

Answer Key

YEAR: 2021

LEVEL : Primary 5

SCHOOL : Methodist Girls' School

SUBJECT : SCIENCE

TERM : End-of-Year Examination

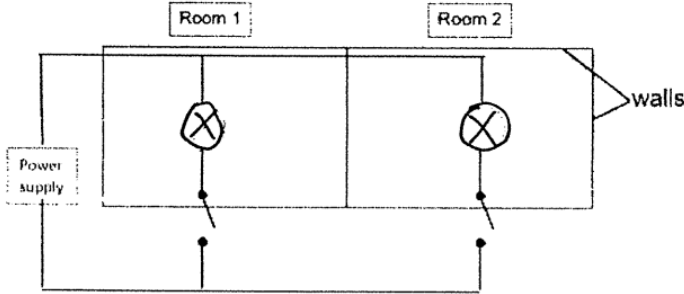
Booklet A

Q1	3	Q2	3	Q3	2	Q4	1	Q5	1
Q6	2	Q7	2	Q8	2	Q9	3	Q10	3
Q11	2	Q12	4	Q13	2	Q14	4	Q15	2
Q16	1	Q17	3	Q18	4	Q19	3	Q20	3
Q21	1	Q22	2	Q23	2	Q24	2	Q25	3
Q26	3	Q27	2	Q28	1				

Methodist Girls' School (Primary)
End-Of-Year Examination 2021
Primary 5 - Student Answer Key

Section B: [13 questions - 44 marks]

Q.	Answers
29a	(i) X: Sperm (ii) Y: Pollen grain
29b	To increase the chances of the egg getting fertilized by the sperms.
29c	The stigma could still receive pollen grains from another flower carried by animals / insects. Fertilisation then took place for the ovary to develop into a fruit.
30a	Part X is the cell membrane. It controls the movement of substances into and out of the cell.
30b	No, I disagree with him. Cell B has a cell wall, so it is a plant cell. It is found in other plant parts that do not need to make food.
31a	
31b	This is to allow the seeds to have space to germinate.
31c	Air is a poor conductor of heat and it slows down heat loss from the seeds to the surroundings.
32a	Part Z absorbs water and minerals from the soil. Part Z anchors / holds the plant firmly to the ground.
32b	Part E can still receive water from the roots through the water-carrying tubes, to make food and grow bigger.
32c	As the food-carrying tubes were removed, part F did not receive more food made by the leaves, therefore it remained the same size.
33a	They allow gaseous exchange.
33b	The gill filaments increase the surface area of the gills to allow faster rate of exchange of gases.
34	Line X. It records a higher breathing rate. Smoker has damaged lung tissues which leads to reduced surface area of the lungs for gaseous exchange.
35a	Water loses heat to the ice cubes.

35b	Metal is a good conductor of heat, so the metal lid will gain heat from the hot water quickly and expands.
35c	The metal lid contracted more than the jar, so it became tighter and more difficult to remove.
36a	Nose, Windpipe, Lungs
36b	Higher amount. Less movement will cause breathing rate to decrease. Therefore, the adults and children in the lift will not take in so much gas Q more quickly.
37a	Four balls. When a ball passed through the hole, it blocked the light from reaching the light sensor, so the reading on the light sensor will be zero.
37b	The duration for the light to be blocked by each ball is different.
38a	 <p>The diagram shows a circuit with a power supply on the left. Two parallel branches lead to the right. The first branch is labeled 'Room 1' and contains a light bulb and a switch. The second branch is labeled 'Room 2' and also contains a light bulb and a switch. The entire circuit is enclosed in a box labeled 'walls'.</p>
38b	When one bulb fused, the other bulb can still light up.
38c	When the switch is closed, an electric current flowed through the coil of wire and magnetised the iron cylinder to become an electromagnet which then attracts the iron rod. The iron rod swings at point D, moves towards the bell and hits the bell to produce a "ding" sound.
39a	Line B. Before pumping, the deflated basketball has a volume of less than 7000 cm^3 . After 5 pumps, the volume of air in the basketball increased and became constant when it reached the maximum capacity of 7000 cm^3 .
39b	Air has no definite volume.
40a	As the temperature of water increases, the rate of evaporation increases.
40b	The temperature of water in beaker C is the highest and it will evaporate into water vapour fastest. Water vapour condenses into water droplets faster when it touches the cooler surface of the glass dish.
40c	Yes, there should only be one changed variable which is the temperature of the water.
40d	Different sizes of containers will lead to a difference in the exposed surface area of water. This will result in a difference in the rate of evaporation, affecting the time taken for the first water droplet to form from condensation.