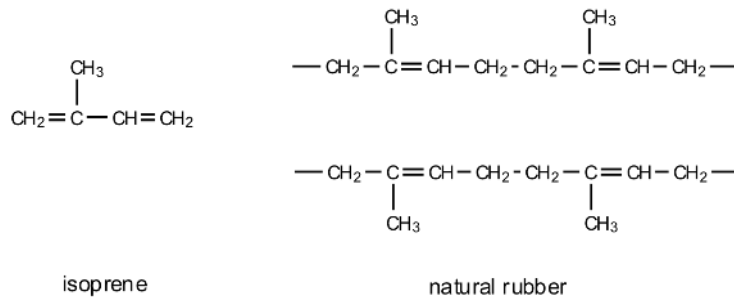


0	1
---	---

Natural rubber is a soft material obtained from trees. It is a polymer of isoprene.

The diagram shows the structure of an isoprene molecule as well as the structure of the molecules in natural rubber.



0	1	.	1
---	---	---	---

What is the molecular formula of isoprene?

C₅H₈ [1]

[1 mark]

0	1	.	2
---	---	---	---

What part of the structure of isoprene allows it be polymerised?

carbon to carbon double bond [1]

[1 mark]

0	1	.	3
---	---	---	---

Suggest a likely name for the polymer in natural rubber.

poly(isoprene) [1]

NOTE:

It is important to include brackets in the name.

0	2
---	---

The diagram below shows the simplified structure of a biological monomer.



0	2	.	1
---	---	---	---

What is the name of this type of monomer?

amino acid [1]

[1 mark]

0	2	.	2
---	---	---	---

What is the general name for the polymers formed from this monomer?

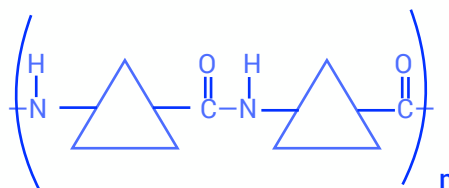
polypeptide [1]

[1 mark]

0	2	.	3
---	---	---	---

In the box below, draw a section of the polymer formed showing at least 2 repeat units.

[3 marks]



correct connections between monomers [1]
double C=O bonds [1]
brackets and little "n" [1]

(Total 8 marks)

End