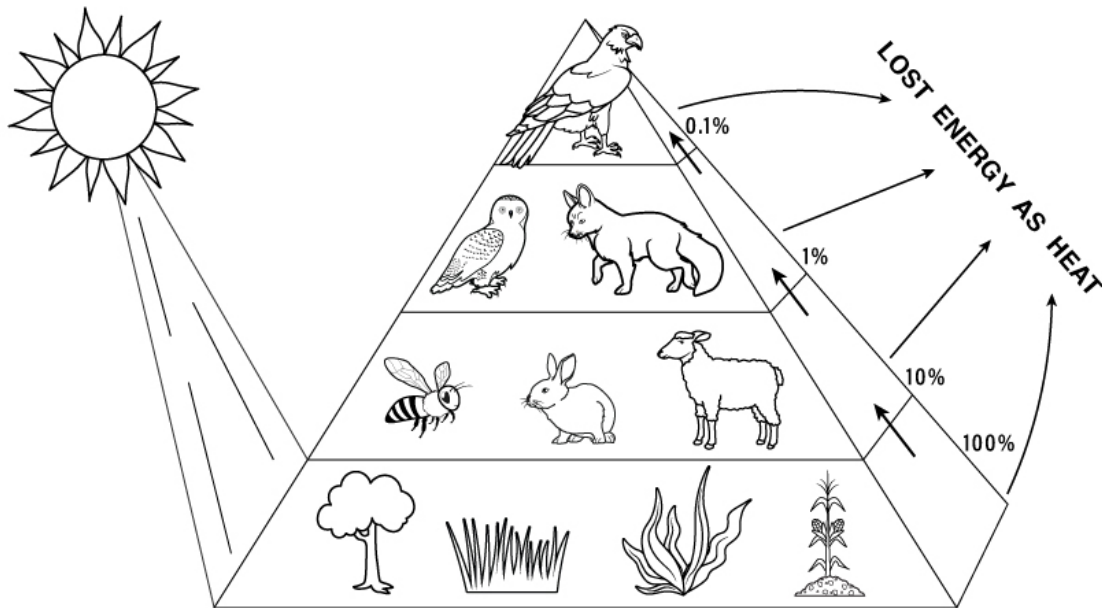


Energy Pyramid 10 Percent Rule

Use the given energy pyramid to answer the following questions.



Q1) What is the 10% rule?

Q2) What is the significance of the 10% rule?

Q3) Assume there are 1000 units of energy at the producer level. How many units of energy are available at each of the three consumer levels?

Consumer-level 1: _____

Consumer-level 2: _____

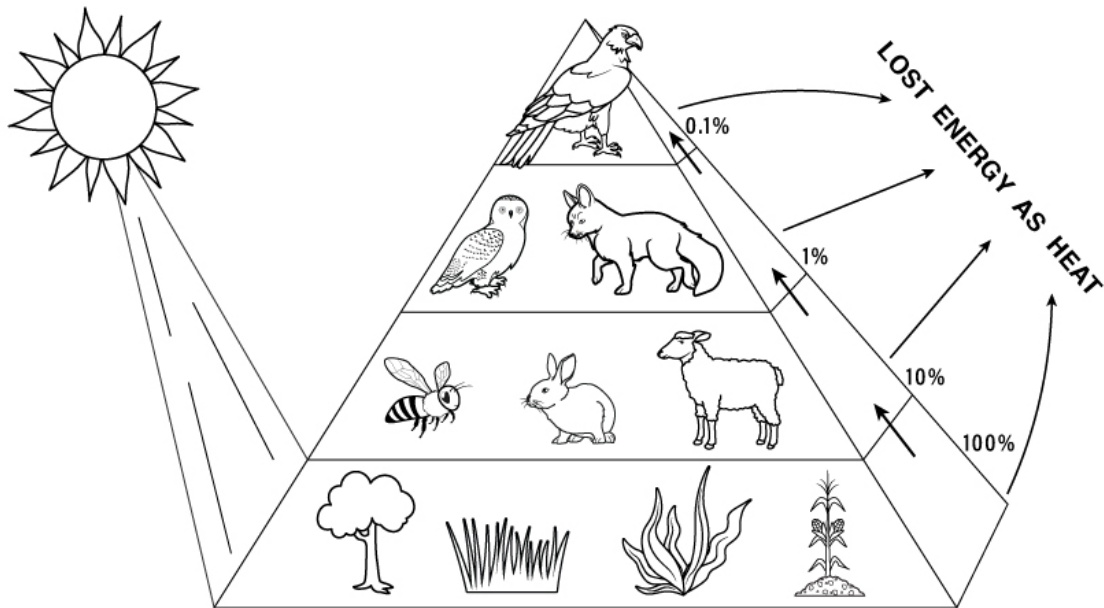
Consumer-level 3: _____

Q4) Suppose there are 500 units of energy available at the base of the pyramid. Approximately how much energy is available to the first-level consumer?

Name: _____

Date: _____

Energy Pyramid 10 Percent Rule



Q1) What is the 10% rule?

The 10% rule of energy transfer states that each level in an ecosystem only transfers 10% of its energy to the levels above it. The rest 90% is used in metabolism or lost as heat.

Q2) What is the significance of the 10% rule?

The 10% rule explains why more organisms are at the bottom of the pyramid than at the top. It thus gives the pyramid its shape.

Q3) Assume there are 1000 units of energy at the producer level. How many units of energy are available at each of the three consumer levels?

Consumer-level 1: 100 units

Consumer-level 2: 10 units

Consumer-level 3: 1 units

Q4) Suppose there are 500 units of energy available at the base of the pyramid. Approximately how much energy is available to the first-level consumer?

50 units

Name: _____

Date: _____