Darwin & the Theory of Evolution by Natural Selection

I. How to make a concept map

- 1. <u>Review a topic.</u> May include reading a textbook chapter or section, watching a video, listening to a lecture, reading your notes, or reflecting on all prior sources of knowledge about the topic.
- 2. <u>Identify the major concepts</u>. List 10 15 important concepts related to the topic.
- 3. <u>Arrange the concepts on paper</u>. Organize the concepts from most to least inclusive, in other words, general to specific.
- 4. <u>Draw and label links between concepts.</u> The labels should specify the relationship between concepts. The map can read from top to bottom or from the center outward.
- 5. <u>Branch out.</u> Add as many additional specifics to the map as you can.
- 6. <u>Make cross links.</u> Try to link and label connections between concepts on your map. Use arrowheads on the links to indicate the direction of the link.

II. Complete the concept map about the topic Evolution by Natural Selection.

Review the appropriate sections in your textbook and lecture notes.

This map puts the main topic in the center and shows observations that support the theory.

- 1. Use the list of concepts, people and linking phrases below to fill in concept map shown. All concepts and linking phrases should be used. Terms in bold are already in the concept map.
- 2. Make any crosslinks you think have been left out and add any additional details you want to include.

Concepts & People:

Cuvier Hutton Lvell Lamarck Artificial selection Fossils Appearance and disappearance Descent with modification sequence of similar looking organisms Earth is old Earth is changing **Species change** Local environment **Galapagos finches** Antibiotic resistance Differential survival and reproduction Genetic variation Biogeography Homologous structures Direct observations

Linking phrases Provide(s) evidence Example of Allows time for Provides conditions for



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Rev. 7/31/15



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