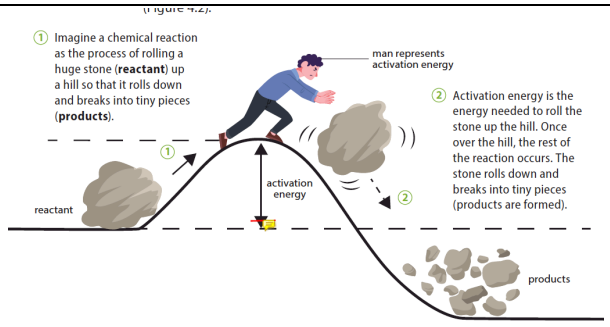
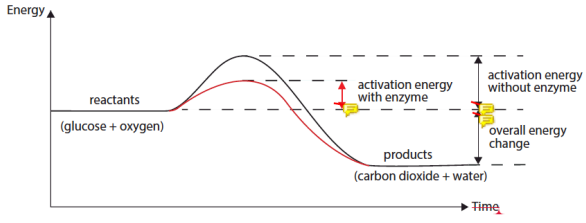
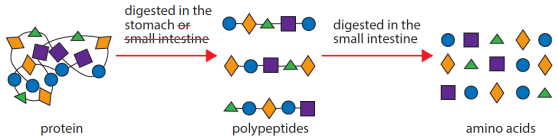
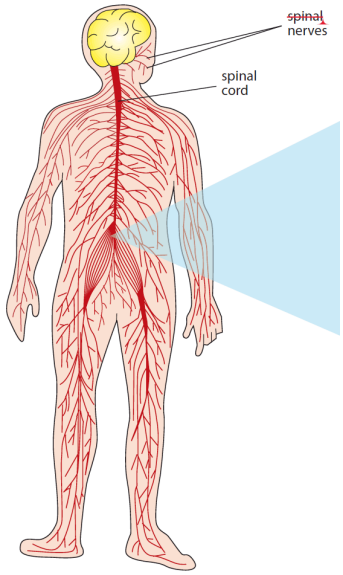
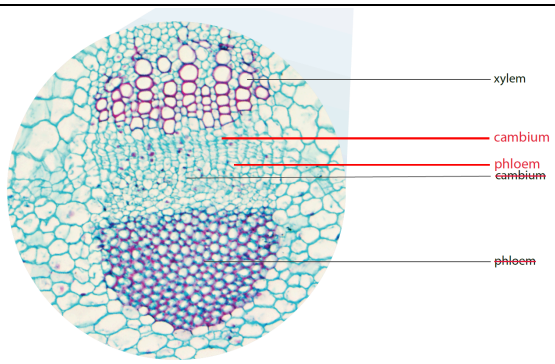
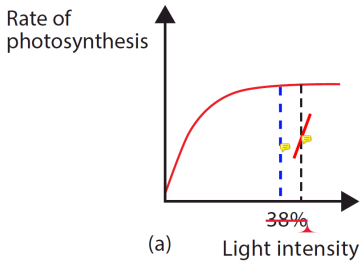
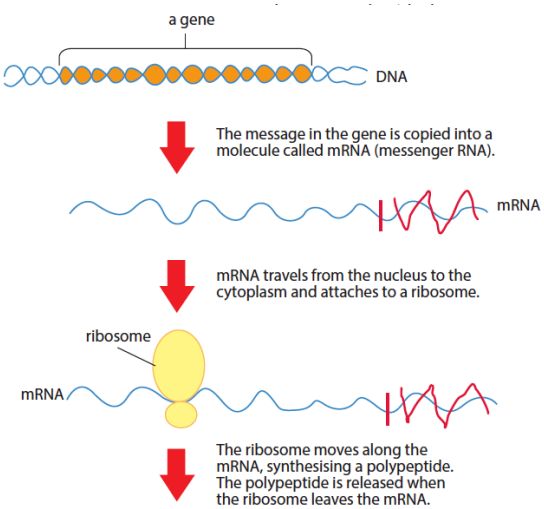
Errata List for Biology Matters for GCE 'O' Level Textbook (3rd Edition)
ISBN: 978-981-4987-88-2
3rd Edition 2023

Note: The following errata will be corrected in subsequent reprints of this book.

Chapter	Page No.	Original	Change
1	6	~~Chromosomes~~ • Each ~~chromosome~~ is a long thread-like structure found within the nucleus. ~~(A human cell contains 46 chromosomes.)~~ • It is made up of proteins and a compound called deoxyribonucleic acid or DNA. Hereditary information is stored in DNA. DNA carries instructions that a cell needs for carrying out its activities. • When ~~the~~ cell is dividing, the ~~chromosomes condense~~ and shorten to become thick, ~~rod-shaped~~ structures.	'**Chromosomes**' changed to '**Chromatin**' Other changes within text as highlighted below: • Each chromatin is a long thread-like structure found within the nucleus. • It is made up of proteins and a compound called deoxyribonucleic acid or DNA. Hereditary information is stored in DNA. DNA carries instructions that a cell needs for carrying out its activities. • When a cell is dividing, the chromatin condenses and shortens to become thick, rod-like structures called chromosomes. (A human cell contains 46 chromosomes.)
2	36	Living cells are able to absorb certain substances even though these substances are of higher concentration inside the cell than they are in the external environment. This means that the cells are absorbing substances against a concentration gradient (Figure 2.30). Such a process requires energy and is called *active transport*.	Last line: Such a process requires energy from the cell and is called *active transport*.
4	59	 **Figure 4.2** Activation energy is needed to start a chemical reaction.  Note: If the overall energy change is negative, there is a decrease in energy content (as shown in graph). If the overall energy change is positive, there is an increase in energy content. **Figure 4.3** Activation energy for an enzyme-catalysed reaction	Change double-headed arrows to single-headed arrows. Figure 4.2: • the arrow for activation energy to point upwards Figure 4.3: • the 2 arrows for 'activation energy with and without enzyme' to point upwards, and • arrow for 'overall energy change' should point downwards • X-axis label, change to "Progress of reaction"
5	74	• **Assimilation** — Nutrients are used by cells to provide energy or to make new ~~cytoplasm~~ for growth.	Change to: "Assimilation — Nutrients are used by cells to provide energy or to make new protoplasm for growth."

Chapter	Page No.	Original	Change
5	82	**Protein Digestion** Proteins are digested by proteases. • ~~Some~~ protein digestion begins in the stomach, where stomach protease digests proteins to polypeptides. • The ~~undigested proteins~~ that enter the small intestine are digested by ~~intestinal~~ protease to polypeptides. • The polypeptides produced are further digested to amino acids by intestinal protease.	Change to: Proteins are digested by proteases. • Protein digestion begins in the stomach, where stomach protease digests proteins to polypeptides. • The polypeptides that enter the small intestine are further digested by pancreatic protease to smaller polypeptides. • The polypeptides produced are further digested to amino acids by intestinal protease.
5	83	 **Figure 5.14** Breakdown of proteins to amino acids	Delete text “or small intestine” above first arrow.
10	202	Figure 10.7 	Change “spinal” to “cranial”
12	248	 **Figure 12.18** Photomicrograph showing a vascular bundle (35×)	Reposition labels for “phloem” and “cambium” as marked up in **red** in diagram on the left.

Chapter	Page No.	Original	Change
12	257		Graph: move broken line to the left to where the curve first levels off (refer to **blue broken line**) Change “38%” to “X”.
14	327	Figure 14.10 	Shorten the mRNA to position shown by the **red vertical line**.