

Zombie Identification

“If you know the enemy and know yourself, you need not fear the result of a hundred battles. If you know yourself but not the enemy, for every victory gained you will also suffer a defeat. If you know neither the enemy nor yourself, you will succumb in every battle.”

– Sun Tzu, *The Art of War*

The first step is to understand the threat.

The three stages of Zombic degradation “At-a-Glance”¹

Stage I: 1-3 months. The skin is mottled, peeling, and covered with open sores.

Stage II: 4-6 months. The ears, lips, nose and eyelids are rotting away; fingers and toes, teeth and hair begin to fall off. Swelling of tissues from gas and fluid buildup; exposure of subcutaneous tissues.

Stage III: 7-9 months. Large areas of exposed muscle and bone

YOU know histology, the public DOESN'T

- For each stage of decomposition specify which tissue type is most affected and explain how the degradation of that tissue will affect the zombie as a whole (e.g., degradation of skeletal muscle will greatly impair the locomotion of the zombie).
- Create an accurate model zombie that illustrates the structure and location of each tissue type (useful for classrooms to ensure the children are safe) Be sure to include defining aspects of each tissue.
- Create a PSA to educate the public on how to identify the “danger level” of a zombie based on the observed decomposition. For each tissue type on your model, include a description of the purpose of that tissue and how its decomposition will affect the zombie.

¹ (Fvza.org, 2017)

Your job is to clarify the lifespan of a zombie. Use the brief description on the previous page as your starting off point to discuss the histology of a zombie.

1. For each stage of decomposition specify which tissue type is most affected and state how the degradation of this tissue type will affect the zombie as a whole (e.g., degradation of skeletal muscle will greatly impair the locomotion of the zombie).
2. Create an accurate model zombie that illustrates the structure and location of each tissue type (see list below). Be sure to include defining aspects of each tissue.
3. Create a PSA to educate the public on how to identify the “danger level” of a zombie based on the observed decomposition. For each tissue type on your model, include a description of the purpose of that tissue and how its decomposition will affect the zombie.
 - a. Include an image of the tissue, and explanation of what it does and a description of what happens to the zombie when that specific tissue decomposes.
 - b. Include :
 - i. **Epithelial**
 1. Cuboidal
 2. Columnar
 3. Pseudostratified
 4. Squamous
 - ii. **Connective**
 1. Loose connective
 2. Fibrous connective
 3. Cartilage
 4. Adipose
 5. Blood
 6. Bone
 - iii. **Muscle**
 1. Skeletal
 2. Cardiac
 3. Smooth
 - iv. **Nervous**
 1. Neuron
 2. Glial

This is a group project (2 people per group). You will sign the employment contract and specify in detail the responsibilities of each person.

Part I. (Test Grade) Rubric

Category	Great (10 – 9 points)	Good (8 – 6 points)	Okay (5-3 points)	Needs Work(2 – 0 pt)
Knowledge	Demonstrates mastery of the concept and evidence of thorough research. Exceeds the requirements of the assignment	Demonstrates adequate understanding of the concept and evidence of research. Meets the requirements of the assignment	Demonstrates understanding of the concept and some evidence of research.	Does not understand the concept and/or displays a lack of research.
Quality of Information	Information clearly relates to the main topic. It includes several supporting details and/or examples. Exceeds the requirements of the assignment	Information clearly relates to the main topic. It provides supporting details and/or examples. Meets the requirements of the assignments	Information clearly relates to the main topic. No details and/or examples are given.	Information has little or nothing to do with the main topic.
Presentation	Masterfully presented as a scientist to students. Exceeds the requirements of the assignment.	Presented as a scientist to students. Meets the requirements of the assignment.	Presented material but not as a scientist to students.	Missing information in Presentation.
Images	Diagrams and illustrations are neat, accurate and add to the reader's understanding of the topic. Exceeds the requirements of the assignment.	Diagrams and illustrations are accurate and add to the reader's understanding of the topic. Meets the requirements of the assignment.	Diagrams and illustrations are neat and accurate and sometimes add to the reader's understanding of the topic.	Diagrams and illustrations are not accurate OR do not add to the reader's understanding of the topic.
Group grade	Superb contributions to the project and group.	Good contributions to the project and the group.	Fair contributions to the project and the group.	Poor contributions to the project and the group.
Creativity	Student demonstrates independence in going beyond the guidelines of the assignment.	Student is not able to go beyond the guidelines of the assignment.	Student does not meet basic guidelines of assignment.	Needs significant improvement.
Spelling and grammar	No mistakes	1-2 mistakes	3-4 mistakes	More than 5 mistakes

Total points possible 70

Points awarded _____

% Grade _____

General Employment Contract: Interview Contract

1. Your role for the project will be clearly defined.
 - a. Failure to carry out the responsibilities of your assigned role will result in a warning. At the third warning your group and/or Dr. Cavar will “fire” you from the project. See below

Please list each member and the topics they will be responsible for:

2. Due dates will be established for each section of the project and will be met. *I would suggest that you have “checkpoint” dates (listed below) for the internal use of your group. These dates will follow the same rules as “official” dates set by Dr. Cavar.*

Examples “checkpoints”: Determined appropriate video/editing software

Outline of notes

Outline of script

- a. Late submissions to either Dr. Cavar or to other group members will be penalized.
 - i. 5 pts off for 1st offence
 - ii. 2nd offence may result in you being “fired” from the group.
 - b. In the case of an emergency or extended illness, an exemption may be made – however you must inform both Dr. Cavar and the other group members within 24 hours of the due date.
3. The work will represent the high standards that you as Lauralton students have learned to expect.
 - a. Errors in the final project will result in a reduction in your grade. These include (but are not limited to) failing to proof read your work and failing to make discussed revisions
 4. Dr. Cavar will ensure that all documentation is turned in, that the above rules are followed, and that penalties are fair and enforced.

Dismissal (being fired) will result for an infraction that occurred 3 times. The group and/or Dr. Cavar will sit with the employee and discuss the situation. Dismissal from your group does not relinquish your responsibility for completing the project – you will just be doing the project on your own