

Student e-Worksheet

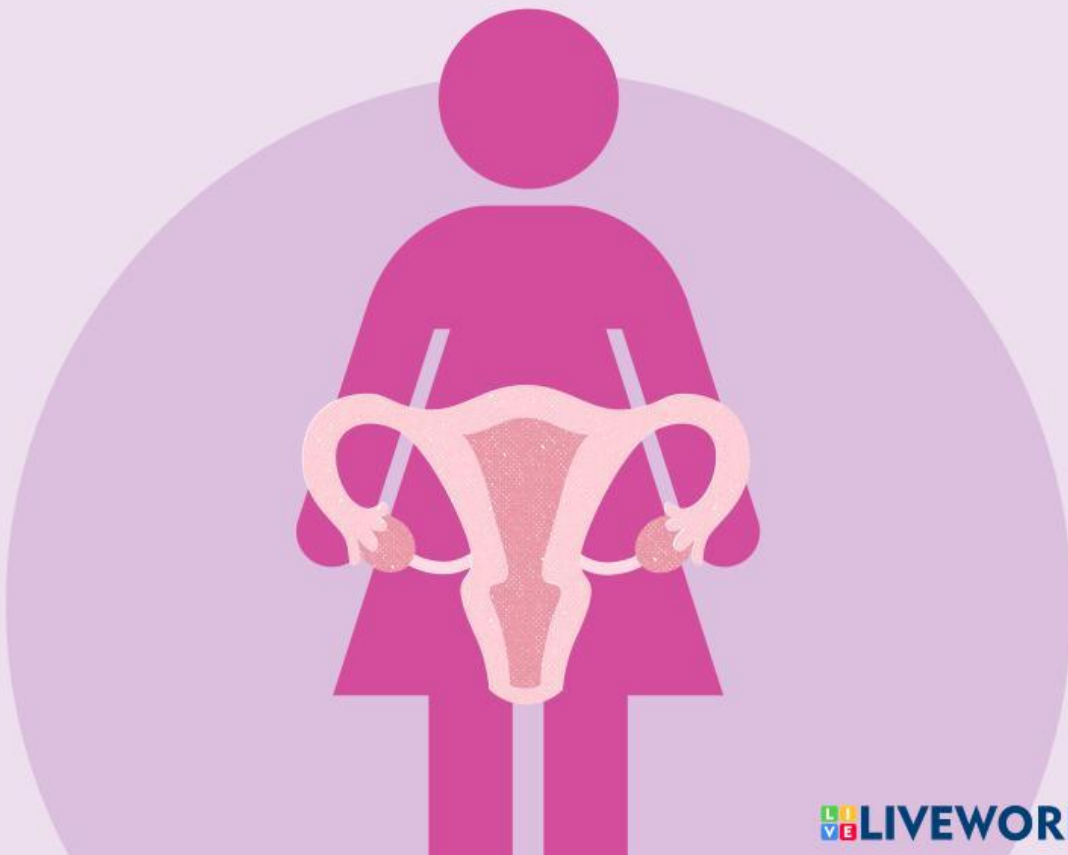
BIOLOGY

Female Reproduction System

Group: _____

Class: _____

Members: _____





Instruction For Use

- Fill the identities.
- Read and understand every command in each learning phase.
- The worksheets are completed in groups.
- The worksheets can be accessed by scanning the QR code or link that has been shared in the class group.
- The answers are filled in on the worksheets.
- If there are question or any difficulties please ask to the teacher.
- The results are then presented in front of the class



Learning Outcomes

Understanding the facts, concepts, principles, laws, theories, and models of cells and the bioprocesses that occur within them, **organ systems and their interrelationships**, evolution, inheritance, growth and development, and modern biotechnology.



Learning Objectives

Through Problem-Based Learning, students are able to:

1. Identifying human reproductive problems with cases of menstrual cycle disorders (SDG 3 & 5)
2. Identify the structure and function of human reproductive organs through problems related to menstrual cycle disorders appropriately. (SDG 3 & 4)
3. Analyze the relationship between menstrual cycle disorders and hormone regulation and the fertilization process appropriately. (SDG 3)
4. Design appropriate solutions based on problems related to menstrual cycle disorders and present their findings in class discussions appropriately. (SDG 4,3 & 5)



Student Orientation to the Problem

Formulate a problem on the article you've read and write your answer in the column below!

The menstrual cycle is the distance between the first day of menstruation and the first day of the next menstruation, normally no less than 21 days and no more than 35 days. The duration of the menstrual cycle sometimes fluctuates each month, so menstrual irregularities can occur. According to a 2020 WHO report, approximately 45 women experience a prevalence of menstrual cycle disorders. According to data from the 2018 Basic Health Research in Indonesia, as many as 13.7 women aged 10-59 years experience irregular menstruation problems in one year. The prevalence of irregular menstrual cycle disorders in Indonesian women aged 17-29 years and 30-34 years is quite significant, reaching 16.4. Menstrual disorders consist of menstrual cycle disorders, menstrual duration disorders, and menstrual blood volume. Several menstrual cycle disorders include amenorrhea (absence of menstruation), polymenorrhea (menstrual cycles less than 21 days), oligomenorrhea (menstrual intervals of more than 35 days), dysmenorrhea (pain during menstruation), premenstrual syndrome (PMS), hypermenorrhea, and hypomenorrhea. Factors that can cause menstrual cycle disorders include hormonal disorders, nutritional status, high or low BMI (Body Mass Index), and stress levels.

References

- Amalia, I. N., Budhiana, J., & Sanjaya, W. (2023). The relationship between stress and menstrual cycle disorders in adolescent girls. *Journal of Health Discourse*, 8(2), 75-82.
- Ilham, M. A., Islamy, N., Hamidi, S., & Sari, R. D. P. (2022). Menstrual cycle disorders in adolescents: A literature review. *Journal of Professional Nursing Research*, 5(1), 185-192.
- Islamy, A., & Farida, F. (2019). Factors influencing the menstrual cycle in third-grade adolescent girls. *Journal of Mental Health Nursing*, 7(1), 13-18.



Student Orientation to the Problem

After you read the article, please write down at least one question of formulation of the problem in the column below!

Organizing Student to Study

- Discuss the problem as a group!
- Determine the division of tasks within the group to gather information, analyze it, and find solutions to the problem!
- Learn concepts related to the human reproductive system from the article below or other valid and credible sources!



Article journal



The video about
menstrual cycle



Summary of material



Individual and Group Research Guide

- Discuss solutions to the problems you have formulated!
- Gather various supporting information from credible sources to determine a solution!
- Analyze and discuss the information you have found to determine solutions to the questions formulated based on the problems provided!
- Write down various alternative solutions to the problem that connect with SDG 3, the reason that support the solutions, and supportive evidence based on the credible sources in the column below!

Alternative Solution	Reason	Supporting Evidence	Source



Develop and Present the Work

- Present the results of the discussion in front of the class!
- Please do the QnA also to give a comment or respond to the presenter!



Analyze and Evaluate the Problem-Solving Process

Please write down your analysis and evaluation about new concept that you have found related to other presenter!



Analyze and Evaluate the Problem-Solving Process

What have you learned from this learning?

Are there material that you don't understand yet? Please write down here!