

NAME:

DATE:

CLASS:

MARKS

10

Water and Changes of State



1. The table below shows the weather conditions on four different days.

Day	Description of weather	Presence of wind	Humidity level
1	cloudy	yes	high
2	sunny	yes	low
3	sunny	no	high
4	cloudy	no	high

(a) What is meant by the term 'humidity'? [1m]

(b) How does the humidity level affect the rate of evaporation? [1m]

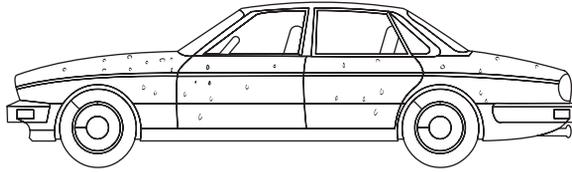
(c) Why does the presence of wind speed up the rate of evaporation? [1m]

(d) On which day would a wet towel hung out in the open dry the fastest? [1m]

(e) On which day would a wet towel hung out in the open dry the slowest?

[1m]

2. Every morning at around 7 am, Mr Sawyer prepares to drive to work. He notices that his car is covered with tiny water droplets although it did not rain the night before.



- (a) Explain how the tiny water droplets were formed.

[2m]

- (b) Mr Larkin also prepares to drive to work at 7 am daily. Give a probable reason why his car is not covered with tiny water droplets like Mr Sawyer's.

[1m]

3. Why is perspiring good for the body?

[2m]

1. (a) Humidity refers to the amount of water vapour in the air.
 (b) The higher the humidity level, the slower the rate of evaporation.
 (c) Wind blows away the water vapour surrounding the object as soon as it forms, allowing more water to evaporate from the object to form water vapour.
 (d) It would be day 2.
 (e) It would be day 4.
 2. (a) The surface of Mr Sawyer's car is cold. When water vapour in the surrounding air comes into contact with the cold metallic car surface, it condenses to form water droplets.
 (b) Mr Sawyer parks his car outdoors while Mr Larkin probably parks his car in an indoor covered carpark.
 3. As perspiration evaporates from the body, it produces a cooling effect. This cools down the body, preventing it from overheating.

Answers: