Practice Paper Set 9B Science

29	Oxygen enters our **nose** and **windpipe** to our **lungs** Oxygen enters **bloodstream** Blood rich in oxygen is pumped by the **heart** to our brain	
30a	Dead leaves will decompose so it will produce nutrients for the plant	
30b	Black plastic sheet prevents/reduces evaporation of water around the plant[1] so the plant will not wilt [1] **OR** Black plastic sheet prevents weeds from growing around plant A[1] which will compete for nutrients, water and space.[1]	
31a	[C] It has a **larger exposed surface area** [E/R] allows air/wind from **different directions** to come into contact with it	
31b	The fruit/seed must have wing/parachute-like structure [1/2] Allows the fruit/seed to be carried by the wind. [1/2]	**State** and **explain** 2 questions to be answered
31c	Distance from ground fruit/seed is dropped from	
31d	Amount/Strength of wind	
32a	[C] When the plastic is black, the faster it takes for pin to drop. [E/R] Black plastic **gains more heat** so the **wax melts faster**.	
32b	[C] The darker part of its body absorbs more heat [E/R] so it can keep itself warm	
32c	Bird P is **camouflaged with the sky from below** so animal B is not able to see it Bird P is **camouflaged with the dark sea floor** when viewed from above so animal A cannot see it	
33a	4	
33b	G -> E -> F-> C	
33c	[1st effect] E will increase because less predators hunting/feeding it [2nd effect] E will decrease as **more animal C will feed on it as C now has lesser food source**	

34	Set up 2 set-ups; 1st set-up consists of a plant with small leaves with its roots inside 100 ml of water with a layer of oil inside a 500ml beaker The 2nd set-up is the same as the 1st except using a plant with big leaves instead. Leave the set-ups at the same place and measure the height of water left in the beaker after 1 day using the half-metre ruler. Water taken in by the plant is the difference between volume of water in beaker before and after the experiment. The amount of water taken in by plant will determine how the result of the experiment is affected by big or small leaves.	**Setting-up the experiment** **obtaining data** **conclusion**
35ai)	Splash is made over an area of different directions OR splash does not stay long enough for measurement to be made	
aii)	Different amount of force was applied to the launcher	
35b	The greater the mass of the ball, the lesser the distance moved by the ball	
36a	A force that opposes motion	
36b	There is **friction between the drum and the belt**	
36c	[C] There will be **less friction** produced [E/R] so **less energy** is converted to heat energy	
37b	[C] Heating coil will heat the water and [E/R] increasing the rate of evaporation	
38a	U, S, T	
38b	Becomes bigger	
38c	Shadow remains black but the rest of screen is blue	
39a	Electrical conductor	

39b	Circuit is closed and the iron rod become an electromagnet Like poles (of electromagnet and bar magnet) face each other and repulsion occurs Swing moves/is pushed to the left and circuit is opened. Swing falls back to the right because of gravity, touched the wire again and the cycle repeats.	4 points here for describing-how-the experiment-works question
39c	- add more coils around the iron rod - replace with a stronger bar magnet	
40a	Gravitational potential -> kinetic -> kinetic + sound	
40b	[C] **More** gravitational potential energy is converted to **more** kinetic energy [E/R] As the water falls from a greater height	