

Name: .....

Date: .....

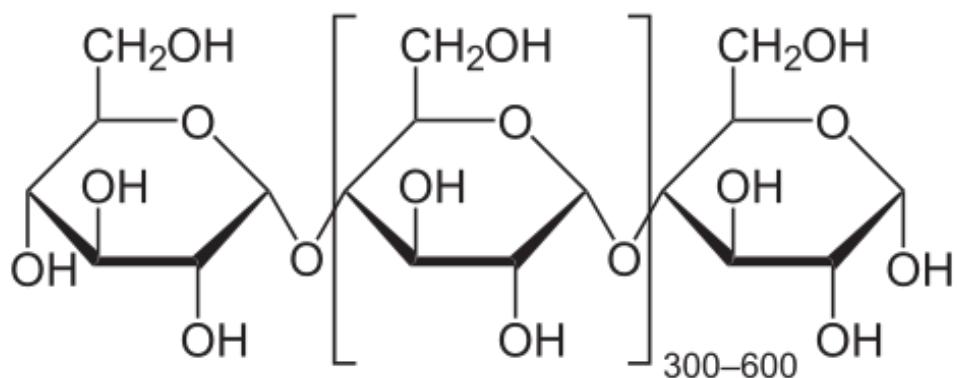
Class: .....



## IGCSE BIOLOGY EDEXCEL 9-1

### CHAPTER WORKBOOK

# Biological Molecules- Carbohydrates, Proteins and Lipids



## Carbohydrates, Proteins, Lipids

1. List the elements that make up the macromolecules.

Macromolecule	Elements
Carbohydrate	<ul style="list-style-type: none"><li>• .....</li><li>• .....</li><li>• .....</li></ul>
Protein	<ul style="list-style-type: none"><li>• .....</li><li>• .....</li><li>• .....</li><li>• .....</li></ul>
Lipid	<ul style="list-style-type: none"><li>• .....</li><li>• .....</li><li>• .....</li></ul>



2.

- a) Draw annotated diagrams to summarise the structure of the macromolecules.

A section of starch (a carbohydrate):	A section of a protein:
A triglyceride (lipid)	

- b) Compare the structure of glucose and starch.

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- c) Describe the similarities in the structure and function of starch and glycogen.

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## Testing for Biological Molecules

Complete the table to summarise the procedures for teaching for the presence of the biological molecules.

Biological Molecule	Test/Reagent	Positive result
Protein		
Safe Procedure:		
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Reducing sugar (e.g. glucose)		
Safe Procedure:		
..... ..... ..... ..... .....		
		White emulsion
Safe Procedure:		
..... ..... ..... .....		
	Iodine	
Safe Procedure:		
..... ..... .....		

