

Protist Research Assignment

Search the internet and watch the videos to answer the following questions.

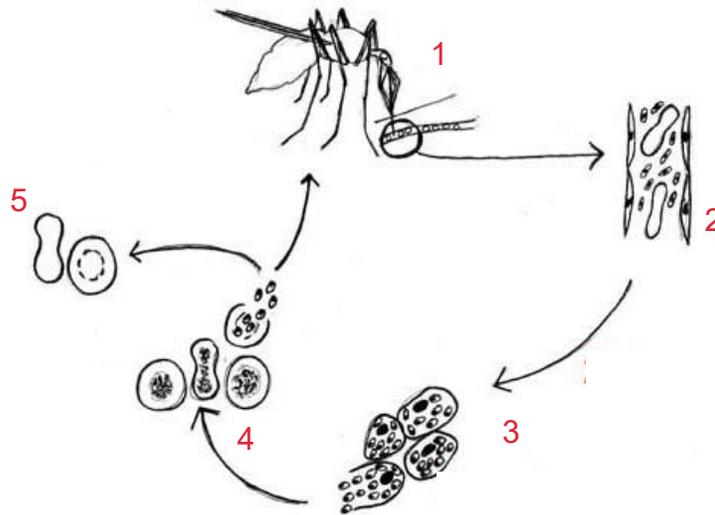
1. Malaria <https://www.youtube.com/watch?v=nFcvDVfIXRI>

a) What does the word "Malaria" mean? How did this disease get its name?

Bad Air. The disease was associated with swampy, marshy areas where the air smelled bad

b) What protist causes Malaria? Plasmodium protozoan

c) Label the following diagram its reproductive cycle using #1-5 .



1	The female mosquito places her pointed mouthparts into the skin of her victim.
2	The malaria parasite moves to the liver in the bloodstream.
3	The parasite reproduces itself in the liver cells.
4	The parasite moves out of the liver cells and infects the red blood cells.
5	As the parasite multiplies in numbers, so more red blood cells are infected.

d) Why are 2 hosts necessary for its survival?

Mosquito = reproduction

Human = development and prepare for reproduction (male and female cells)

e) What symptoms do people having this disease experience?

high fever, vomiting, reduced kidney/liver function, coma

f) Many people die from Malaria each year. Give 2 reasons why this disease is becoming more common?

Plasmodium developing resistance to antimalarial drugs

Mosquitos develop resistance to insecticides = still spreading the protozoans

2. Tripanosomiasis <https://www.youtube.com/watch?v=4aVUrGO97Zg>

a) What protist causes this disease? How is it spread? Tripanosoma

Bite of the Tsetse fly

b) What is the common name of this disease? How do you think this disease gets its name?

African Sleeping Sickness.

Infection results in a coma

c) In what area of the world is it commonly found? Africa

d) What is the ultimate cause of death for individuals infected with this parasite?

Like Plasmodium, Trypanosma destroys red blood cells which carry oxygen and nutrients to the body

3. Dinoflagellates https://www.youtube.com/watch?v=ifTE_q84NdE

<https://www.youtube.com/watch?v=uqJbUKEPgXc>

a) What is a Red Tide? What causes it?

Algal Bloom caused by reproduction of many dinoflagellates

b) How can Red Tide be dangerous to humans?

Toxins produced by the species of dinoflagellates are taken in by shellfish which are then consumed by humans.

c) How do some species, such as *Lingulodinium polyedra* react when threatened by a predator?

They glow (bioluminescence)

4. Slime Mold <https://www.youtube.com/watch?v=K8HEDqoTPgk>

a) What is a slime mold?

protist with amoeba-like and fungi-like characteristics

b) Why are slime molds thought to be intelligent? Explain how it is able to “remember” where food is?

They are able to find their way through a maze by using chemical to mark unsuccessful pathways.

c) Slime molds are difficult to classify into 1 kingdom. Explain why.

They look and move like an amoeba but produce club shaped reproductive structures like fungi.
