

Exam for Unit 4: Ecosystems and Living Things

1. What is an ecosystem? Explain in your own words.

2. Click the 4 things that make up parts of an ECOSYSTEM.

heterotrophs	producers	habitats	fungi	bacteria
animals	populations	individuals	vertebrates	communities

3. a) What do we use to show the direct connections between living things in an ecosystem?
b) What do we use to show the complex connections between organisms in an ecosystem?
c) Which one shows the biomass available in an ecosystem?
d) Which one has three levels?

4. a) Read the characteristics and choose the correct type of ecosystem.

- i) *This ecosystem can contain evergreen and deciduous trees. It can be found in temperate, tropical and Mediterranean regions of the planet.*
- i i) *This ecosystem is very dry. It is hot in the day and cold at night.*
- iii) *Savannahs, prairies and steppes are examples of this type of ecosystem. They are covered with grasses and shrubs.*
- iv) *This ecosystem contains the biggest variety of organisms. 71% of Earth is covered in this type of ecosystem.*
- v) *This ecosystem is found in the North and South of the planet. It is generally very dry and extremely cold.*
- vi) *This type of ecosystem is not natural. It is an imitation, created by humans.*

b) Now, give 2 examples of organisms (1 plant + 1 animal) we can find in each of these ecosystems:

Ecosystem:	Plant:	Animal:
Forest	_____	_____
Grassland	_____	_____
Desert	_____	_____
Tundra	_____	_____
Marine	_____	_____
Freshwater	_____	_____

5. Move the organisms into the correct order to make 2 basic food chains.
Three organisms have been put in place for you.

squirrel	butterfly	hawk	flower	acorn	fly	toucan
<i>ardilla</i>	<i>mariposa</i>	<i>halcon</i>	<i>flor</i>	<i>bellota</i>	<i>mosca</i>	<i>tucán</i>

	Mediterranean forest	Tropical rainforest
PRODUCER		
PRIMARY CONSUMER		
SECONDARY CONSUMER	serpent	
TERTIARY CONSUMER		boa constrictor
DECOMPOSER	mushroom (<i>seta</i>)	

6. Choose the correct vocabulary to go with the definition:



this type of organism eats other organisms for food

this type of organism does not have a nucleus in its cells

these organisms produce their own food through photosynthesis

these heterotrophic consumers only eat plants

these autotrophic organisms use sunlight, nutrients and gases to make energy

these organisms can be parasitic or consume dead organic material

this is the energy available in an ecosystem, represented as populations

this material is produced by plants and passed through food chains

7. Click the 6 components we find in BOTH animal *and* plant cells:

organelles	cytoplasm	cell wall	vacuole(s)	mitochondria
a nucleus	chloroplasts	chlorophyll	cell membrane	

8. a) What does EUKARYOTIC mean?

b) What does PROKARYOTIC mean?

9. Plant cells are a little different from animal cells. Complete these exercises about plant cells:

a) Describe the function of the CELL WALL:

b) What extra pieces do we find inside a plant cell?

i) _____

ii) _____

c) What process do these pieces do? Choose the correct answer:

d) In your own words, describe *why* PHOTOSYNTHESIS is important in a food chain or food web:
