March 17th, 2015

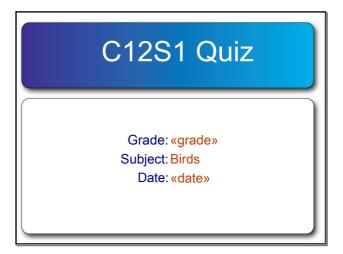
1. Quiz C12S1 (7-3 only)

2. Class Notes: C12S1(2)
- Characteristics of Birds (Notecard)
- Adaptations of Birds for flying

3. Charts For the Prant Development Project

4. Research paper airplane designs
- One for flying far and straight

5. Assignment (Same as yesterday)
- Read Section C12S2 The Physics of Flight' pages 416-419
- Complete the vocabulary (3)



Nov 13-12:58 PM Feb 15-3:13 PM

- 1 What are the feathers used for flight called?
  - A down feathers
  - B contour feathers
  - C prickly feathers

- 2 What type of feathers are used for warmth?
  - A down feathers
  - B contour feathers
  - C prickly feathers

Feb 15-3:05 PM

- 3 A bird's skeleton is strong but light due to them being
  - A solid
  - B nearly hollow
  - C entirely hollow

4 What is the digestive organ used to grind up hard foods?

Feb 15-3:08 PM

- A crop
- B intestine
- C gizzard

Feb 15-3:10 PM Feb 15-3:11 PM

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- 5 How many chambers does a bird heart have?
- 6 Are birds endothermic or exothermic vertebrates?
  - endothermic
  - exothermic

Feb 15-3:11 PM Feb 15-3:12 PM

## 3-16 Class Notes: C12S1

Characteristics of Birds

- 1. 4 chambered heart (efficient)
- 2. endothermic vertebrates ('warm blooded')
- 3. air sac for storing oxygen (allows for long flights)
- 4. lay eggs with hard shells (internal fertilization)
  5. skeletons are strong and nearly hollow
- 6. teeth are modified as a bill or beak
- 7. most migrate to warmer climates in the winter

## Adaptations for Flight

- 1. two different types of feather...one for flight and one for warmth
- 2. nearly hollow bones to eliminate weight but maintain strength
- 3. oil on wings to allow less friction
- 4. feathers interlock to create each of the wings

Feb 16-11:15 AM