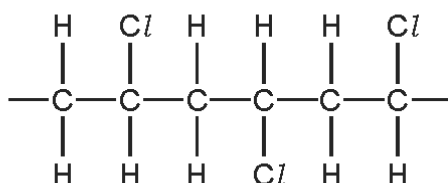
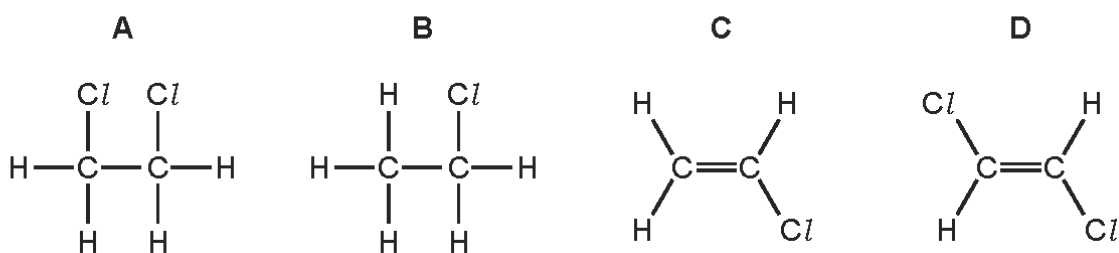


1298 - (0620-W 2014-Paper 1 (Core)/1-Q38) - POLYMERS

The diagram shows three repeat units in the structure of an addition polymer.

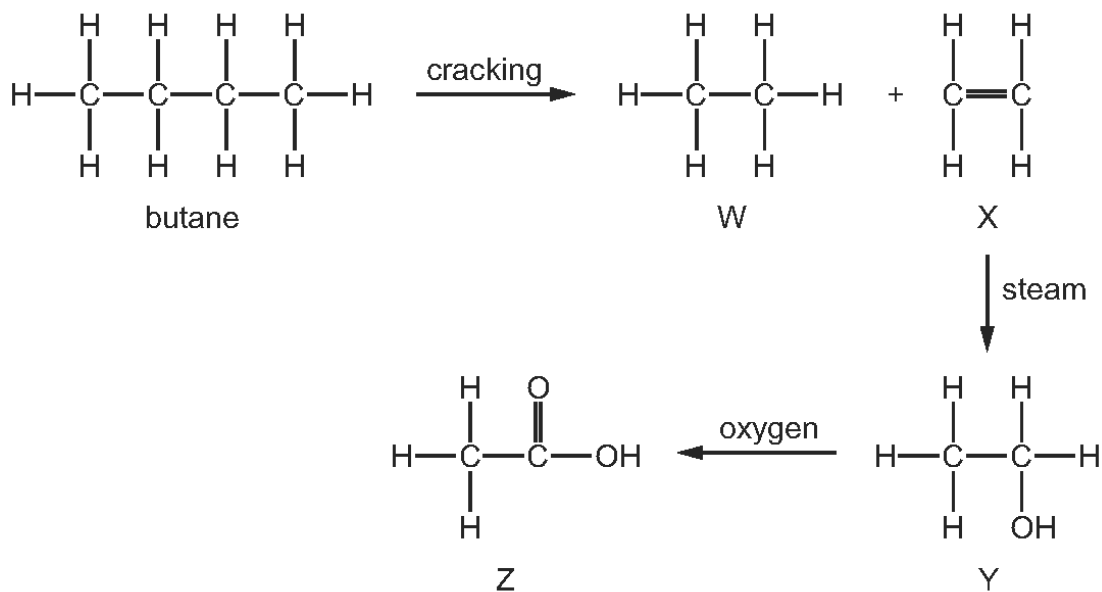


Which alkene monomer is used to make this polymer?



1299 - (0620-W 2015-Paper 1 (Core)/3-Q35) - POLYMERS

What are the names of the compounds shown in the reaction scheme below?



	W	X	Y	Z
<b>A</b>	ethane	ethene	ethanol	ethanoic acid
<b>B</b>	ethane	ethene	ethanoic acid	ethanol
<b>C</b>	ethene	ethane	ethanol	ethanoic acid
<b>D</b>	ethene	ethane	ethanoic acid	ethanol

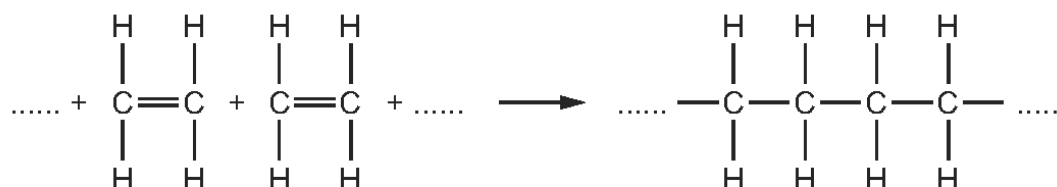
1300 - (0620-W 2015-Paper 1 (Core)/1-Q36) - POLYMERS

Which row describes the formation of a polymer?

	monomer	polymer
<b>A</b>	ethane	poly(ethane)
<b>B</b>	ethane	poly(ethene)
<b>C</b>	ethene	poly(ethane)
<b>D</b>	ethene	poly(ethene)

1301 - (0620-S 2016-Paper 1 (Core)/1-Q39) - POLYMERS

Ethene forms an addition polymer as shown.

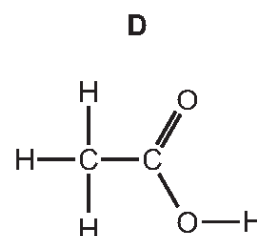
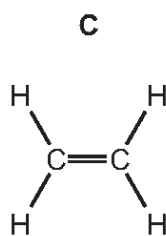
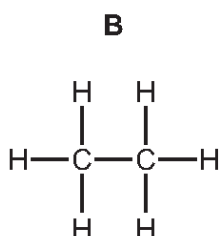
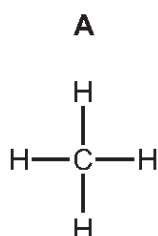


Which terms describe this polymer?

- A** a saturated compound called poly(ethane)
- B** a saturated compound called poly(ethene)
- C** an unsaturated compound called poly(ethane)
- D** an unsaturated compound called poly(ethene)

1302 - (0620-W 2016-Paper 1 (Core)/1-Q39) - POLYMERS

Which molecule can be polymerised?



1303 - (0620-S 2017-Paper 1 (Core)/2-Q38) - POLYMERS

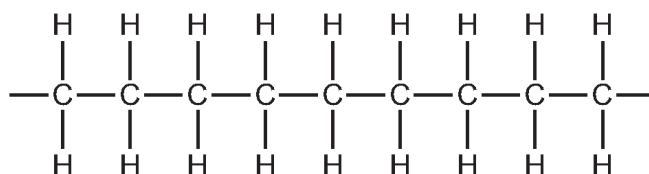
Poly(ethene), nylon and *Terylene* are all polymers.

From which small units are all polymers made?

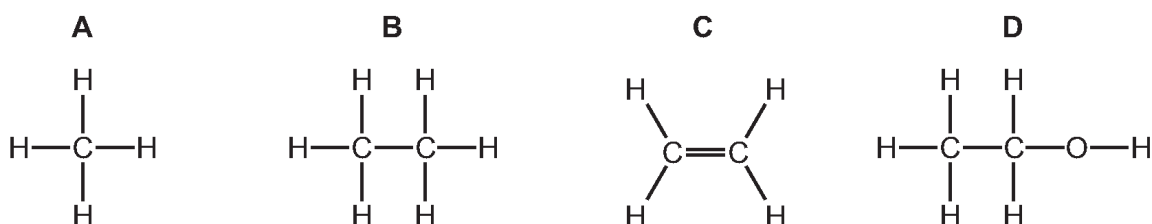
- A alkenes
- B monomers
- C plastics
- D proteins

1304 - (0620-S 2017-Paper 1 (Core)/1-Q40) - POLYMERS

The diagram shows part of the molecule of a polymer.



Which diagram shows the monomer from which this polymer could be manufactured?



1305 - (0620-W 2017-Paper 1 (Core)/1-Q39) - POLYMERS

The diagram shows a reaction sequence.

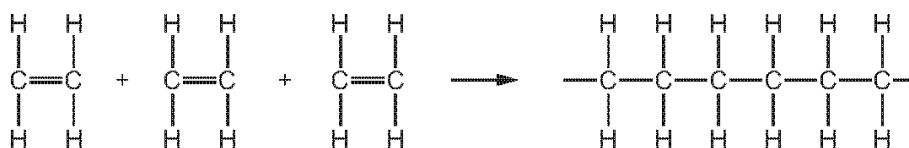


Which row names the processes X, Y and Z?

	X	Y	Z
A	cracking	fermentation	respiration
B	cracking	hydration	combustion
C	distillation	fermentation	respiration
D	distillation	hydration	combustion

1306 - (0620-W 2017-Paper 1 (Core)/1-Q40) - POLYMERS

Molecules of a substance react together as shown.



Which type of reaction has taken place?

- A cracking
- B oxidation
- C polymerisation
- D reduction

1307 - (0620-S 2018-Paper 1 (Core)/1-Q40) - POLYMERS

Polymers are long-chain molecules made from small molecules linked together.

Four polymers or types of polymer are listed.

- 1 carbohydrates
- 2 nylon
- 3 proteins
- 4 *Terylene*

Which of these polymers or types of polymer are synthetic?

- A 1 and 3
- B 1 and 4
- C 2 and 3
- D 2 and 4

1308 - (0620-S 2018-Paper 1 (Core)/2-Q40) - POLYMERS

Part of the label on the packet of a potato product is shown.

This potato product contains:

starch  
ethanoic acid  
sodium chloride  
sugar

Which constituent is a natural polymer?

- A ethanoic acid
- B sodium chloride
- C starch
- D sugar

1309 - (0620-S 2018-Paper 1 (Core)/3-Q40) - POLYMERS

Which substances are natural polymers?

	ethanol	protein	starch	vinegar
A	✓	✓	✓	✓
B	✓	x	✓	x
C	x	✓	✓	x
D	x	x	x	✓

1310 - (0620-W 2018-Paper 1 (Core)/1-Q40) - POLYMERS

Which statement about *Terylene* is correct?

- A It is a form of protein.
- B It is a natural polymer.
- C It is also called poly(ethene).
- D It is used to make clothes.

1311 - (0620-W 2018-Paper 1 (Core)/2-Q40) - POLYMERS

Which substance is a natural polymer?

- A ethene
- B glucose
- C nylon
- D protein

1312 - (0620-W 2018-Paper 1 (Core)/3-Q40) - POLYMERS

Some information about poly(ethene) is given.

- Poly(ethene) is used to make plastic bags.
- Poly(ethene) plastic bags in landfill sites do not readily decompose.
- Poly(ethene) molecules contain carbon and hydrogen atoms.

Which statement about poly(ethene) is correct?

- A It is biodegradable.
- B It is combustible.
- C It is unsaturated.
- D It reacts with water.

1313 - (0620-S 2019-Paper 1 (Core)/1-Q40) - POLYMERS

Which naturally occurring polymers are found in foods?

- 1 complex carbohydrates
- 2 nylon
- 3 salts
- 4 proteins

**A** 1 and 2      **B** 1 and 4      **C** 2 and 3      **D** 3 and 4

1314 - (0620-S 2019-Paper 1 (Core)/2-Q40) - POLYMERS

Which polymers are found in foods?

- 1 carbohydrates
- 2 poly(ethene)
- 3 protein
- 4 *Terylene*

**A** 1 only      **B** 1 and 3      **C** 2 and 4      **D** 3 and 4

1315 - (0620-S 2019-Paper 1 (Core)/3-Q40) - POLYMERS

Which substances are synthetic polymers?

- 1 *Terylene*
- 2 nylon
- 3 protein
- 4 poly(ethene)

**A** 1, 2 and 4      **B** 1 only      **C** 2 and 3      **D** 3 and 4

1316 - (0620-W 2019-Paper 1 (Core)/1-Q39) - POLYMERS

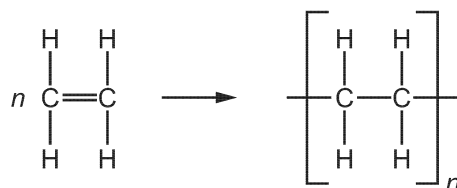
Which statements about aqueous ethanoic acid are correct?

- 1 It has a pH value of 10.
- 2 It reacts with metal carbonates to produce carbon dioxide gas.
- 3 It reacts with magnesium metal to produce hydrogen gas.

**A** 1, 2 and 3      **B** 1 and 2 only      **C** 1 and 3 only      **D** 2 and 3 only

1317 - (0620-W 2019-Paper 1 (Core)/1-Q40) - POLYMERS

The diagram shows the structure of a monomer and of the polymer made from it.



What are the monomer and polymer?

	monomer	polymer
<b>A</b>	ethane	poly(ethane)
<b>B</b>	ethane	poly(ethene)
<b>C</b>	ethene	poly(ethane)
<b>D</b>	ethene	poly(ethene)