Chicken Wing Dissection – Skeletal and Muscular Systems

Purpose:

To observe how the muscular and skeletal systems work together to move/support a chicken's wing and relate this to the arrangement of comparable anatomical structures of the human body.

Analysis Questions:

- 1. What tissue of the chicken wing is commonly referred to as the "meat"?
- 2. Why would a bird be unable to fly if there were torn tendons in the wing?
- 3. Which two specific muscles, found in the human *upper arm*, are the equivalent of the chicken wing muscles you looked at in this lab?
- 4. Why does a chicken need to have so many different bundles of muscles attaching to different parts of the bones?
- 5. Think about your pre-dissection sketch: There an additional structure that can be found on a chicken wing but not on a human arm. This is called an *alula*. Draw a sketch of the chicken wing and label the alula. Using an encyclopedia or the internet, look up the alula- give it's common name and describe its function.
- 6. What structure on the human body is comparable to the alula?

Conclusion: Look back at the purpose. Think critically about what you learned by doing this lab:

- 1. Explain how bones, muscles, tendons, and ligaments work together to move a chicken's wing. <u>Use observations</u> to support your explanation.
- 2. Write a paragraph discussing:
 - The benefits of this lab (for your understanding of the purpose)
 - Suggestions for this lab
 - Your favorite part of this lab

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- 8. Why would a bird be unable to fly if there were torn tendons in the wing?
- 9. Which two specific muscles, found in the human *upper arm*, are the equivalent of the chicken wing muscles you looked at in this lab?
- 10. Why does a chicken need to have so many different bundles of muscles attaching to different parts of the bones?
- 11. Think about your pre-dissection sketch: There an additional structure that can be found on a chicken wing but not on a human arm. This is called an *alula*. Draw a sketch of the chicken wing and label the alula. Using an encyclopedia or the internet, look up the alula- give it's common name and describe its function.
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<u>Conclusion</u>: Look back at the purpose. Think critically about what you learned by doing this lab:

- 3. Explain how bones, muscles, tendons, and ligaments work together to move a chicken's wing. <u>Use observations</u> to support your explanation.
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