

Transpiration: practice questions

2 questions • 6 marks • mark scheme at the back

For Cambridge IGCSE Combined Science 0653. **Supplement** is Extended content, only examined on Papers 2 and 4.

Name

Total / 6

1 **Supplement** [4 marks]

A student uses a potometer to investigate the effect of wind speed on the rate of transpiration. Describe how the student could do this.

2 **Supplement** [2 marks]

In a potometer experiment, an air bubble moved the distances shown in the table. Calculate the rate of water uptake with the fan on, in mm / min.

Potometer results		
conditions	distance moved by bubble / mm	time / min
still air	18	6
fan on	54	6

Answer =

Mark scheme

One mark for each point unless a maximum is given. Words in brackets are not needed for the mark.

1. [4] **Supplement**

- place a fan at different distances from the leafy shoot / use different fan speeds (1)
- measure the distance moved by the air bubble in a set time (1)
- keep other variables the same, for example temperature / light / same shoot (1)
- repeat and calculate a mean (1)

2. [2] **Supplement**

- rate = distance $\div$ time = $54 \div 6$ (1)
- 9 mm / min (1)