

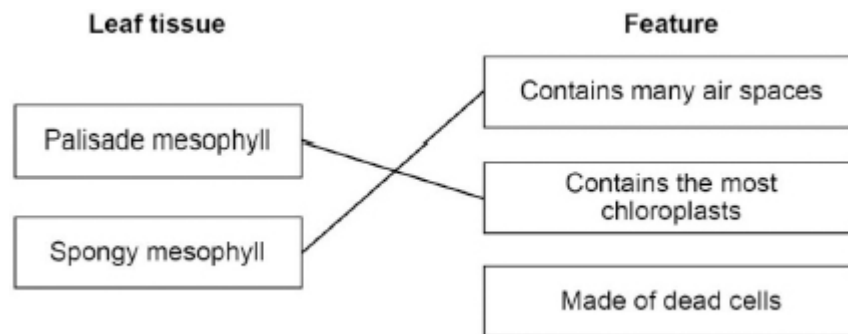
Mark schemes

Q1.

(a) organ

1

(b)



1

do **not** accept more than one line from a box on the left 1

1

(c) transpiration

1

(d) lignin

1

(e) (so) light can reach (palisade / spongy) mesophyll

*allow (so) light can reach (other / lower) layers / tissues**allow (so) light can reach other / lower cells**allow (so) light can reach chloroplasts / chlorophyll**ignore (so) light can get through*

1

for photosynthesis

1

(f) stomata

must be in this order

1

guard cells

1

(g) (permanent) vacuole

1

(h) active transport

1

(i) mitochondria

1

[12]

Q2.

- (a) oxygen
allow O₂
1
- glucose
allow C₆H₁₂O₆
in either order
1
- (b) xylem
1
- stomata
1
- phloem
1
- must be in this order*
- (c) $\frac{310}{254}$
1
- 1.22047...
1
- 1.2
allow an answer of 0.82 if numerator and denominator reversed
1
- (d) each leaf of species **A** has more stomata
1
- (e) increased temperature
1
- (f) C
1
- (g) (spines) stop the plant being eaten
or
(spines) prevent animals damaging the plant
allow any named animal
allow to reduce water loss
1
- (h) it looks like the hornet
allow animals think it is a hornet
1
- (so) animals avoid the risk of being stung
allow (so) animals avoid the risk of pain
1