

Practice Questions for Material Covered on Exam 1

You do not have to know all of the material in every chapter listed on the syllabus. To help you pick and choose what to focus on, I have selected the following questions as being most relevant to the material we will cover in class. As you study, try to answer these questions without looking at your book or your notes.

Chapter 1 – Scientific Study of Life

Section	Question type	Question number(s)
1.1	Mastering Concepts	1, 2
1.2	Mastering Concepts	1, 2, 3
1.3	Mastering Concepts	1, 3, 4

Section/page	Question type	Question number(s) or question location
End of chapter	Multiple Choice	1, 2, 3, 4, 5, 7, 8, 9
End of chapter	Write It Out	1, 2, 4, 5, 6, 8, 9, 10, 11, 12, 13
End of chapter	Pull It Together	1, 2, 3

Chapter 2 – Chemistry of Life

Section	Question type	Question number(s) or question text
2.1	Mastering Concepts	1, 2, 3, 5
2.2	Mastering Concepts	2, 3
2.2	Other	What is the relationship between atoms and molecules?
2.3	Mastering Concepts	1, 2, 3, 4, 5, 6
2.4	Mastering Concepts	1, 2, 3
2.5	Mastering Concepts	1, 2, 3, 4, 5, 6, 7
2.5	Other	What are the four main categories of organic molecules?

Section/page	Question type	Question number(s) or question location
N/A	Figure It Out	Pages 23, 26, 28
End of chapter	Multiple Choice	1, 2, 3, 4, 5, 6, 7, 8, 9, 10
End of chapter	Write It Out	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17
End of chapter	Pull It Together	1, 2, 3, 4

Make a concept map using the following terms: atom, atomic number, proton, neutron, nucleus, electron, ion, isotope, molecule, valence shell, covalent bond, polar, nonpolar, ionic bond, hydrogen bond, water, hydrophilic, hydrophobic, monosaccharide, polysaccharide, hydrolysis, dehydration synthesis, amino acid, protein, nucleotide, nucleic acid, lipid, fat, steroid

Chapter 3 – Cells

Section	Question type	Question number(s)
3.1	Mastering Concepts	1, 4, 5
3.2	Mastering Concepts	1, 2, 3
3.3	Mastering Concepts	1, 2, 3, 4
3.4	Mastering Concepts	1, 2, 3, 5, 6
3.5, 3.6	Mastering Concepts	None

Section/page	Question type	Question number(s) or question location
End of chapter	Multiple Choice	1, 3
End of chapter	Write It Out	2, 3, 4, 5, 6, 7, 8, 9, 10, 11
End of chapter	Pull It Together	1, 3, 4, 5 (not lysosome)

Make a concept map using the following terms: cell, ribosome, phospholipid bilayer, protein, fluid mosaic, cytoplasm, membrane, nucleus, prokaryote, eukaryote, chloroplast, mitochondrion, cell wall, chloroplast

Chapter 4 – The Energy of Life

Section	Question type	Question number(s)
4.1	Mastering Concepts	None
4.2	Mastering Concepts	1, 2
4.3	Mastering Concepts	1, 2
4.4	Mastering Concepts	1, 4
4.5	Mastering Concepts	None

Section/page	Question type	Question number(s) or question location
End of chapter	Multiple Choice	2, 4
End of chapter	Write It Out	2, 3, 5, 6
End of chapter	Pull It Together	None

Make a concept map using the following terms: metabolism, ATP, chemical reactions, enzyme, protein, nucleotide, amino acid, energy, cell

Chapter 5 -- Photosynthesis

Section	Question type	Question number(s)
5.1	Mastering Concepts	1, 2, 3
5.2-5.7	Mastering Concepts	None

Section/page	Question type	Question number(s) or question location
End of chapter	Multiple Choice	1, 2, 3

End of chapter	Write It Out	1, 6, 7, 10a, 10b, 11
End of chapter	Pull It Together	2, 4 (just use the top part of the concept map; you don't need to know structures or stages)

Chapter 6 – Respiration and Fermentation

Section	Question type	Question number(s)
6.1	Mastering Concepts	1, 2, 3
6.2-6.8	Mastering Concepts	None

Section/page	Question type	Question number(s) or question location
End of chapter	Multiple Choice	1
End of chapter	Write It Out	1, 9
End of chapter	Pull It Together	3, 4

Make a concept map using the following terms from chapters 5 and 6: metabolism, ATP, respiration, photosynthesis, mitochondrion, chloroplast, light, water, O₂, glucose, autotroph, heterotroph