

Name \_\_\_\_\_ Date \_\_\_\_\_

## End-of-unit 3 test

*The End-of-unit tests have been written by the authors.  
These may not fully reflect the approach of Cambridge Assessment International Education.*

20 marks

- 1 Write the correct words in the spaces to complete each sentence.

Use each of the following words.

<b>liquid</b>	<b>water</b>	<b>change of state</b>	<b>particles</b>
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- a All materials consist of \_\_\_\_\_.
- b Heating causes a solid to experience a \_\_\_\_\_.
- c Heating causes a solid to change into a \_\_\_\_\_.
- d An example of this is when ice changes to \_\_\_\_\_.

- 2 Answer 'solid' or 'liquid' to the descriptions of how materials behave.  
The first one has been done for you.

- a A brick is an example. solid
- b Particles are close together but not in a fixed pattern. \_\_\_\_\_
- c Particles cannot move around. \_\_\_\_\_
- d Does not change shape. \_\_\_\_\_
- e Can change shape by spreading out over a surface. \_\_\_\_\_
- f Forms when a solid is heated. \_\_\_\_\_
- g Forms when a liquid is cooled. \_\_\_\_\_

3 Amina and Leah made ice cream. They mixed together milk, sugar and cocoa powder. They poured the mixture into a plastic container and put it in the freezer. The learners took the container out of the freezer the next day.

a In which state of matter was the milk when the learners started to make the ice cream?

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b In which state of matter was the milk when they took the ice cream out of the freezer?

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c Why did the milk change from the one state to the other?

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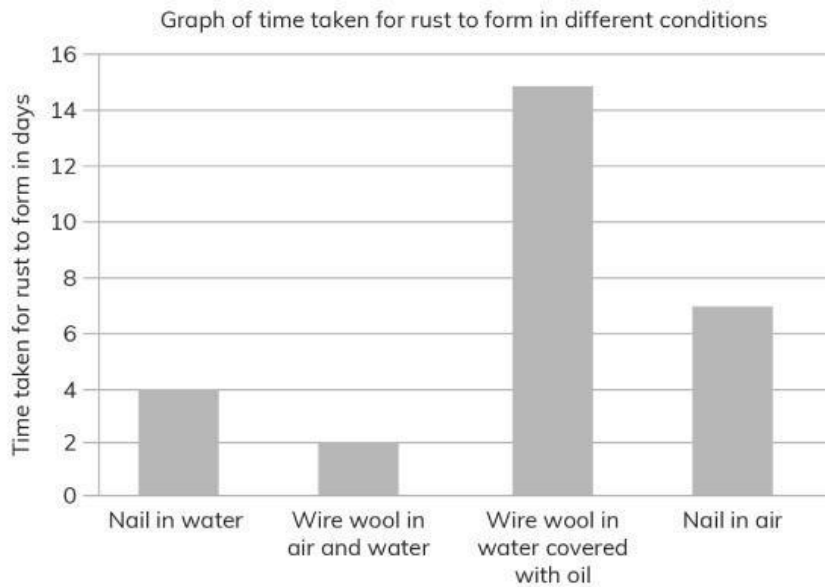
d Name the process that took place to make the milk change state.

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e Why could Amina and Leah pour the ice cream mixture into the container before they put it in the freezer?

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4 Ahmed's group investigated rusting. This is a graph of their results.



a In which conditions did rust form quickest?

\_\_\_\_\_

b How long did it take for rust to form in air only?

\_\_\_\_\_

c Why did it take rust longer to form in the water covered with oil?

\_\_\_\_\_

d This was not a fair test. Say why.

\_\_\_\_\_

e Rusting is a chemical reaction. Say why this is so.

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