Assessment Activity: Critter Portfolio
Obtain a Habitat card; read through the description; choose one multicellular organism.

1. Draw a sketch of what you imagine the habitat looks like and label several important features. Write down a detailed description of the habitat.
2. Determine its scientific name and common name.
3. Create one or more drawings/diagrams of your organism. Label its distinctive structures.
4. Write a paragraph about the adaptations you labeled on your drawing.
5. Write a second paragraph describing a scientifically reasonable scenario by which your critter may have diverged from an ancestral species to form a new species.
6. Write a third paragraph that explains the characteristics that make your critter a member of its domain, kingdom, and phylum (or division).
7. List at least three characteristics that your critter shares with all other forms of life.
8. After you have completed 1-7, obtain an environmental change card. Write a fourth paragraph predicting what might happen to your critter's species as a result of this change. If you predict that it will go extinct, explain how this may affect the evolution of other species. You may want to use the following terms in your explanation: Natural selection, adaptation, extinction, variation, heritable.

What is your habitat?

What type of organism do you have?

What is your environmental change?

Rules of Binomial Nomenclature - The first name (capitalized) is the genus of the organism, the second (not capitalized) is its species. Genus and species names are always italicized when printed or underlined when handwritten.

The scientific name of the white oak is *Quercus alba,* while red oak is *Quercus rubra.* The first name applies to all species of the genus— *Quercus* is the name of all oaks—but the entire binomial applies only to a single species. Many scientific names describe some characteristic of the organism (*alba* = white; *rubra* = red); many are derived from the name of the discoverer or the geographic location of the organism.

Criteria	Excellent 5 4	Could Be Improved 3 2	Needs Substantial Improvement 1 0 (missing)
1.Habitat Drawing:	Detailed habitat sketch is included	Habitat sketch is included but reflects only moderate effort.	Habitat is omitted or hastily sketched.
2.Scientific Name:	The critter's scientific name is listed according to the rules of binomial nomenclature.	----------	The critter's scientific name is not listed, or the name listed does not follow the rules of binomial nomenclature.
3. Organism Drawing:	Drawings include several significant adaptations that are clearly labeled and briefly described.	Drawings include several significant adaptations, but 1 or 2 of the labeled adaptations could be more clearly drawn or better matched to this habitat.	Drawing Habitat is omitted or hastily sketched.
4. Adaptations:	All adaptations chosen suit the assigned habitat well; each would clearly make this critter better able to survive, reproduce, and pass on the trait.	Some adaptations chosen, suit the assigned habitat; some but not all would probably make this critter better able to survive, reproduce, and pass on the trait.	One or more of the designated adaptations are not reasonably likely to be inherited traits or would not make the critter more likely to survive and reproduce.
5. Speciation	Paragraphs describing the adaptations and speciation of the critter provide a clear explanation of how the critter evolved and show the author's understanding of how diversity results from natural selection, adaptation, and speciation.	Paragraphs describing the adaptations and speciation of the critter provide a general explanation of how the critter evolved and show the author has a general understanding of how diversity arises.	Paragraphs describe the adaptations and speciation of the critter without explaining how the critter evolved and without showing that the author understands how diversity arises.
6. Classification:	In a paragraph, student describes which domain, kingdom, and phylum or division (in the case of a plant) the critter should be assigned to and lists characters that correctly place the critter in those classification groups.	The student correctly describes which domain, kingdom, and phylum or division the critter should be assigned to, but fails to explain adequately why the critter is classified within these groups.	The critter is assigned to a domain, kingdom, and phylum or division incorrectly, not at all or without explanation.
7. Characteristics shared by all living things	Author shows clear understanding of characteristics that the critter shares with all other life forms, and these are based on the unifying principles.	Author provides a general understanding of characteristics shared by all life, but these are not connected with either the unifying principles or features of the critter.	Author's paragraph does not include characteristics that the critter shares with all life forms, or the listed characteristics are incorrect.
8. Environmental Change:	The paragraph written about environmental change makes a well supported prediction and uses all terms correctly and clearly.	The paragraph written makes a reasonable prediction and uses most terms correctly, clearly, or uses all terms with moderate clarity.	The paragraph written does not make a reasonable prediction and uses terminology incoherently or incorrectly.

Subtotal Points _____ _____ _____

Total Points _____/40