# TERM 2: WEEK 4 – 5 (8th – 19th June)

# Strand 3: Organism Level Biology

## Sub-strand 3.3 Excretion in animals

### Lesson Activity 3.3

**The specific learning outcomes (SLO) targeted in this activity are provided below:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Specific Learning Outcomes:** Students are able to  | **Skill level** | **SLO code**  | **Achieved****(Yes / No)** |
| List the main excretory organs in a fish, insect and human | 1 | Bio3.3.1.1 |  |
| Identify the excretory product of fish, insects and humans | 1 | Bio3.3.1.2 |  |
| Describe the structure of the main excretory organs or systems in fish, insects and humans | 2 | Bio3.3.2.1 |  |
| Describe the function of these specific excretory organs in fish, insects and humans | 2 | Bio3.3.2.2 |  |
| Explain the process involved in the production of carbon dioxide, water and nitrogenous wastes from fish, insects and humans | 3 | Bio3.3.3.1 |  |
| Discuss the efficiency of the excretory system of an organism and relate it to its environment in relation to carbon dioxide, water and nitrogenous waste: ammonia (fish), uric acid (insects) or urea (humans) | 4 | Bio3.3.4.1 |  |

**Instructions:**

1. Read Chapter 20 – Excretion in animals, pages 219 – 224
2. If you have access to the internet, refer to Central School’s website: [www.centralschool.edu.vu](http://www.centralschool.edu.vu), Year 12 Biology folder Term 2 Week 4 – 5, to watch videos on excretion in animals and access other resources.
3. Answer the following questions.
4. List the main excretory organs in:
5. insect

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1. fish

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1. human

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1. Name the excretory product of:
2. fish

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1. insect

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1. human

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1. Describe the structure of the main excretory organs in:
2. fish

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1. insect

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1. human

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1. Describe the function of the excretory organs in:
2. fish

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1. insect

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1. human

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1. Explain the process involved in the production of carbon dioxide, water and nitrogenous wastes in:
2. fish

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1. insects

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1. humans

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1. Discuss the efficiency of the excretory system of fish, insects and humans. Your discussion must include :
* name of nitrogenous waste produced by each organism ;
* process involved in the production of : carbon dioxide, water, and nitrogenous waste in each organism ; and
* efficiency of the excretory system in relation to the organism’s environment.

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