

Teacher/Pastor Mark O'Ffill

NAD Honors Task-force Chair Wiki.pathfindersonline.org





Two Honors

TODAY!Raptors



Keep Learning!
Advanced Raptors



There are significant "Do it" requirements, some of which are NOT possible during COVID-19.

COVID-19 options are suggested whenever it still meets the purpose and intent of the honor.

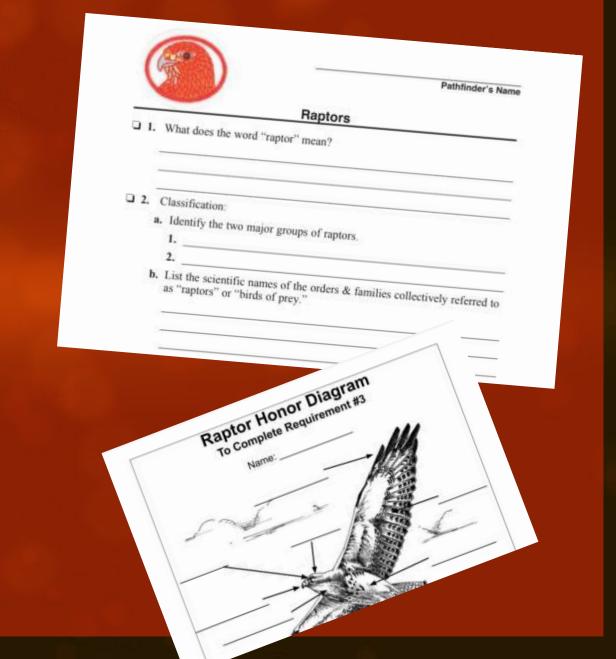


Did You Download & Print?

http://bit.ly/RaptorsWorksheet

5 pages



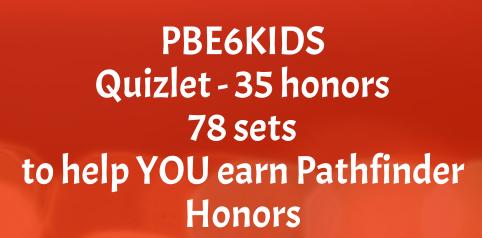


QUIZLET http://bit.ly/PBE6KidsQuizlet









Requirement #1



https://quizlet.com/_5ofhg2?x=1jqt&i=1q6gw8

What does the word "raptor" mean?



Definition

The word Raptor comes from the Latin word rapere, meaning to seize, or snatch away.

The term is used in reference the way many raptors kill their prey with their feet.



Definition

Common characteristics among raptors are their

- sharp, curved talons for catching and holding prey
- a curved upper bill for tearing flesh
- keen eyesight, hearing and/or sense of smell, used for finding their food.

Requirement #2a



Classification: Identify the 2 major groups of raptors.

Groups

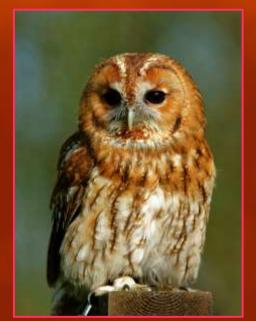
- based on sleeping habits!
- diurnal raptors (those active in the day)

hawks, eagles, kites, falcons and osprey

nocturnal raptors (those active at night)

"true" owls and the barn owls.







Requirement #2b



https://quizlet.com/_9bt38b?x=1jqt&i=1q6gw8

List the scientific names of the orders & families collectively referred to as "raptors" or "birds of prey."



Order Accipitriformes (accipiter, from the Latin word meaning hawk)
Order Falconiformes (likely from falx, from the Latin meaning sickle, referring to the curved beak)

Order Strigiformes (strix, from the Greek meaning to screech)

3 Orders

Order Accipitriformes -- Eagles, Hawks, Vultures, Condors Order Falconiformes -- Falcons Order Strigiformes -- Owls



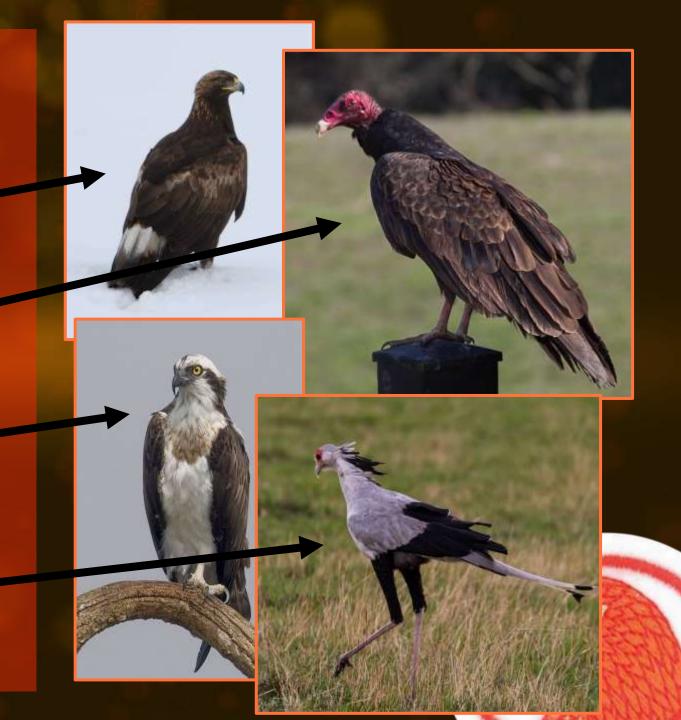






Accipitriformes

- Family Accipitridae: including the hawks, eagles, and kites, some 217 species worldwide
- Family Cathartidae (cathartes, from the Greek word meaning purifier): the seven species of vultures and condors
- Family Pandionidae (Pandion, from the Greek legend, the father of Procne, changed into a swallow): the two species of Osprey
- Family Sagittariidae (Sagittarius, Latin for archer): One species of Secretarybird



Falconiformes

• Family Falconidae: Some 60 species of falcons and their allies, including the Caracaras



Strigiformes

- Family Strigidae: Some 124 species of owls worldwide
- Family Tytonidae (Tyto, from the Greek for owl): The ten species of Barn Owls









Mnemonic Device Orders/Families



Accipitriformes Accipitridae Cathartidae Pandionidae Sagittariidae Falconiformes Falconidae Strigiformes Strigidae Tytonidae

Australian Avicideas &

Condors Pecked Silky

Falcon Feathers while

Swooping Swiftly

Tonight

Requirement #2c



https://quizlet.com/_9cacpy?x=1jqt&i=1q6gw8

Identify distinct characteristics of raptors

Can you identify the raptor by its shadow?

- What made it easy to spot?
- What characteristics did we notice?



Size Matters!



- sharp curved talons
- sharp, powerful curved beaks
- (also) keen eyesight

- Grab and sometimes kill prey with talons (except Cathartidae)
- Diurnal raptors = bare feet
- Nocturnal raptors = feathered feet
- -three toes forward, one back
- Owls & Osprey rotate one toe backward for two x two (better balance)

- sharp curved talons
- sharp, powerful curved beaks
- (also) keen eyesight

- Sharp hook to tear flesh, pull ofF feathers and fur, and spear their food
- Falcons have a "tomial tooth" that is used to cut the spinal cord of their prey (faster death)



- sharp curved talons
- sharp, powerful curved beaks
- keen eyesight

- Very large eyes with binocular vision (8x)
- Can see ultraviolet light (heat)
- Three eyelids (added protection from water or food)
- Cannot turn (have to turn their head)



- larger than usual "silhouette"
- shorter neck, larger wings
- sharp curved talons
- sharp, powerful curved beaks
- (also) keen eyesight





Requirement #2d



https://quizlet.com/_9bsose?x=1jqt&i=1q6gw8

Be able to identify readily an example of a raptor that illustrates each of the families represented under these two major groups (7 families).



Cathartidae ~ Vulture



Strigidae ~ Owl



Accipitridae ~ Hawk



Osprey



Sagittariidae ~ Secretarybird



Tytonidae ~ Barn owl



Accipitridae ~ Eagle



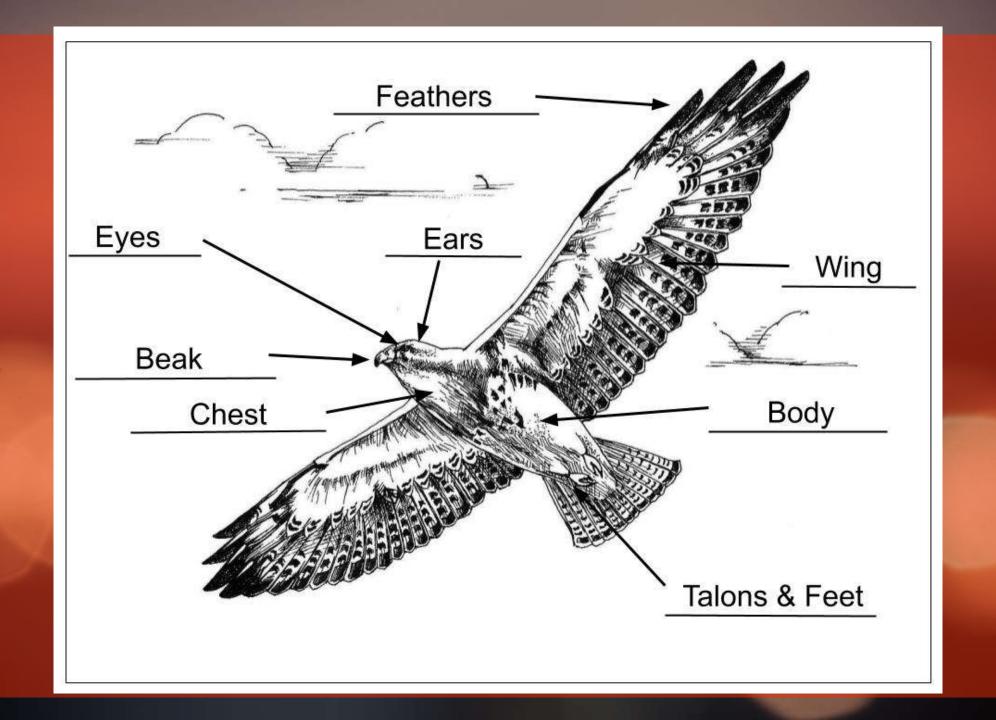
Falconidae ~ Falcon

Requirement #3



From a diagram, identify or label the following parts of the raptor:

- a. Eyes
- b. Feet & Talons
- c. Chest
- d. Body
- e. Beak
- f. Ears
- g. Wings
- h. Feathers



Requirement #4



https://quizlet.com/_9bsh9l?x=1jqt&i=1q6gw8

Discover the following information about raptors. Use this information to compare and contrast raptors with another family of birds, such as ducks & geese (anatidae) or parrots (psittaciformes).

Suggestions for completion

PHOTO COLLAGE!

Find google images + wikipedia/website articles that match each category and give the bird's name + unique identifiers.



Parrot much bigger
Parrot is CRITCALLY
endangered
Australia vs. Mexico
hunter vs. grasses
Forest vs. grassland
flyer (owl) vs. ground
bird (parrot)



Requirement #4a



Contrast on

Worksheet

a. the smallest diurnal and nocturnal raptor



Requirement #4b



Contrast on

Worksheet

b. the largest diurnal and nocturnal raptor



Requirement #4c



c. kinds of nests raptors build

With

Compare and

Contrast on

Worksheet



Requirement #4d



Worksheet

d. the average life span for large and small raptors

Requirement #4e



Contrast on

Worksheet

e. the most common food of raptors

Requirement #5



Do one of the following:

- a. Watch a live raptor demonstration
- b. Read a book on raptors
- c. Watch a film documentary on raptors

A. Live Raptor Demos

Google:

"webcam raptors zoos"

COVID-19 ADAPTATION

or

webcam <<your raptor of choice>>

NOTE: winter nests are usually empty in the northern hemisphere -- look to Autralia and African continent webcams



B. Books about Raptors

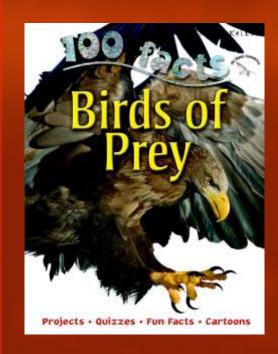
Google:

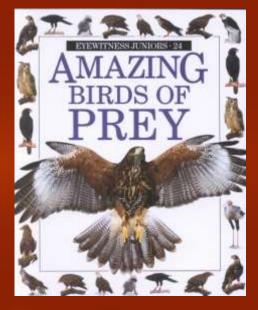
"good books on raptors for kids"

BE SURE to use the term "raptors" in your amazon or google search.

KINDLE reads are ideal in many instances!







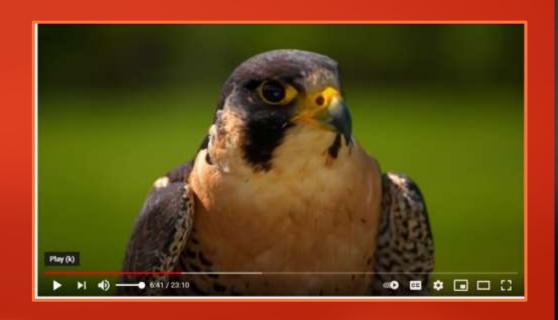


C. Documentaries

Eagle, Falcon, Owl - Birds Of Prey, Nature 2018 HD Documentary (23 min). REALLY GREAT VISUALS and FUN INFORMATION

https://youtu.be/fnkV3S3aOio

Natural Centre for Birds of Prey (INTRO) https://youtu.be/h2lspoyCaok







Do two of the following:

- a. Create a puppet show about raptors.
- b. Dissect an Owl Pellet, preferably online, and write down what you find.
- c. Make a chart of raptor wing spans and shapes of wings.
- d. Make a file of at least 10 raptor craft ideas and complete 5 of the crafts.
- e. Make a notebook, art display, media presentation or collage with pictures and information about raptors.
- f. Create a board game about raptors.
- g. Photograph at least 5 live raptors in the wild or captivity. Label your photographs.

6a Puppet Show

https://dltk-kids.com/animals/mbagowl.htm





6b. Dissect Owl Pellet

https://kidwings.com/virtual-pellet/





6c. Chart Wingspans

Google "wingspans of eagles hawks and buzzards for kids"

https://kidspressmagazine.com/scie nce-for-kids/misc/misc/birds-preywingspans.html







6f. Board Game

https://rediscoveredfamilies.com/how-w-to-make-a-board-game/



Suggestions:

Monopoly - different raptors for each property, bird play pieces, 4 sanctuarys (Railroads), Hunters = Jail, etc

Trivia Game - demo what you've learned about raptors

6g Photograph 5

Google "raptor photography </state/province/region/country"



Unforgatisible Instrueys That Do Good for People And Wildlin

DESTINATION: WILDLIFE™

HOME TRAVEL GUIDES BLOG ABOUT

CARROLINES FROM BOOK 200

How To Get Spectacular Bald Eagle Photographs at Conowingo Dam

Lower Susquehanna River, Conowingo, Maryland



6g Photograph 5

Captivity photography - Rehab centers / zoos / wildlife research facilities





http://www.turbarywoods.co.uk

Experience raptors in one of the following ways a Visit a zoo or aviary. Have a docent (guide) tell about the raptors they care for.

we a specialist visit the group and share what e does with raptors.

DURING COVID-19 Substitute and additional #5 Find a person willing to demonstrate for your group via Zoom or equivalent



Observe raptors in the wild nesting or migrating. If possible, work with an area nature center, park, or Wildlife Management Areas.



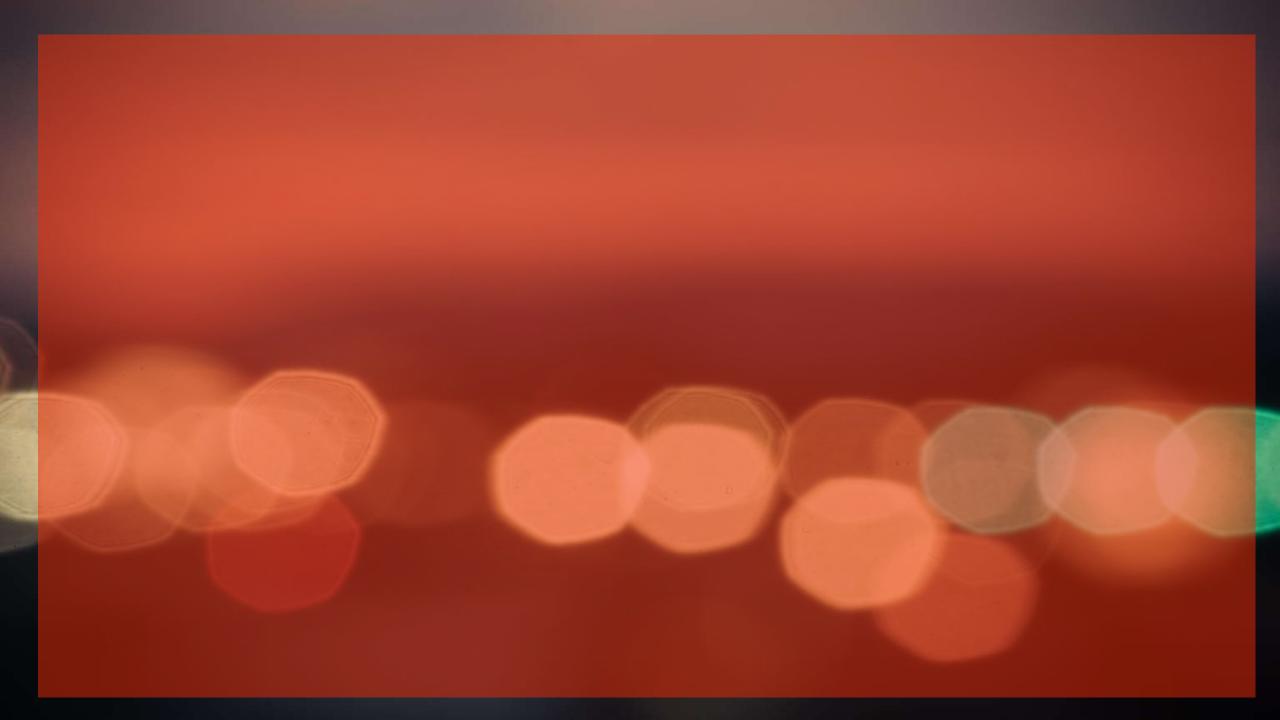
Find two Bible passages about raptors and summarize a moral lesson from each one.

Bible Texts

Quizlet - https://quizlet.com/_5s2vtv?x=1jqt&i=1q6gw8

Deuteronomy 14:11-18

You may eat any clean bird. But these you may not eat: the eagle, the vulture, the black vulture, the red kite, the black kite, any kind of falcon, any kind of raven, the horned owl, the screech owl, the gull, any kind of hawk, the little owl, the great owl, the white owl, the desert owl, the osprey, the cormorant, the stork, any kind of heron, the hoopoe and the bat.





Other Similar Honors



Left to Right 1-Bats, Birds, Worms

2 - Reptiles, Dinosaurs, Odonates

3 - Marsupials, Parrots & Cockatoos, Sharks



You Tube

"NAD Pathfinders"



Worksheet for this honor http://bit.ly/RaptorsWorksheet



This slideshow download: http://bit.ly/RaptorsSlideshow

Wiki.pathfindersonline.org







Web/App Resources

Raptors



Owls of Europe -

https://www.owlpages.com/owls/spe
cies.php?r=5

Birds of Prey in Europe -

https://www.rspb.org.uk/birds-and-wildlife/wildlife-guides/bird-a-z/kites-hawks-eagles/

Best App: iNaturalist (2.8 million contributors)

