

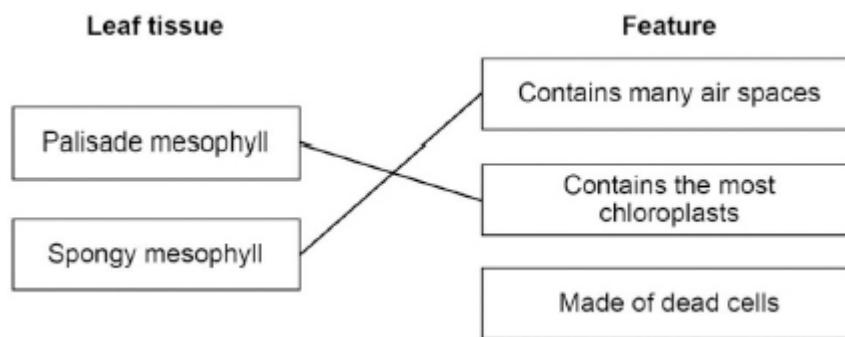
## Mark schemes

**Q1.**

(a) organ

1

(b)



1

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

(c) transpiration

1

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 O<sub>2</sub>*

1

glucose

*allow C<sub>6</sub>H<sub>12</sub>O<sub>6</sub>*

1

*in either order*

(b) xylem

1

stomata

1

phloem

1

*must be in this order* $\frac{310}{254}$ (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