



Welcome to your AP Biology Text

Biology, 9th Edition by Raven and Johnson

This activity is designed to introduce you to your text, its resources and provide a starting point for reading a college level text. This textbook is used in many universities for a first year biology course for students who are science majors. We will be using the book all year and you will be responsible for reading the text. I will provide “Guided Reading Worksheets” via edline to match the text and help you identify the important facts and concepts that I will review in class. As in any college class, YOU are the most important piece of the learning equation. Your guided readings also become the “frame” for your class notes. Putting those two pieces of the puzzle together tell you that the effort you put into these will give you a matching benefit.

Hint: while this assignment seems easy I try never to waste time. This assignment has a strong purpose. These strategies will be very helpful. I am expecting you to be independent with your book. This means if I assign a reading and you ask no questions in class or after, then you are responsible for the content. No, I will not skip a chapter and then hold you accountable but **lecture will not be a repeat of every word in the book.** If anything in the reading is unclear, you should come in with questions ready to discuss the content.

1. Let's start with the preface—what do Part I, Part II, Part III, etc. refer to?
2. Look at page v, Committed to Excellence:
 - a. What is said about themes in biology and why do the authors think that they are important?
 - b. What is the authors' viewpoint on evolution?
3. Look at page vii—Cutting Edge Science—this section is meant to alert individuals between this edition and the previous one. Instead of being a list of differences when I read this section, I saw it as not only content but also excitement with the content and the authors' drive to engage students. Read over this section and discuss the two chapters that interest you the most based on the information on pages vii to ix and why.

a.

b.

5. Let's look at pages x and xiii—this is a preview of features you will find in each chapter. Each section contains learning outcomes and review. You are also informed here about the web site. Diagrams are described and the coordination with the online diagrams is highlighted. Scientific thinking, descriptions of experiments, results and interpretation will be in each chapter too. There is nothing to write here – we'll get to that next.

6. We will be covering the Ecology Unit first: how many chapters are in the ecology unit?

7. Turn to page 1132– let's start by looking at the patterns of organization in the chapter.

a. What is this chapter titled?

b. How many sub-sections are in this chapter?

c. Do most chapters have as many sub-sections? Scan a few chapters and answer?

8. Think of your brain as a file cabinet. Learning is putting information into the cabinet and then being able to take it out and use it at a later time. Imagine you are given this file cabinet and a whole “bunch” of information to file, being ready to retrieve it quickly. You would divide up the “stuff”, label folders and then organize the headings of those folders and put the “stuff” away. The chapter outline headings do just that!

a. Read the introductory paragraph on page 1132—how does it relate to the picture on the same page?

Now scan the chapter outline—can you see how it connects to that introductory paragraph?

At this point I would be setting up my file drawer, as Behavioral Biology and I know that I need 12 big folders.

9. Scan through the chapter by just paging—take note that each section begins with a block listed learning outcomes and at the end of the section there is a summary statement and then a question.

a. Are the answers to Learning Outcome review questions in the book? If so where?

b. Take note of the figures, often there is a graph of sorts, an explanation and then an inquiry question. Are the answers to the inquiry questions in the book? If so, where?

The best way to read a text such as this is to begin by paging through the chapter. Look at the structure of the chapter, the diagrams – scan those, the pictures, again scan.

10. Bold words are important for example on page 1139, the word imprinting is used; write the definition of the word imprinting

Bold words and vocabulary words necessary to understand content are a great source of material for classroom quizzes.

11. Look at page 1159. The authors have provided a great brief review of each sub-section. When you studying for the unit test this is a place to start to see what you already know.

Look further to the Review Questions, when studying for a test, answer the questions including the short answer questions and then check the back of the book. There is no reason for any student to get a similar question wrong when you have this help. What if you have no idea why the answer is “A”? Then you know to come in for extra help before the test or to ask a question during class discussion time.

12. Look to page 1169 and look only at figure 56.9. What is written on the x and y-axes?

a. Look at the names of the animals represented by the red points. What trend do you see represented by this graph?

Now look at the inquiry question below the diagram. Think through an

answer. These are positioned throughout the book to get the reader from the facts to the concepts. Check your answer in the back of the book.

13. Now, turn to page 1171. Please read ONLY the three paragraphs on the right hand side of the page. Now look at figure 56.12 – begin with the heading on the caption, then the axes and points plotted and then back to elaboration in the caption.

- a. What is the relationship between the three paragraphs and the figure?
- b. What does this tell you about using your book as a review for tests and looking at concepts?
- c. What does this tell you about reading strategies if you find the text a bit confusing when you first begin to understand a concept – ah- ha, scanning the chapter and reading headings, captions and diagrams first might help.

14. Turn to page 1219 – look at figure 58.13 – don't read any words yet – but look at the different shapes and depths of the boxes – now look only at the titles of the four boxes a, b, c and d. Now, make a prediction of what each box represents solely on the titles and shapes of the boxes. Check yourself with reading the descriptions, how close were you? Are you a visual learner, if so you likely prefer this type of diagram?

15. The next pattern is very helpful in getting the most learning out of your reading. Turn to page 1186 – Look at the heading – Biological Communities: Species Living Together. There are two learning outcomes. The first paragraph is brief and to the point. The balance of the section elaborates the concept. Think of this as big idea, sub headings and details.

Your guided readings are a very important part of your course work. It is where I will be able to give you credit for reading. The textbook covers much more material than we will be able to cover in class. The Guided Reading Worksheet together with the Student Learning Plan will help you to narrow the focus of your reading and study time.