

Science Olympiad Division B
Test SSSS 2020

Ornithology



Exploring the World of Science

Team Name: _____

Team Number: _____

Team Member(s): _____

Do not open this booklet until instructed to.

This test is 50 minutes. You are allowed to take apart the test but only answers recorded on the answer sheet will be counted. If any rules are broken, you may be penalized or disqualified.

Part 1: In this section, you will be asked to answer questions about the birds in the image sheet.

Bird #1 *Refer to picture A*

- 1) What is the common name of this bird?
- 2) Which bird is commonly confused for this one?
- 3) How many days after nest construction, will this bird lay its eggs?
- 4) How did this bird gain its common name?
- 5) What is the scientific name for this bird?
- 6) Which state(s) does this bird represent?
- 7) When does this species usually migrate?
- 8) What is the average flock size of these birds?
- 9) What are the main predators for this species?
- 10) How much does this bird weigh?

Bird #2 *Refer to picture B*

- 1) What is the common name of this bird?
- 2) What is this bird named after?
- 3) How often do these birds change mates?
- 4) How many states does this bird represent and which states are they?
- 5) Why are their beaks cone-shaped?
- 6) Are these birds arboreal?
- 7) When a female of this species sings, what does it usually mean?
- 8) How old was the oldest bird, not in captivity, of this species?

- 9) Where do these birds get their red pigmentation from?
- 10) What type of feathers does this species shed during the summertime?

Bird #3 *Refer to picture C*

- 1) What is the scientific name of this bird?
- 2) What is the clutch size of this bird?
- 3) Which gender is larger, in size not population, in this species?
- 4) Do these birds migrate?
- 5) What part of North America are these birds found in?
- 6) What is the average weight, in ounces, of the males of this species?
- 7) What is their conservation status?
- 8) What is the incubation period for the eggs of this bird?
- 9) What is the average lifespan of this bird?
- 10) Describe the habitats in which this bird commonly resides.

Bird #4 *Refer to picture D*

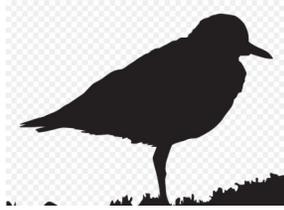
- 1) What type of swimmer is this bird?
- 2) What order does this bird belong to?
- 3) What is the conservation status of this bird?
- 4) Where does this species commonly nest?
- 5) How old was the oldest bird of this species that was kept in captivity?
- 6) What do you call a group of this bird?

- 7) Describe the male courtship display.
- 8) What is the nestling period for this bird?
- 9) Describe what noise this bird makes.
- 10) What order does this bird belong to?

Bird #5 Refer to picture E

- 1) How many years can this bird fly without landing?
- 2) How does climate change affect this bird?
- 3) What is the flying speed, in miles, of this bird?
- 4) How long does it take for this bird to mature?
- 5) How long does it take for this bird to fledge?
- 6) What is rhodopsin and how does it help this bird?
- 7) What earned this bird its scientific species name?
- 8) What was the main reason this bird was so heavily hunted in the 19th century?
- 9) What is their wingspan and why is it useful for them?
- 10) Where do these birds gather to breed?

Part 2: In this section, you will be asked questions generally about ornithology and birds. It is not specific to birds in this test.



- 1) This is a silhouette of what bird from the list, provide its common name?
- 2) Which bird, on the list, has the world's largest wingspan, provide its common name?
- 3) What is the common name of *Stercorarius Pomarinus*?
- 4) Who was the first ornithologist?
- 5) How many bird species live in North America?
- 6) Do birds have elbows or knees?
- 7) What is the state bird of Wyoming, provide its scientific name?
- 8) How old was the oldest *Thryothorus Ludovicianus* in the wild?
- 9) What is the fastest bird in the world, provide its scientific name?
- 10) What was the scientific name of the world's first bird?
- 11) What bird makes a **purr-WEE-eer** noise, provide its scientific name?
- 12) What bird represents the most states?
- 13) On average how many days before a full moon, does a *Caprimulgus vociferus* egg hatch?
- 14) What noise does a male *Botaurus lentiginosus* make while mating?
- 15) About how long does it take a *Certhia americana* to build a nest?

- 16) How long does it take *Piranga olivacea* young to leave the nest?
- 17) What is special about *Loxia Curvirostra*'s beak and how does it help the bird?
- 18) What is the average population of *Pheucticus Ludovicianus*?
- 19) Give the reason for why some birds fly in a V-Formation.
- 20) What type of bird does Trichomoniasis affect?

Part 3: In this section, you will be asked to answer questions regarding bird anatomy and biology-related questions.

- 1) What is cloaca?
- 2) How many toes do most birds have?
- 3) What are the 3 different scale types that bird feet have?
- 4) Since birds do not have a diaphragm what do they do in place of this organ?
- 5) What two organs are the avian stomach made of?
- 6) What is the embryonic development time for a duck?
- 7) When the egg is developing, how long does embryogenesis last?
- 8) Explain how birds are able to fly.
- 9) What is the purpose of the contour feather?
- 10) What is the purpose of downy feathers?
- 11) What are the 7 main types of feathers?
- 12) What layer of the skin does feather development start at?
- 13) What are feathers made of?
- 14) What do feathers develop from?

- 15) Describe the basic structure of most feathers.
- 16) Why do birds lack a bladder?
- 17) What fraction of a bird's body do its lungs take up?
- 18) What is the most common deformity in birds?
- 19) How many fingers do birds have per wing?

Part 4: In this section, you will be asked vocabulary regarding ornithology.

- 1) Define alula.
- 2) Define furcula.
- 3) Define polygynous.
- 4) Define pygostyle.
- 5) Define synsacrum.
- 6) Define barbules.
- 7) Define preening.
- 8) Define brood patch.
- 9) Define monogamous.
- 10) Define altricial.
- 11) Define cursorial.