2020 Spring Docent Training Class Quiz Week 5 – March 1, 2020

Name:	 	 	
Date:		 	



	SAN FRANCISCO ZOO
1.	What two characteristics of a bird can you look at and be able to tell information about their habitat or what they eat?
2.	Name two physical characteristics that birds inherited from (have in common with) reptiles?
3.	Since birds do not have teeth, what physical mechanism(s) do birds have to help them digest their food? Name and define what mechanism does.
4.	Define these two words and give one bird example for each: ALTRICIAL:
	PRECOCIAL:
5.	Scales on birds and reptiles serve a purpose. What is it? (more than one may apply)  a. To prevent wear and tear of their skin  b. Keeps the heat in so they can maintain their body temperature  c. Helps in maintain water balance in their body  d. All of the above

## Answers:

- 1. The beak and feet can tell you a lot of a bird's habitat and feeding habits.
- 2. Birds & reptiles share characteristics:
  - a. Both lay eggs & both oviparous (lay eggs outside their bodies)
  - b. Both have scales on their feet and legs
  - c. Single occipital condyle
  - d. Single middle ear bone stapes (mammals have three)
  - e. Lower jaw composed of several bones (5 6, on each side, in modern birds and reptiles)
  - f. Sclerotic ring supports eye
  - g. Females heterogametic sex
  - h. nucleated red blood corpuscles
  - i. uric acid excretion
- 3. Lacking teeth, the digestion of birds is aided by a gizzard and a crop. The gizzard provides an extra grinding mechanism. Generally the seed-eaters & birds that eat shelled animals that have the powerful, muscular gizzard for grinding. The gizzard is also a safety stop to prevent sharp bones and indigestible items from passing further. These birds, such as owls, then regurgitate a pellet including undigested bone, fur, and teeth. In some birds, the esophagus has a large storage chamber or swelling called the **crop**. This is an adaptation for taking food in in large quantities quickly; it functions as a temporary storage area for excess food that can be digested later, reducing the time a bird is vulnerable to predation. The crops tend to be largest in birds that eat larger seeds.

## 4. Altricial vs Precocial

- a. **Altricial:** helpless at birth or hatching and requiring parental care for a period of time. This is seen in your songbirds, raptors and parrots
- b. **Precocial:** refers to species in which the young are relatively mature and mobile from the moment of birth or hatching. This is seen in your waterfowl & gamebirds such as turkeys, pheasants and guinea fowl
- 5. Answer d all apply.