Engage

Uni and Multicellular Organisms

Questions to think about and answer.

1. How many cells do you think a worm has?

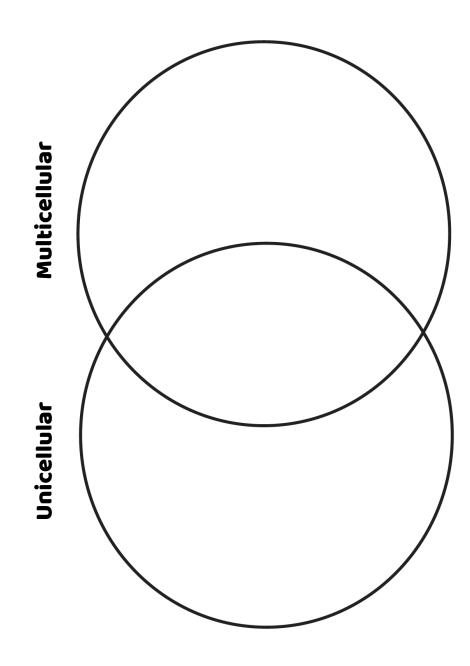
2. How many cells do you think a snake has?
4. How many cells do you think a bird has?
5. How many cells do you think a human has?
6. Do you think an elephant has more cells than a human?
7. Explain your thinking.
8. Do you think an elephant's cells are larger than a human's cells?
9. Explain your thinking.
10. Share your ideas with your shoulder partner. Write down anything they thought about that you didn't, in the space below.

Explore

Part 1 What To Do:

1. Watch the video found at $\underline{https://houstonpbs.pbslearningmedia.org/resource/tdc02.sci.life}$.stru.singlecell/single-celled-organisms/

2. Fill in the blanks below.		
1. All living things are made up of one or more		
2. Four things that unicellular organisms do that multicellular		
organisms do are grow,, excrete and		
3. In eukaryotes, a cell protects the		
4. The paranema has a flagellum that looks like a		
5. Other organisms have cilia that look like		
6. An amoeba reaches out to form a pseudopod, or		
7. The red spot of the euglena helps it find		
Part 2 What To Do: 1. Access the site http://www.microscopy-uk.org.uk/ponddip/index.html 2. Click on each of the organisms on the site to explore them. 3. Answer question about the organisms below. Questions 1. What is the name of the organism that has tentacles?		
2. Where can they be found?		
3. Which 5 organisms are green?		
4. What is the name of the organism that has arms and an eye?		
5. What do you find interesting about this organism?		
6. What is the name of the orange organisms?		



Elaborate

What To Do:

- 1. Look at the pictures of the multicellular organisms your teacher has placed around the room.
- 2. Answer the questions below.

Questions:

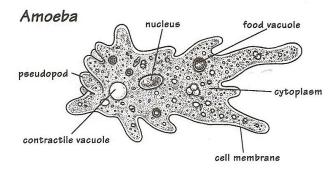
1. Which multicellular organism can make its own food by using		
sunlight?		
2. Which multicellular organism walks on two legs?		
3. Which multicellular organism walks on 4 legs?		
4. Which multicellular organism(s) have a backbone?		
5. Which multicellular organism crawls on the ground?		
6. Which multicellular organism can fly?		
7. Which multicellular organism lives in the water and swims?		
8. Which multicellular organism hops on six legs?		

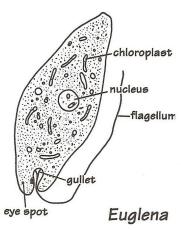
On the next page you will find 3 general examples of unicellular organisms.

Materials: colored pencils

What To Do:

- 1. Color the nucleus in each of the organisms blue.
- 2. Color any vacuoles yellow.
- 3. The amoeba moves using a pseudopod. Color one orange.
- 4. The euglena moves using a flagellum. Color it orange.
- 5. The paramecium moves using cilia. Color the little hairs orange.
- 6. The euglena has chloroplasts to make its own food. Color them green.

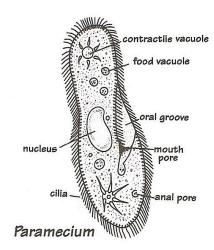




Questions:

- 1. What structure does an amoeba use to move?
- 2. What structure does a euglena use to move?

- 3. How does a euglena get its food?
- 4. What structures does a paramecium use to move?
- 5. What structure does each organism have?



Name	period

EXIT TICKET

Uni and Multicellular Organisms

- 1. Which of the following lists gives ways some unicellular organisms move around?
 - A. Arms, legs and feet
 - B. Legs, flagella, vacuoles
 - C. Flagella, cilia, pseudopodia
- 2. Which of the following organelles does each of the unicellular organisms contain?
 - A. eye spot
 - B. flagellum
 - C. nucleus
- 3. The euglena is able to obtain food two different ways. It can use the chloroplasts to make food from light and use its flagellum to move around in the water to find food. How is this ability helpful?
 - A. It can capture food when light is not available
 - B. It can always make food.
 - C. The flagellum helps it move faster.
- 4. What types of locomotion do multicellular organisms use?
 - A. They can swim, fly, walk, hop and crawl.
 - B. They all must swim in the water.
 - C. They all must fly in the air.