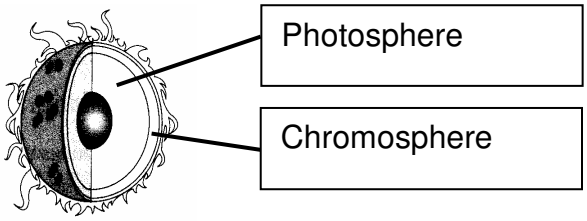
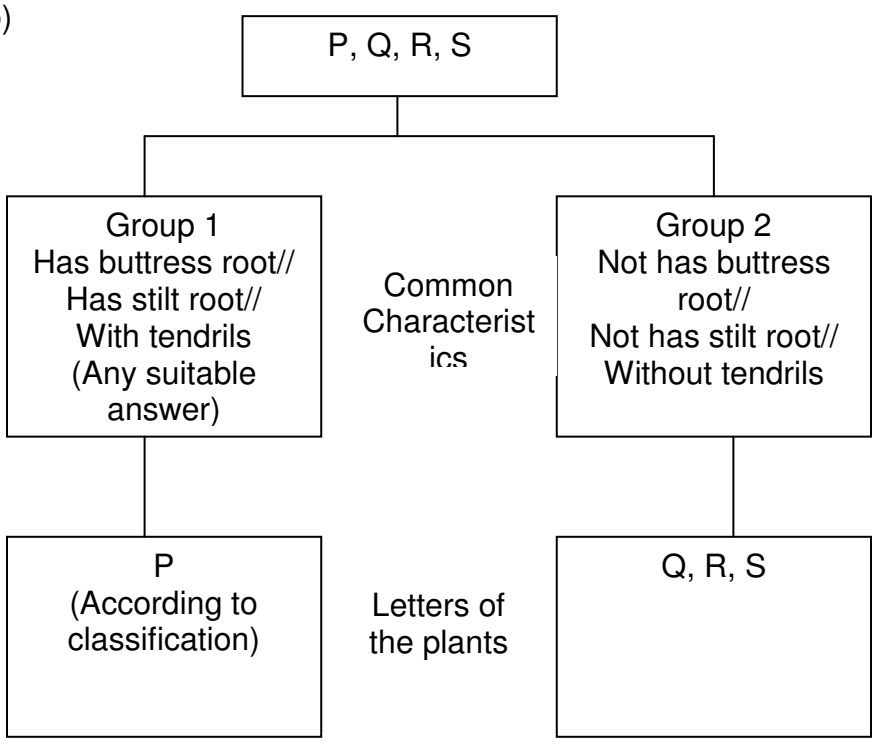
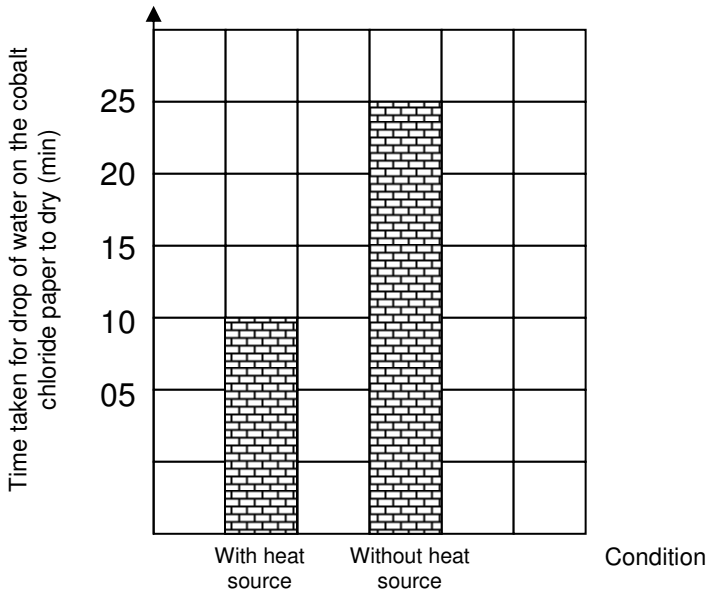
ANSWER SCHEME SCIENCE PAPER 2 TRIAL 2009

NO	RUBRIC	MARKS
1	(a) P – Measuring cylinder Q – Triple beam balance R – Spring balance (b) Q – Measure the mass of an object R – Measure the weight of an object (c) Lever balance// electronic balance	3x 1m = 3 2x 1m = 2 1m Total = 6 m
2	(a)  **Q** (b)(i) Solar flare (ii) Disrupts radio wave// Changing the climate (c) (i) Core (ii) Nuclear fusion	2x 1m = 2 1 m 1 m 1 m 1m Total = 6 m
3	(a) J : Self pollination K : Cross pollination (b) J Produce fruits/seeds which is same as parent plant while K produce a variety of fruits and seeds// K produce better plants than J// K produce plants that withstand against diseases better than J// Any suitable answer (c)(i) Fertilisation (ii) Develop into fruit (d) i. Vegetative reproduction ii. Stem cutting // tissue culture// cloning	1x 2m = 2 1 m 1 m 1 m 2 x 1m = 2 Total = 7

4	(a) Water Electrolysis (b) Carbon rod Y (c) Hydrogen gas (d) Use burning wooden splinter, produce 'pop' sound (e) Q/ P = ?/10 2/1 = ?/10 ? = 2/1 x 10 = 20 cm (f) For respiration// combustion	1 m 1 m 1 m 1m 1 m (method) 1m (answer) 1m Total = 7
5	(a) Lime water turns cloudy// water vapour form on the wall of gas jar (b)(i) i. Heat/ light energy ii. carbon dioxyde iii. water vapour (any two) (b)(ii) **<u>charcoal</u>** + oxygen → **<u>carbon dioxyde</u>** + energy (c)(i) turns cloudy/milky (ii) Carbon dioxide is released during combustion	1 m 2 x 1m = 2 2 x 1m = 2 1 m 1m Total = 7
6	(a)(i) T, S, U, R (ii) R – to test for the presence of starch S – to remove chlorophyll in the leaf (b)(i) Students labeled green part of the leaf with P (ii) Starch is present in green leaf by photosynthesis// Photosynthesis produced starch in green leaf (d)i. Produced food to the plants ii. Release oxygen to the air/surrounding iii. Maintain the balance of oxygen and carbon dioxide in the air	1 m 2 x 1m = 2 1 m 2 x 1 m = 2 Total = 7

7.	(a) P : Butress root Q : Stilt root R : Clasping root S : Thorn	4 x 1m = 4
	(b)  	2 x 1m = 2 2 x 1 m = 2 Total = 8
8	(a)(i) The clothes in Condition A dry faster than in Condition B (ii) Time taken for the clothes to dry depends on present of sunlight/ surrounding temperature (iii) The higher the temperature, the faster the cloth dry// As the temperature high, the cloth dry faster. (b) Condition | Time taken for drop of water to dry(min) With heat source | 10 Without heat source | 25 (c)	1 m 1m 1m 2 x 1m = 2



(d) Drop of water on cobalt chloride paper with heat source dry faster compare to without heat source// Vice versa

(e) The higher the temperature of surrounding the higher the rate of evaporation

(f) Manipulated V – Present of heat source// lamp
Responding V – Time taken for the (cobalt chloride) paper to dry
Constant V – Size of cobalt chloride paper// Number of drop of water/ Volume of water drops