



# Year End Review

## Unit 2 – Cells and Systems

Complete each of the following questions, relating to the specific learner outcomes, covered this year in Grade 8. The questions in this review reflect what you should have mastered and will be tested on in the **Final Achievement Exam**. The answers will be covered in class.

### Part 1 – Characteristics of Living Things

What are the basic functions of all living things, and what are the structures that enable organisms to perform those functions? (p. 98)

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How are living organisms organized. (p. 100-101)

### Part 2 – The Microscope

Describe changes that took place in the development of the microscope over time.

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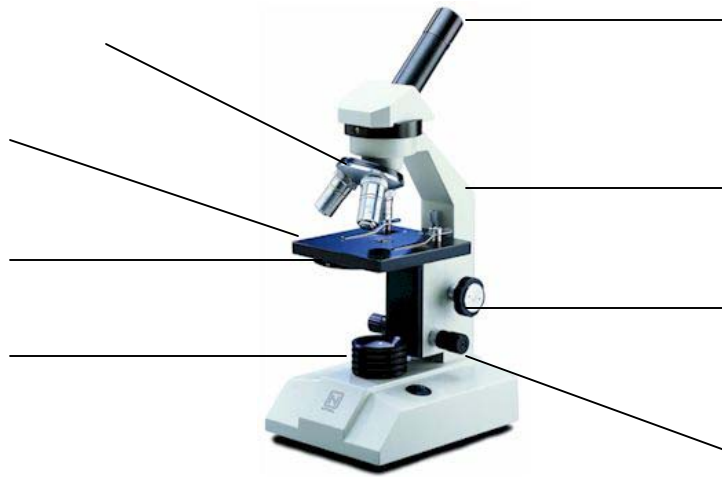
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What are the main **parts of the microscope**? (p.107) (Label as many parts as you can.)



Describe how to calculate the **field of view**. (p.111)

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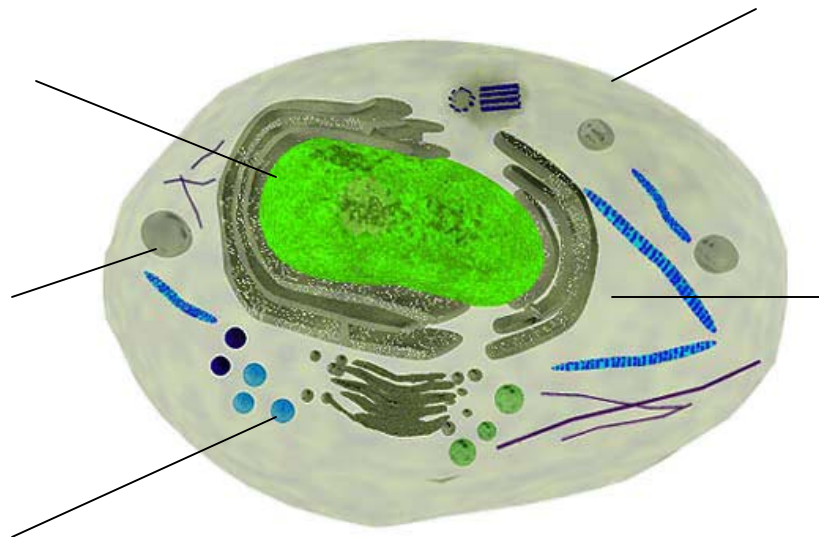
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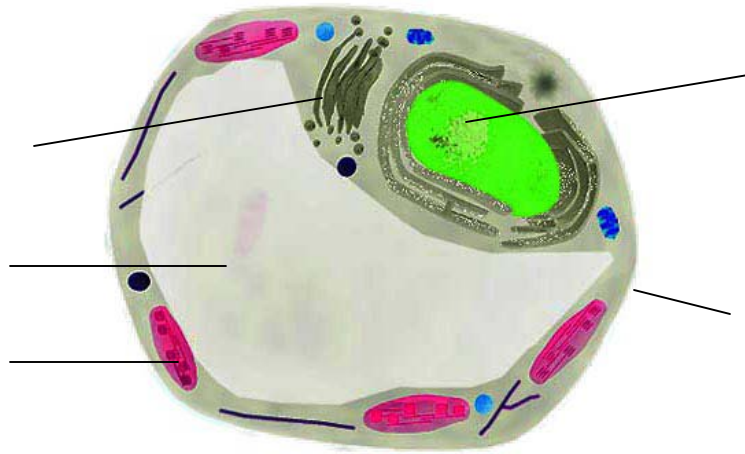
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### **Part 3 – Cells**

Identify the main component parts of the **animal cell**.



Identify the main component parts of the **plant cell**



### **Part 4 – Cell Processes**

What is a **selectively permeable membrane**? (p.128)

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Describe **diffusion**. (p.129)

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Describe **osmosis**. (p.130)

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What is **transpiration**? (p.135)

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Explain how a plant transports fluids, from the roots to the leaves.

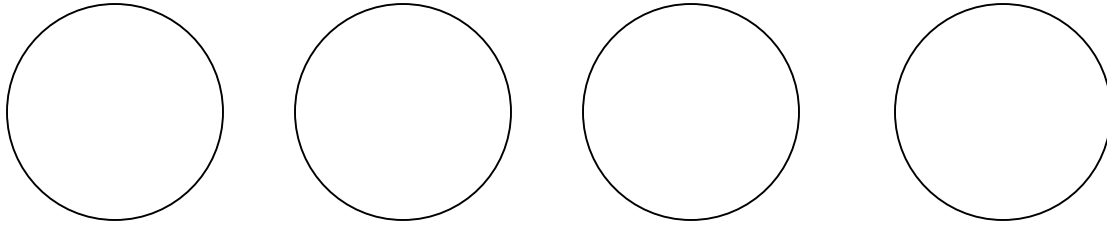
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## Part 5 – Cell Specialization

Identify and describe the differences between different specialized cells. (p.138)



Muscle	Nerve	Skin (epithelial)	Bone (connective)

What are the primary **advantages** of multi-cellular organisms (compared to unicellular organisms)?

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Describe the levels of cellular organization in a multi-cellular organism. (p.140)

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**Excretory**

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

**Skeletal**

_____	_____
_____	_____
	_____
	_____

**Muscular**

_____	_____
_____	_____
	_____
	_____

How do the different body systems work together? Give specific examples.

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**Part 7 – A healthy life style leads to a healthy body**

How can you keep each of your body systems healthy?

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What **disorders** are common in each of the body systems?

**Respiratory** \_\_\_\_\_

**Digestive** \_\_\_\_\_

**Nervous** \_\_\_\_\_

**Excretory** \_\_\_\_\_

**Skeletal** \_\_\_\_\_

**Muscular** \_\_\_\_\_

What **life style choices** should be made if we want healthy bodies?

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