Change Over Time Foldable Directions

1. Make a layered-booklet foldable using three pieces of legal sized paper. Make your tabs at least one inch wide.
2. On the cover, write “Change Over Time”. You’ll be using pages 166 - 172 of the green Life Science textbook.
3. Label the flaps as follows:
   a. Definitions
   b. Fossil Evidence for Evolution
   c. Other Evidence for Evolution
   d. Case Study: Evolution of the Whale
   e. Case Study: Evolution of the Horse
4. Follow the instructions for each flap.
   a. Definitions
      ● Define species
      ● Define population
      ● Define adaptation
      ● Define evolution (be sure to include and underline the word population in your definition)
   b. Fossil Evidence for Evolution
      ● Copy this question, then answer it: What are fossils and how do they form?
      ● Copy this question, then answer it: What is the fossil record?
      ● Copy this question, then answer it: How do scientists use the fossil record to understand evolution?
      ● Write: “This diagram shows connections between ancient and modern mammals.” Under that, copy the diagram that shows the relationship between baleen whales, toothed whales, hippopotamuses, hoofed grazing animals, pigs and peccaries, and camels and llamas.
      ● Looking at the diagram, label which species are most closely related and which are most distantly related.
   c. Other Evidence for Evolution
      ● Copy this question, then answer it: How are skeletal structures used as evidence for evolution?
      ● Copy this question, then answer it: How is DNA used as evidence for evolution?
      ● Copy this question, then answer it: How are embryos of different species used as evidence for evolution?
   d. Case Study: Evolution of the Whale
      ● Cut out each of the diagrams that show a modern toothed whale and its ancestors.
      ● Using both the back of the “Evidence of Changes” flap and the space above the “Case Study: Evolution of Whales” label, arrange the diagrams to show the evolution of the whale and glue/tape them down.
      ● Add arrows to show the order in which these species existed.
      ● Use the textbook and write notes about each species near its pictures.
      ● Make a note about how each species is different from the one before it.
   e. Case Study: Evolution of the Horse
      ● Cut out the diagram of the evolution of the horse. Tape/glue it to the space above the “Case Study: Evolution of the Horse” label.
      ● Cut out the page of text that goes with the diagram. Tape/glue it to the back of the “Case Study: Evolution of the Whale” flap.
      ● T-4 the text. As you T-4, follow the directions about coloring. Add notes to the diagram of the horses as well as in the margins around the text.