

Unit 1 Test 1

Lessons 1-5 Study Guide

Purpose: To provide you with a framework for reviewing the key concepts and terms from lessons 1-5 of the IBI text.

Instructions: Your test is scheduled for **Tuesday, October 27th**. Use this study guide to help you prepare for the quiz. Study guides are meant to help guide your thinking and focus. Use this guide to help you identify areas of strength and weakness so you know what to study.

Test Format

The test will be entirely short response questions. There will be no matching and no multiple choice. On the test you will be asked to do several things. All of these can be found on the next page of this study guide.

Vocabulary that will be on the test.

The following vocabulary will show up on the test in some way. This means that you may be asked to identify these terms, use them in a response, or define them on the test.

Lesson #	Vocabulary	Where these are defined
1	Eukaryote, Prokaryote	IBI Handout 6
2	Microscope parts: stage, light, objective lenses (high, medium, low), coarse adjustment knob, fine adjustment knob	IBI Handout 9
3	No vocabulary from lesson 3 will be on the test.	N/A
4	No vocabulary from lesson 4 will be on the test.	N/A
5	Cell parts: cell membrane, cell wall, nucleus, vacuole, chloroplast, chlorophyll Osmosis/diffusion: hypotonic, isotonic, hypertonic	Cell parts are defined on IBI textbook pages 68-69. Osmosis/diffusion terms are defined on IBI handout 23.

Continued on next page.

What's on the Test

What you have to do	Resources to help you
<p>1. Observe a microscope that has been shut down incorrectly. Identify what is wrong and explain what the student would have to do to correct this.</p>	<p>From Lesson 2</p> <ul style="list-style-type: none"> Review "Removing a Slide" and "Shutting down a Microscope" procedures from page 3 of IBI handout 9.
<p>2. Identify the errors in a scientific drawing and explain what the student would have to do to correct this.</p>	<p>From Lesson 2</p> <ul style="list-style-type: none"> Review page 4 from IBI handout 9.
<p>3. Identify a cell as prokaryotic or eukaryotic and explain how you know.</p>	<p>From Lessons 1 and 5</p> <ul style="list-style-type: none"> Review IBI handout 6 for the definitions of eukaryote and prokaryote. Review IBI reading pages 68-69 for cell parts. See IBI handout 20, question 5a, for an example of how we would know if a cell is eukaryotic or prokaryotic.
<p>4. Identify a cell as plant or animal and explain how you know.</p>	<p>From Lesson 5</p> <ul style="list-style-type: none"> Review IBI reading pages 68-69 for cell parts and a comparison between plant and animal cells. Review IBI handout 19, question 3, for an example of parts found in plant cells but not animal cells.
<p>5. Label and define visible parts of a cell.</p>	<p>From Lesson 5</p> <ul style="list-style-type: none"> Review IBI reading pages 68-69 for cell parts. Review IBI handouts 18 and 19 and their drawings for examples visible cell parts.
<p>6. Respond to questions about the shape, arrangement, and parts of a cell.</p>	<p>From Lesson 5</p> <ul style="list-style-type: none"> Review IBI handouts 18 and 19 for examples of the shapes, arrangements, and parts of a cell. Pay close attention to how the shape of the cell and the parts it contains is connected to the function (job) of the cell.
<p>7. Identify a cell as being in a hypertonic, hypotonic, or isotonic; explain what will happen to the cell in that solution.</p>	<p>From Lesson 5</p> <ul style="list-style-type: none"> Review IBI handout 23 for definitions on hypertonic, hypotonic, and isotonic. Review IBI handouts 24 and 25 for examples of what happens to things placed into hypotonic, isotonic, and hypertonic solutions.

Additional Review Sources

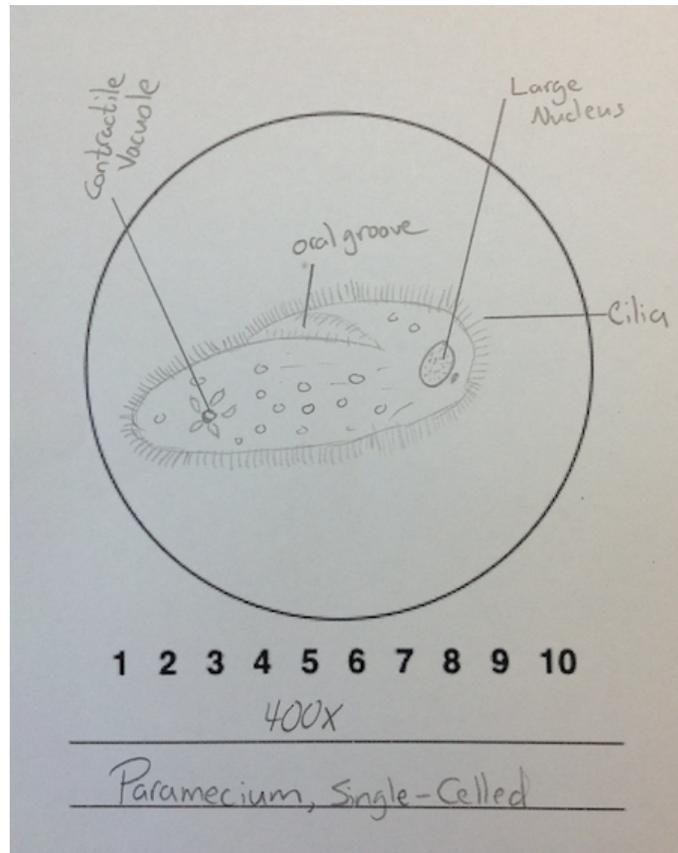
- View the Lesson Summaries in Schoology.
- Review your content reflections and reading checks in Schoology.
- E-mail me with specific questions you may have (i.e. "I'm not sure how to identify a eukaryotic cell. What should I look for?" **not** "I don't get cell stuff.")
- We will have an in-class review the day before the test.

Sample Question (and answer)

Below is a scientific drawing made by a student. To receive full credit you must:

- Identify what the student did wrong
- Explain what they need to do to fix it

This problem is worth 8 points. There are 4 errors with the drawing. You earn 1 point for each error identified and 1 point for explaining how to correct this error.

**Sample response that would receive full credit.**

The student made 4 errors with their drawing. First, they wrote a label inside the circle. To fix this they must write the label "oral groove" outside the field of view. Second, they wrote a label in the wrong direction. To fix this they must write the label "contractile vacuole" so it is parallel to the base of the page. Third, their title is not in all caps. To fix this they must write all the letters in capitals. Finally, they did not include a measurement. To fix this they must measure the organism and write it on one of the title lines.