

Student Activity Sheet (LKPD)

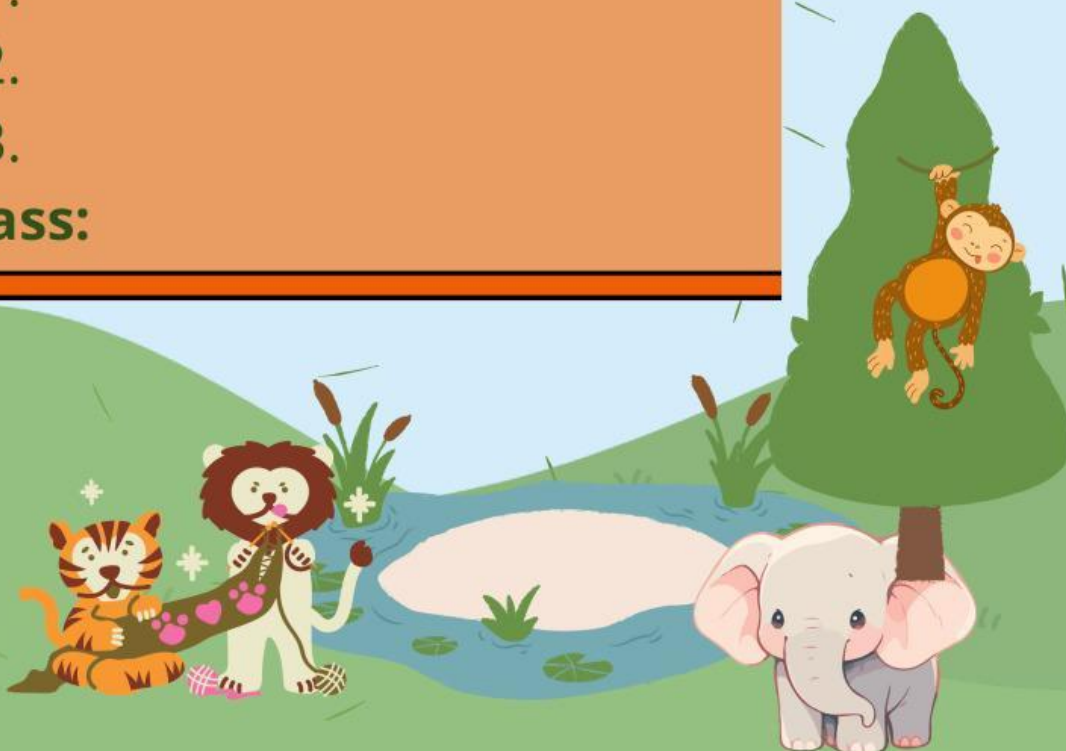
Classification of Living Things Based on Observed Characteristics

Arrange by:
Miftakhul Jannah
22030654054

Student group name:

- 1.
- 2.
- 3.

Class:





Learning objective



Clasify living things based on observasi characteristic

Instructions for use



1. Write down your identity before working on the LKPD
2. Pray together before starting your work
3. Pay attention to each step listed in the work instructions
4. Work in group
5. Work carefully
6. Follow all work instructions
7. Ask the teacher if there is something you don't understand
8. Collect the LKPD to the teacher when you have finished working on it





Introduction



Picture 1. Observing living creatures

What is meant by the classification of living things? Classification of living creatures is the process of grouping various types of living creatures based on their characteristics to make it easier to recognize a living creature. This classification of living things will help you to understand the characteristics of living things. In this activity, we will study the grouping of living things based on the characteristics we observe. For example, in the grouping of fungi (fungi). When you observe rotten trees in the surrounding environment, you will definitely find mushrooms growing on these trees. Because fungi will grow in damp environments such as rotting trees (BSNP, 2016).





Research Question



1. How to classify types of living things based on observed characteristics?

Purpose



1. to classify types of living things based on observed characteristics



Activity 1



Materials



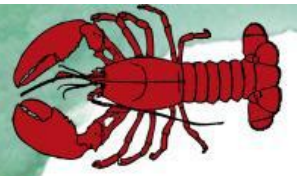
1. Mikroskop
2. Pipete
3. Preparat
4. Cover glass
5. Water
6. Tempe



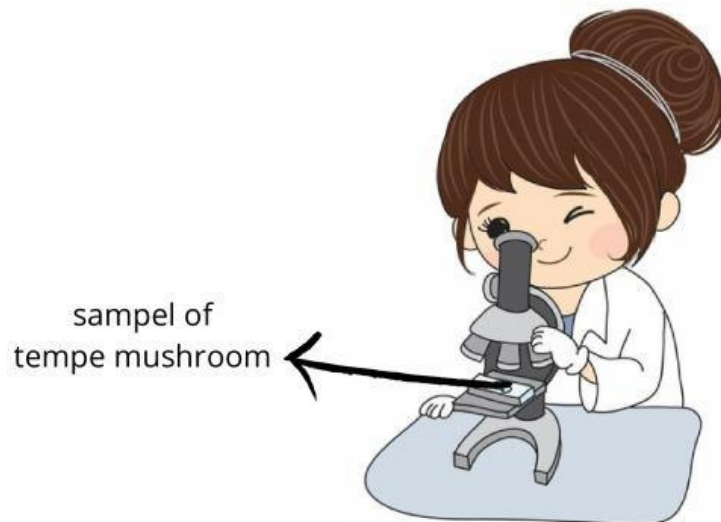
Work Procedures



1. Prepare the materials
2. Take a little of the white part of the tempe
3. Place the little of white part of the tempe on the glass slide
4. Give a little water
5. Cover the preparation using a glass slide cover
6. Place the preparation on the preparation table
7. Observe what's on the white part of the tempe
8. Classify visible living things based on observed characteristics
9. Record the results of observations



Experimental design



Data

No.	Observation result
1.	What are the physical characteristics of the mushrooms that you observe? Answer: has hyphae that form roots, has stolon hyphae that spread
2.	Describe the <u>tempe</u> mushroom seen in a microscope!  Answer:
3.	What kind of mushroom does <u>tempe</u> belong to? Answer: Fungi



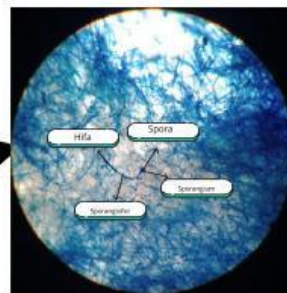
Activity 2

Compare

What is the difference between microscopic and macroscopic fungi in the two pictures below?



Answer:



In the image, macroscopic fungi have mushroom caps, lamella, rings, and hyphae that can be seen with the naked eye. However, in microscopic fungi the hyphae, spores, sporangium, and sporangiofores can be seen when observed using a microscope.



Data analyst

Based on the practicum that has been carried out, the results obtained are that the tempe mushroom has the physical characteristics of having hyphae that are shaped like roots, and having stolon hyphae that spread out. The image seen on a microscope shows that tempeh has a fungus commonly called *Rhizopus Oligosporus*.

Enrichment

After carrying out the experiment answer the following questions in discussion with your group

1. What are the most visible characteristics after observing mold on tempe?

Answer: Tempe mushrooms seen on a microscope have hyphae that are shaped like roots

2. From your observations, are there any differences in characteristics seen in the mushrooms observed under a microscope and the mushrooms observed with the naked eye?

Answer: From your observations, are there any differences in characteristics seen in the mushrooms observed under a microscope and the mushrooms observed with the naked eye

Conclution

Based on the observations that have been made, fungi are included in the fungal class based on the characteristics that have been observed. The characteristics of mushrooms are more clearly visible when the mushroom is observed under a microscope. When tempeh mushrooms are only observed with the naked eye, the characteristics of the mushrooms cannot be seen clearly.

Documentation



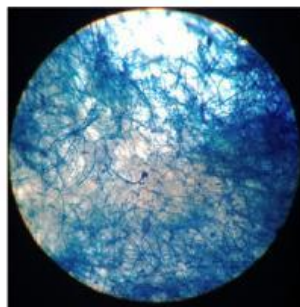
take mushroom samples



drip the fungus sample
with methylene blue



Observe fungal samples
using a microscope



observation result

Reference

- Badan Standar Nasional Pendidikan (BSNP). (2016). Naskah Akademik instrument penilaian : Buku Teks Pelajaran Pendidikan Dasar dan Menengah Jakarta: BSNP
- Haryani, Desi. (2016). Pertumbuhan Kapang Tempe pada Fermentasi Tempe Bergaram. Program studi biologi. Fakultas Biologi. Universitas Kristen Satya Wacana. Salatiga
- Ramlawati, Hamka L, Sitti Saenab, Sitti Rahma Yunus. (2017). Klasifikasi Makhluk Hidup. Kementerian Pendidikan dan Kebudayaan. Direktorat Jenderal Guru dan Tenaga Kependidikan