



Water

Hydrogen
Bonds

Structure of H₂O





Properties of Water

1 2 3 4 5

Property

Importance

Example



Introduction to the Biological Molecules

Monomer

e.g.

Polymers

Polymer

Molecules	Elements	Monomers	Polymers

Not Polymers



Condensation & Hydrolysis Reactions

- 1
- 2
- 3
- 4
- 5

Condensation

_____ :

Hydrolysis

_____ :



Monosaccharides & Disaccharides

- 1
- 2
- 3
- 4
- 5

Glucose

+



+



+



Alpha Glucose

+



Glucose



Beta Glucose



Alpha Glucose

Beta Glucose

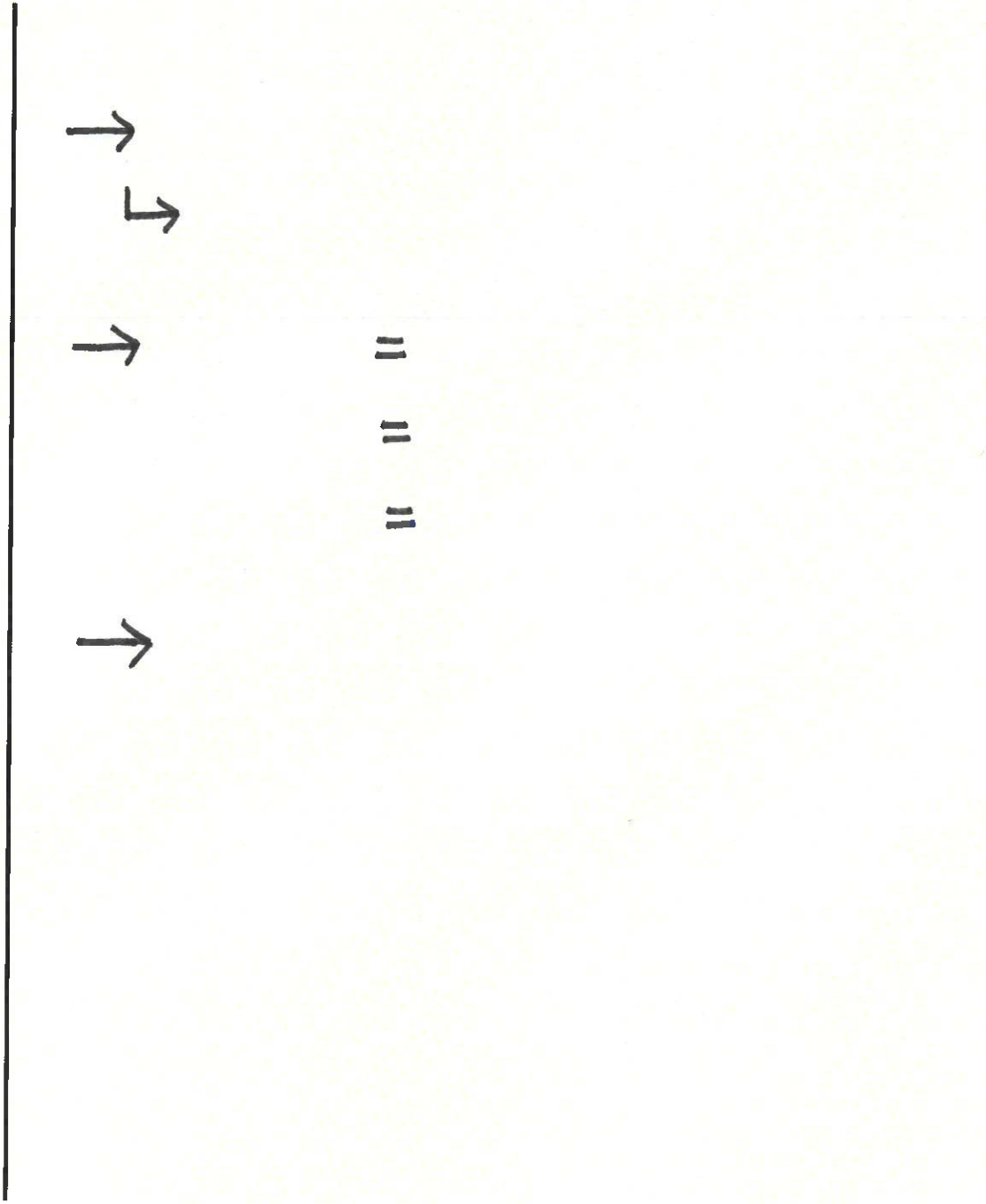
Glycosidic Bond





Ribose

1 2 3 4 5





Triglycerides

Structure



Saturated Fatty Acids



Functions

Unsaturated Fatty Acids

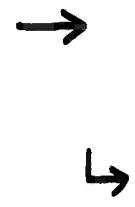




Phospholipids & Cholesterol

Structure

Functions



e.g.



e.g.



Cholesterol





Introduction to Proteins

- 1
- 2
- 3
- 4
- 5

Proteins

_____ :
_____ :

Amino Acids



Proteins



Types of Proteins





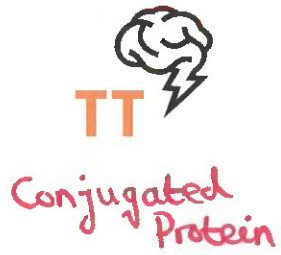
Protein Structure

1 2 3 4 5

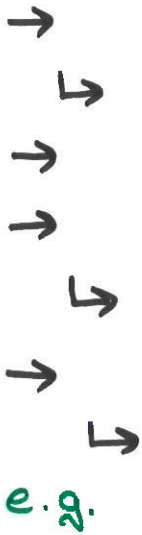
Primary Structure				
Secondary Structure				
Tertiary Structure				
Quaternary Structure				

Fibrous & Globular Proteins

- 1
- 2
- 3
- 4
- 5



Fibrous



Globular



Other Examples



Other Examples





Cations & Anions

Cations

Anions

_____ :	_____ :
↳ _____ ()	_____ ()
→	→
→	
_____ ()	_____ ()
→	→
_____ ()	_____ ()
→	→
→	→
_____ ()	_____ ()
→	→
_____ ()	_____ ()
→	→
_____ ()	_____ ()
→	→
_____ ()	_____ ()
→	→



Qualitative Tests for Molecules

1 2 3 4 5

Molecule				
Name				
Method	① ② ↘	① ② e.g. ③ e.g. ④	①	① ② ③
Positive Result				↘ ↘
Negative Result				