

Principles of Organisation

Mark Scheme

Level	GCSE (9-1)
Subject	Combined Science: Trilogy - Biology
Exam Board	AQA
Topic	4.2 Organisation
Sub-Topic	Principles of Organisation
Difficulty Level	Silver Level
Booklet	Mark Scheme

Time Allowed: 18 minutes

Score: /18

Percentage: /100

Grade Boundaries:

- M1.(a)** tissue → organ → organ system
one right for 1 mark
three right for 2 marks 2
- (b) **Epithelial tissue** → covers the outside and the inside of the stomach
more than one line from a tissue = no mark 1
- Glandular tissue** → produces digestive juices 1
- Muscular tissue** → allows food to be churned around the stomach 1
- (c) (i) light
ignore dark 1
- (ii) moving (to the dark) 1
- (iii) any **two** from:
 - use more woodlice
 - repeat the experiment
 - run for a longer time 2
- M2.(a)** (i) xylem 1
- (ii) water 1
- minerals / ions / named example(s)

[9]

ignore nutrients

1

- (b) (i) movement of (dissolved) sugar

allow additional substances, eg amino acids / correct named sugar (allow sucrose / glucose)

allow nutrients / substances / food molecules if sufficiently qualified

ignore food alone

1

- (ii) sugars are made in the leaves

1

so they need to be moved to other parts of the plant for respiration / growth / storage

1

- (c) (i) mitochondria

1

- (ii) for movement of minerals / ions

Do not accept 'water'

1

against their concentration gradient

1

[9]