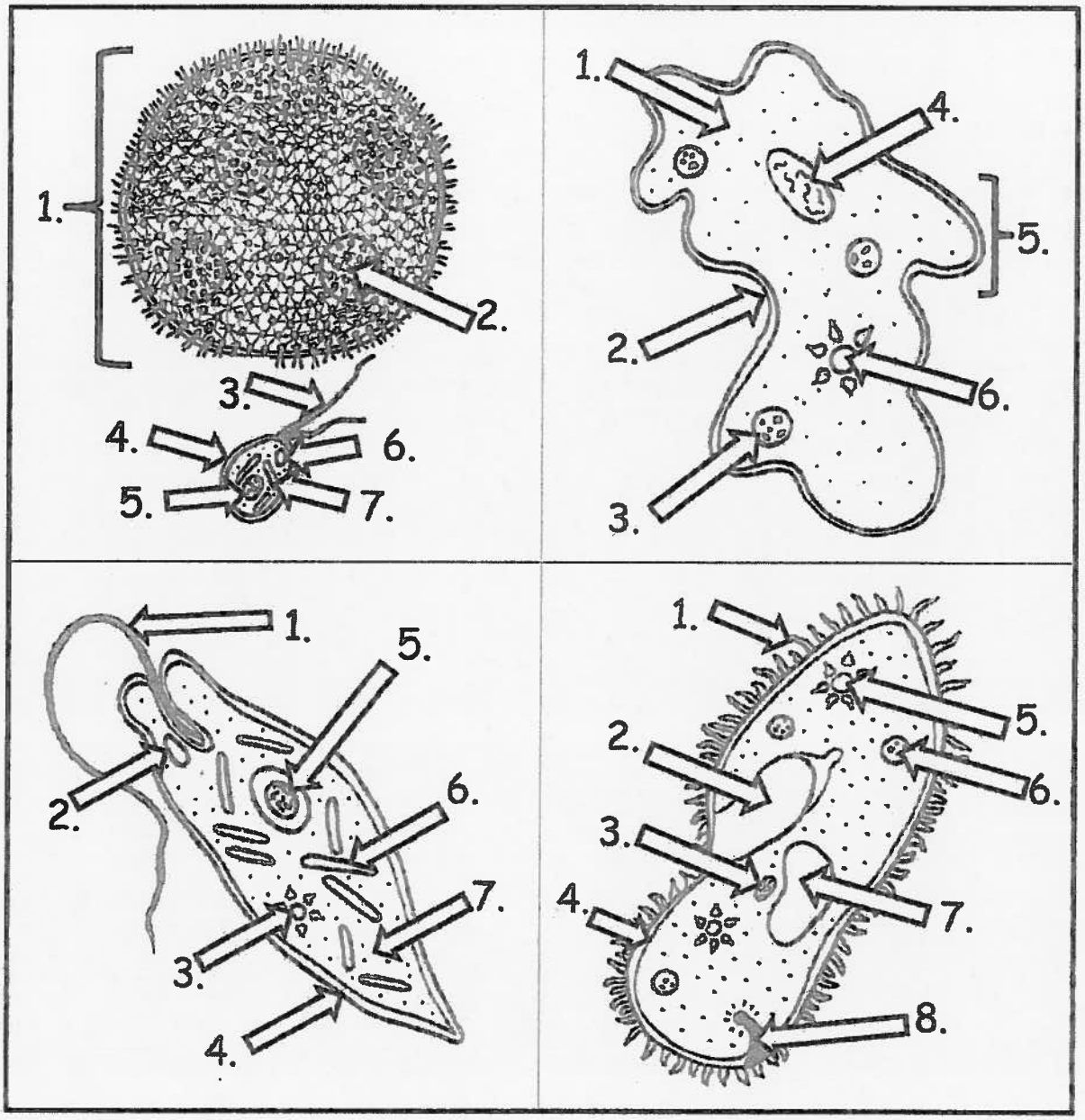
Front of Protist 4-Flap Foldable

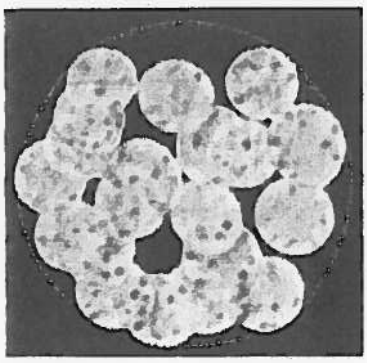


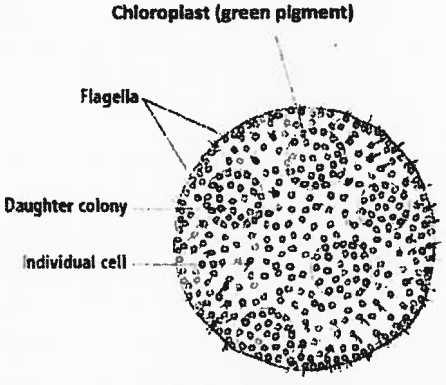
Illustrations hand drawn by Cate Colangelo

Inside of Protist 4-Flap Foldable

VOLVOX	VOLVOX	AMOEBA	AMOEBA
<u>Movement:</u> Flagella of individual cells work together <u>Metabolism:</u> Autotrophic (plant-like producer) <u>Reproduction:</u> Asexual & sexual	1. colony 2. daughter colony 3. flagella 4. cell membrane 5. nucleus 6. eyespot 7. chloroplast	1. cytoplasm 2. cell membrane 3. food vacuole 4. nucleus 5. pseudopod 6. contractile vacuole	<u>Movement:</u> Pseudopods extend to allow amoeba to ooze <u>Metabolism:</u> Heterotrophic (animal-like hunter) <u>Reproduction:</u> Asexual & sexual (rare)
EUGLENA	**EUGLENA**	**PARAMECIUM**	**PARAMECIUM**
<u>Movement:</u> Flagella pulls like a propeller <u>Metabolism:</u> Mixotrophic (producer and hunter) <u>Reproduction:</u> Asexual only	1. flagella 2. eyespot 3. contractile vacuole 4. cell membrane 5. nucleus 6. chloroplast 7. cytoplasm	1. cilia 2. oral groove 3. micronucleus 4. cell membrane 5. contractile vacuole 6. food vacuole 7. macronucleus 8. anal pore	<u>Movement:</u> Cilia move like rowing oars <u>Metabolism:</u> Heterotrophic (animal-like hunter) <u>Reproduction:</u> Asexual & Sexual

http://www.noaanews.noaa.gov





http://www.eduplace.com

Volvox carteri

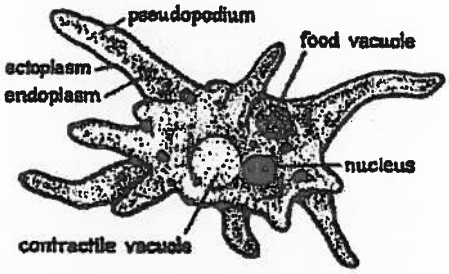
Colonies can be as large as 1000 µm

Found in still and moving freshwater near the surface

autotroph- makes its own food using chloroplasts

http://www.microscopy-uk.org.uk

http://rst.gsfc.nasa.gov



http://www.arthurscl part.org

Amoeba Proteus

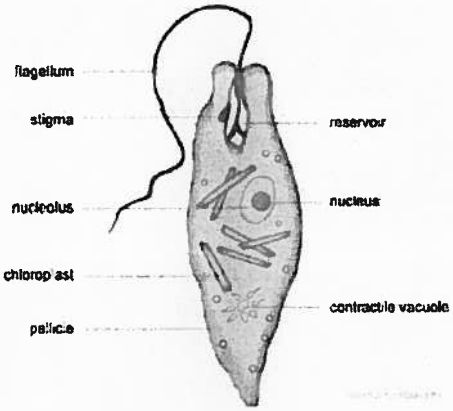
approximately 15-45 µm

found in fresh and salt water, usually around decaying leaves at the mud's surface

heterotroph- cannot make its own food

http://www.microscopy-uk.org.uk

http://www.microscopy-uk.org.uk



http://wwwinfovisual.info

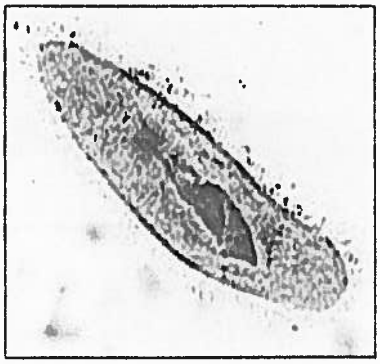
Euglena sanguinia

Approximately 25-100 µm

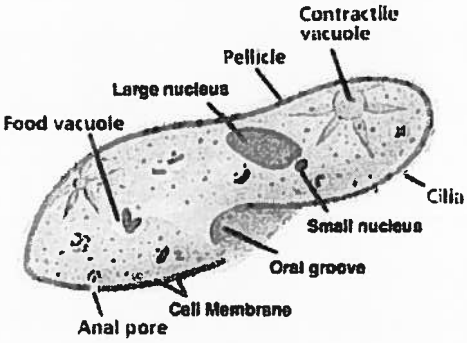
Usually found in freshwater near the surface

mixotroph-uses chloroplasts to make its own food or uses flagella to capture prey

http://www.microscopy-uk.org.uk



http://rst.gsfc.nasa.gov



http://www.emc.maricopa.edu

Paramecium

Approximately 60-300 µm

Mostly found in freshwa-ter, rare salt water species exist

heterotroph- cannot make its own food

http://www.microscopy-uk.org.uk

PROTIST DETERMINATION

NAME: _____

DATE: _____

PER: _____

TOP: COMPLETE THE LABELLING OF THE PROTISTS IN THE BOX

BELOW: USING THE VENN DIAGRAM, COMPARE & CONTRAST ANY 2 PROTISTS,

Write "A" if the statement describes an amoeba, "E" if euglena, "P" if paramecium, or "V" if Volvox. You may have to write more than one letter on each blank

____1. is a heterotroph
____2. is an autotroph
____3. is a mixotroph
____4. has pseudopods to move/eat
____5. has cilia to move/eat
____6. has flagella to move or move/eat
____7. has chloroplasts
____8. reproduces sexually (as of March 2011, rare instances of amoeba sexual reproduction have been noted.)
____9. lives as an individual cell
____10. lives as a colony
____11. reproduces asexually
____12. has a nucleus