Microbes

What is a microbe? What piece of equipment is used to study microbes?

Complete the following chart to explore characteristics of microbes.

Microbe	Living	Characteristics	Disease
Protist			
Bacteria			
Virus			
Fungi			

Epidemics and Pandemics

What is the difference between epidemic and pandemics?

EPIDEMIC	PANDEMIC

Cellular Respiration and Photosynthesis

Write the formula for cellular respiration and photosynthesis. Label the reactants and products of each.

Antibiotic and Vaccines

Diseases are treated by antibiotics and vaccinations. Explain the differences and what pathogens they are used on.

Antibiotics	Vaccinations

Microbes and Industry

Different microbes are helpful. Provide examples of helpful microbes and how they are used.

Virus
Bacteria
Fungi

Biotechnology

What is biotechnology?

Provide an example of biotechnology in agriculture?

Provide an example of a good use of biotechnology.

Provide an example of a bad use of biotechnology.

Title Page:

Living Things and Ecosystems

Name and Date

Protists

Sketch the 4 primary protists we covered in class. Identify the different was each protest moves

Ecosystems

What is an ecosystem? All energy starts form the _____.

What are the 4 basic of all living things?

Create a chart of the following components an ecosystem.

Role	Definition	Examples
Producer		
Consumer		
Decomposer		

Food Web

Draw a food web. Pictures are not required. Include and label the following.

Producers

Primary consumers

Secondary consumers

Tertiary Consumer

Symbiotic Relationships

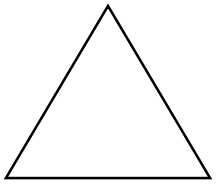
Symbiotic relationships	Define	Visuals (faces)
Mutualism		
Commensalism		
Parasitism		
Predation		

Examples of Symbiotic Relationships

Symbiotic relationship	Example
Mutualism	
Commensalism	
Parasitism	
Predation	

Draw a 4 level energy pyramid.

Include examples and label producers, primary consumer, secondary consumer and tertiary consumer. Show the change in energy from the bottom to the top.



Cycling of Matter in Ecosystems

Draw pictures of the carbon cycle and nitrogen cycle.

CARBON CYCLE:

NITROGEN CYCLE: