

## Darwin & the Theory of Evolution by Natural Selection

### I. How to make a concept map

1. Review a topic. 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. Identify the major concepts. List 10 – 15 important concepts related to the topic.
3. Arrange the concepts on paper. Organize the concepts from most to least inclusive, in other words, general to specific.
4. Draw and label links between concepts. The labels should specify the relationship between concepts. The map can read from top to bottom or from the center outward.
5. Branch out. Add as many additional specifics to the map as you can.
6. Make cross links. 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.

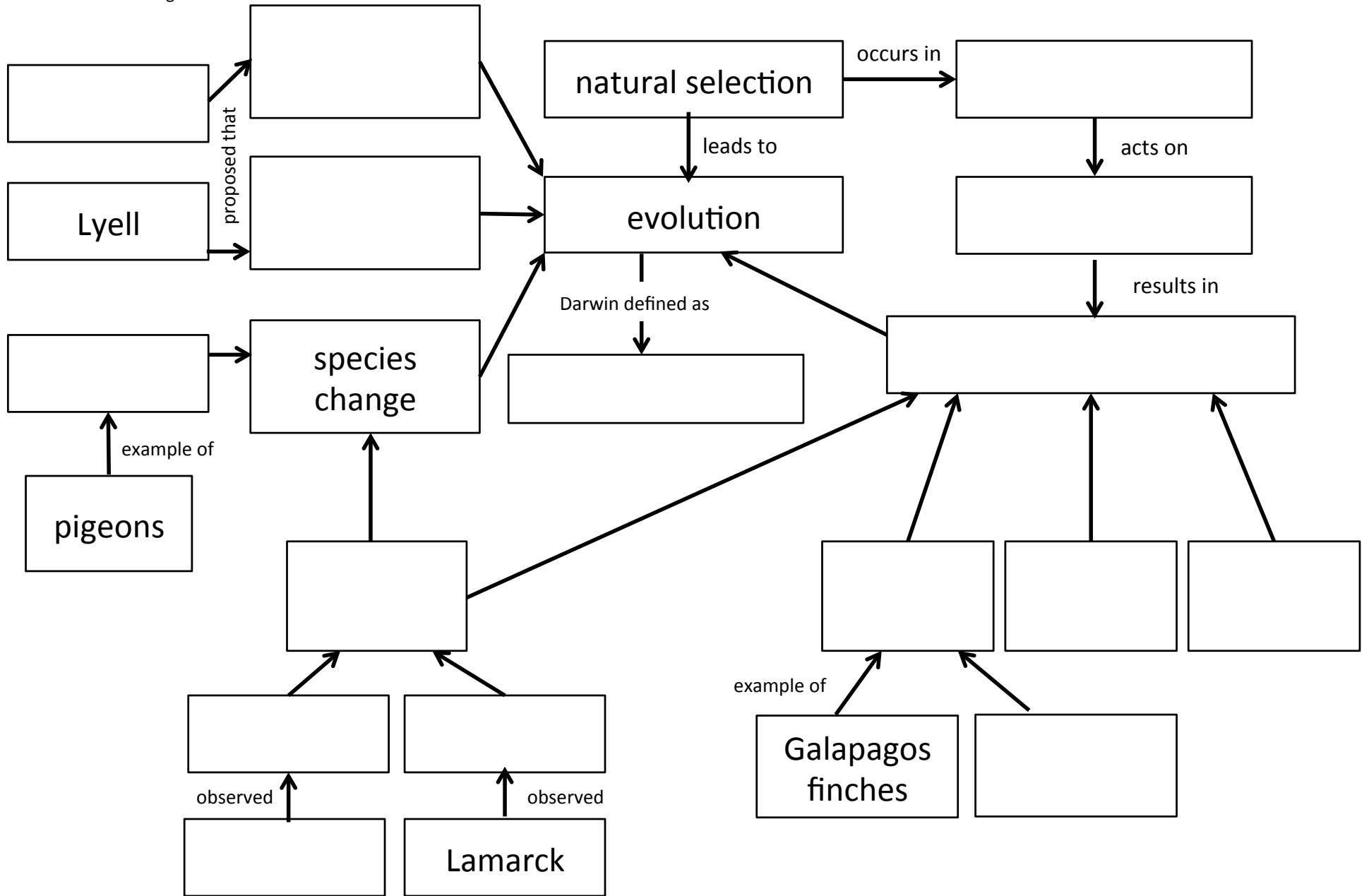
1. Use the list of concepts, people and linking phrases below to fill in concept map shown. All concepts and linking phrases should be used. Terms in bold are already in the concept map.
2. Make any crosslinks you think have been left out and add any additional details you want to include.

#### *Concepts & People:*

Cuvier  
 Hutton  
**Lyell**  
**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



**SUGGESTED ANSWER KEY**

