# TERM 2: WEEK 2 – 3 (25th May – 5th June)

# Strand 3: Organism Level Biology

## Sub-strand 3.2 Animal Circulatory system

### Lesson Activity 3.2

**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)** |
| Define open/closed circulatory system | 1 | Bio3.2.1.2 |  |
| Describe the features of a single/double circulatory system. | 2 | Bio3.2.2.4 |  |
| Differentiate between a single and a double circulatory system | 3 | Bio3.2.3.4 |  |
| Identify organisms with 2, 3, and 4 chambered hearts | 1 | Bio3.2.1.1 |  |
| List the differences identified in relation to size and mobility of an insect, fish and human | 2 | Bio3.2.2.1 |  |
| Tabulate the differences of the efficiency of the circulatory system in an insect, fish, and human | 2 | Bio3.2.2.2 |  |
| Explain how the efficiency of the circulatory system of an insect relates to its size and mobility | 3 | Bio3.2.3.1 |  |
| Explain how the efficiency of the circulatory system of a fish relates to its size and mobility | 3 | Bio3.2.3.2 |  |
| Explain how the efficiency of the circulatory system of a human relates to its size and mobility | 3 | Bio3.2.3.3 |  |
| Discuss the difference in efficiency between closed single, closed double and open circulatory systems, using specific examples | 4 | Bio3.2.4.1 |  |
| Discuss reasons as to why animals above a certain size require an internal transport system using examples | 4 | Bio3.2.4.2 |  |

**Instructions:**

1. Read Chapter 20 – Plant taxonomic groups, pages 197 – 209
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 2 – 3, to watch videos on plant transport and access other resources.
3. Answer the following questions.
4. Define the following terms:
5. Closed circulatory system

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1. Open circulatory system

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1. Describe the features of:
2. Closed circulatory system

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1. Open circulatory system

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1. Explain the differences between closed and open circulatory systems.

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1. Name an organism with:
2. 2 chambered hearts

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1. 3 chambered hearts

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1. 4 chambered hearts

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1. Describe the differences between insect and fish in terms of: size and mobility

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1. Describe the differences between fish and human in terms of: size and mobility

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1. Complete the table below by describing the efficiency of the circulatory system of: insect, fish, and human.

|  |  |  |  |
| --- | --- | --- | --- |
| Organism | Size | Mobility | Efficiency of circulatory system |
| Insect |  |  |  |
| Fish |  |  |  |
| Human |  |  |  |

1. Explain the efficiency of the circulatory system of an insect in relation to its way of life (size and mobility).

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1. Explain the efficiency of the circulatory system of a fish in relation to its way of life (size and mobility).

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1. Explain the efficiency of the circulatory system of a human in relation to its way of life (size and mobility).

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1. Discuss the difference in efficiency between closed single, closed double, and open circulatory systems, using specific examples.

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1. Discuss reasons as to why animals above a certain size require and internal transport system using examples.

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