

Unit 9 – Nutritional Adaptations in Animals

Instructions: Read the background material for this unit and then complete each of the four activities below. The activities match those in the lab manual. Videos, simulations, and images necessary for completing the activities are located on the lab website. After you have finished them, you will complete the Assignment listed below.

Activity #1: *Paramecium* feeding (online videos)

1. Use the online videos on the lab website to learn about how the *Paramecium* feeds, type of digestion and what structures are involved. The videos will substitute some of the steps on page 153-155 #1-4 & 6-7 of this activity.
2. Use what you have learned to complete steps #5 & 8 in your lab manual.

Activity #2: *Hydra* feeding (online videos)

1. Use the online videos on the lab website to learn about how the *Hydra* feeds, type of digestion, and structures involved. The videos will substitute page 154-155 steps #1-3.
2. Use what you have learned to complete step #4.

Activity #3: Virtual frog dissection:

Use the one or more of the provided dissection videos or animations to complete this activity. Make sure to fill in the material requested on p. 156-157.

Activity #4: Mammals' Teeth and Birds' Bills

Mammals— (As a supplemental aid, refer to the “Muscles of Mastication” handout to help you--see lab website)

1. In your lab manual, read all the background material on pages 158-160. Fill out Tables 9-1, 9-2, 9-3, 9-4.
2. For Table 9-4, refer to the “Muscles of Mastication” handout. You'll have to try to ID the specimen and provide your reasoning.

Birds—

1. Read the small paragraph of background material on page 163. Fill out table 9-5.
2. Answer questions #2 and #3 on p. 164

Nutritional Adaptations in Animals Assignment: (also posted below in the YELLOW assignment box as a Word document)

1. Answer the questions at the end of the lab unit, p. 165-166 (#s 1-6).
2. Scan the pages from your lab manual that you have filled in (i.e., tables and answers to questions) and **insert the pictures as images in the template provided below.**

Spring 2020 – modification of lab for online learning

3. Upload your work as **one document** to Moodle. You may want to. Save this document and upload as a PDF.

Assignment template for inserting images:

Activity #1: *Paramecium* feeding (online videos)

Steps 5 & 8: [insert your work below]

Activity #2: *Hydra* feeding (online videos)

Step 4 [insert your work below]

Activity #3: Online frog dissection:

Steps 7 -11 [insert your work below]

Activity #4: Mammals' Teeth and Birds' Bills

Mammals—

Table 9-1 [insert below]

Table 9-2 [insert below]

Table 9-3 [insert below]

Table 9-4 [insert below]

Birds—

Table 9-5 [insert below]

Steps #2 and #3 on p. 164 [insert below]