr><td>iii.</td><td>Yellow paint found on the tree trunk.</td><td>☒</td><td></td></tr><tr><td>iv.</td><td>The name of the place.</td><td>☐</td><td></td></tr><tr><td>v.</td><td>The age of the old person.</td><td>☐</td><td></td></tr></tbody></table>	i.	The tyre marks on the ground.	☒	1	ii.	The direction of the wind on that day.	☐	1	iii.	Yellow paint found on the tree trunk.	☒		iv.	The name of the place.	☐		v.	The age of the old person.	☐		
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iv.	The name of the place.	☐																						
v.	The age of the old person.	☐																						
	b	i	Incisors	1																				
			Canines	1																				
			Premolars	1																				
			Molars	1																				
		ii	Tooth A	1																				
			Canine	1																				
			Piercing and tearing	1																				

	c	i	Friction	1
		ii	An overused tyres is smooth and thus there is much less friction between the tyre and the ground, making it more likely that the car skids.	1
	d	i	Hair was found on the crime scene , but Carlston has no hair.	1
		ii	Andy (hair and fingerprint).	1
			Total	13
6	a	i	Air pollution: burning waste releases harmful gases.	1
		ii	Water pollution : Scrap metal can poison the soil. Toxins / liquids leech away with rain water.	1
	b	i	Reuse	1
		ii	Recycle	1
		iii	Reuse	1
		iv	Reuse	1
		v	Recycle	1
	c		reduce	1
			Total	8
7	a		Slightly acidic	1
	b		Acid is corrosive and wears away limestone.	1
	c		Burning of fossil fuels <i>Accept also: Volcanic activity</i>	1
	d		Reduce use of cars	1
			Reduce burning of fossil fuels	1
			More use of renewable energy sources (any two)	
	e		There will be an increase in the average air temperature.	1
			There will be a change in rain patterns.	1
			Total	7
8	a		6 – 3 – 2 – 4 -5 -1	5
	b		Light travels faster than sound.	1
	c		Light only travels in a straight line.	1
	d		Decibels	1
	e		The ear drum can tear.	1
			The cochlea may stop functioning.	1
			Hair cells in the ear can die resulting in hearing loss. (any two)	
			Total	10

9	a		Chromatography	1
	b		Drink X	1
			E107 and E120	2
	c			1
	d		E131	1
			It is the one that moved the longer distance	1
	e	i	Because ink is a mixture of colours. This can interfere with the experiment results.	1
			Total	8
10	a			1 1
	b	i	Using a magnet	1
		ii	Using your hand	1
			Total	4
11	a			1
	b		24 hours / 1 day	1
	c		Days will be shorter.	1
	d		There will be no seasons.	1
	e		Day and night	1
			Total	5

12	a	i.	365¼ days or 1 year	1
		ii.		1
	b	i.	Mars, Jupiter (Saturn, Uranus, Neptune) Any two	1 1
		ii.	Gravity	1
		iii.	The force of gravity increases.	1
	c		GPS Weather forecasting Communication (any one or equivalent)	1
			Total	7
				100

The annual paper is out of 100. Kindly input this mark into the MySchools portal as instructed. This is to represent 70% of the final global mark obtained by the student.

30% of the final global mark are related to continuous assessment. The continuous assessment should include the following:

- 15% Practical work
- 10% Fieldwork
- 5% School based assessment

Kindly input this assessment mark (out of 100) into the MySchools portal. The portal will automatically add this mark to the mark obtained by the students during the annual exam.

Kindly follow assessment document disseminated at the beginning of 2021-22 scholastic year [INTEGRATED SCIENCE yr7 8 guidelines 2021 2022.pdf \(gov.mt\)](#) re any assessment issues due to COVID-19 protocols.