

States of matter

STUDENT BOOK pp. 6, 43, 66

1. What are the main states (phases) of matter?

2. Identify the state of matter in each of the following cases:

a) The substance has definite shape and volume.

b) The particles are not bound together.

c) The particles can slide over one another.

d) The particles are very far apart.

e) The particles are strongly bound together.

f) A closed container is needed to hold the substance.

g) The substance has definite volume, but no definite form.

h) The particles move rapidly around one another.

i) The substance occupies all available volume.

j) The substance remains in an open container and assumes its shape.

3. Give a similarity and a difference for each comparison in the following table.

Comparison	Similarity	Difference
Solid state and liquid state	<p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	<p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>
Liquid state and gaseous state	<p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	<p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>