



**Subject:** Grade 8 Natural Sciences

**Topic:** Particle model of matter

**Total:** 35 Marks

**Name:** \_\_\_\_\_

**Date:** \_\_\_\_\_

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**Question 1: Please Fill In The Blanks**

4 marks

The forces of attraction between the particles of a gas are (1) than that between the particles of a liquid, and the gas particles will move (2) than the liquid particles.

Possible Answers: slower | quicker | stronger | weaker

<b>1</b>	
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<b>2</b>	
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**Question 2: Multiple Choice**

4 marks

When a liquid is cooled, ...

- |          |                                     |
|----------|-------------------------------------|
| <b>A</b> | the particles move around quicker.  |
| <b>B</b> | the particles stop moving.          |
| <b>C</b> | the particles vibrate more quickly. |
| <b>D</b> | the particles move more slowly.     |
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**Question 3: Text Input**

3 marks

The phase of matter in which diffusion will take place the quickest is a ... .

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**Question 4: Text Input**

3 marks

The spontaneous movement of particles from an area of high density to one of a low density is known as ... .

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**Question 5: Multiple Choice**

4 marks

Kinetic energy is best described as ...

- |          |                                       |
|----------|---------------------------------------|
| <b>A</b> | the energy of movement.               |
| <b>B</b> | heat energy.                          |
| <b>C</b> | the energy contained within a solid.  |
| <b>D</b> | the energy contained within a liquid. |
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**Question 6: Multiple Choice**

4 marks

When a substance is heated, then ...

- A. the particles slow down.  
B. the particles start moving.  
C. the spaces between the particles increase.

- |          |              |
|----------|--------------|
| <b>A</b> | only B       |
| <b>B</b> | only C       |
| <b>C</b> | B and C only |
| <b>D</b> | A and C only |
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**Question 7: Please Fill In The Blanks**

4 marks

In order to increase the rate of **diffusion** of a gas in a room, (1) and the room could be (2) .

Possible Answers: a fan could be used | cooled | water can be sprayed into the room | heated

<b>1</b>	
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<b>2</b>	
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**Question 8: Text Input**

3 marks

When a solid is heated the particles absorb the heat energy and this is converted to ... energy.

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**Question 9: Please Fill In The Blanks**

4 marks

In which phases of matter are the particles not in a rigid structure? (1) and (2) .

List your answers in alphabetical order.

Possible Answers: gas | solid | liquid | all of these | none of these

<b>1</b>	
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<b>2</b>	
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**Question 10: True/False**

2 marks

A gas will always fill the container into which it is placed.

<b>TRUE</b>
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<b>FALSE</b>
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**Total: 35 Marks**