



Interactive Example Candidate Responses

Paper 3 (May / June 2016), Question 6

Cambridge IGCSE™
Physics 0625



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6 Fig. 6.1 shows an experiment to observe the motion of smoke particles in air.

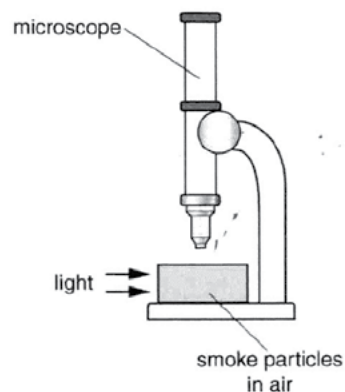


Fig. 6.1

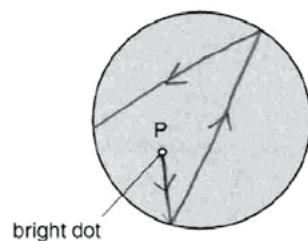


Fig. 6.2

(a) (i) Fig. 6.2 shows the view through the microscope of one smoke particle, labelled P.

On Fig. 6.2, draw 3 lines to show the movement of this particle.

[2]

(ii) Explain what causes the smoke particle to move.

gas particles move about freely in whatever container they are in. The more space a particle has, the more energy it has so the more it moves.

[2]

(b) The air containing the smoke particles becomes warmer.

Suggest how this changes the movement of the smoke particles.

They move more because they have more ~~more~~ energy. move faster

[1]

[Total: 5]

Select
page

Your
Mark

6(a)(i)

6(a)(ii)

6(b)

Q6 Mark scheme

(a)(i)	three straight lines, joined end to end at least two changes of direction
(a)(ii)	collisions OR bumps OR bounces off (with moving) air molecules
(b)	more collisions OR changes of direction

6 Fig. 6.1 shows an experiment to observe the motion of smoke particles in air.

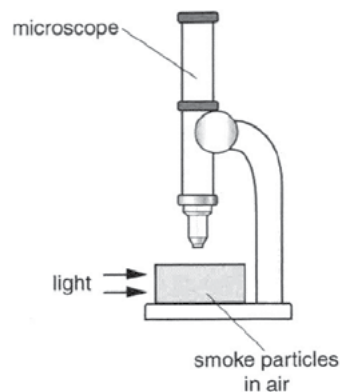


Fig. 6.1

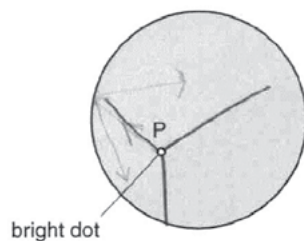


Fig. 6.2

(a) (i) Fig. 6.2 shows the view through the microscope of one smoke particle, labelled P.

On Fig. 6.2, draw 3 lines to show the movement of this particle.

[2]

(ii) Explain what causes the smoke particle to move.

These particles contain energy which makes them move around and bounce off any objects

[2]

(b) The air containing the smoke particles becomes warmer.

Suggest how this changes the movement of the smoke particles.

The movements increase because more heat cause the particles to obtain more energy

[Total: 5]

Select
page

Your
Mark

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