

# Worksheet 10.2

## Alkenes and isomerism

1 a What is an alkene?

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b Draw the structure of a molecule of propene.

c What is the molecular formula of butene?

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d There are two possible structures for butene depending on the position of the C=C double bond in the chain.

i Draw the structures of these **two** forms.

ii What are their names?

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iii What is the general name given to these forms – two different structures with the same molecular formula?

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**2 a** How many isomers can you draw for pentane,  $C_5H_{12}$ ? Draw the structures here in the space provided.

**b** Name each of the isomers you have drawn in a.

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**3 a** Why is an unsaturated hydrocarbon more reactive than a saturated one?

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**b** Explain why an alkene but not an alkane turns bromine water immediately colourless.

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