

New World Vultures



A Hawk Mountain
Activity Book for Children



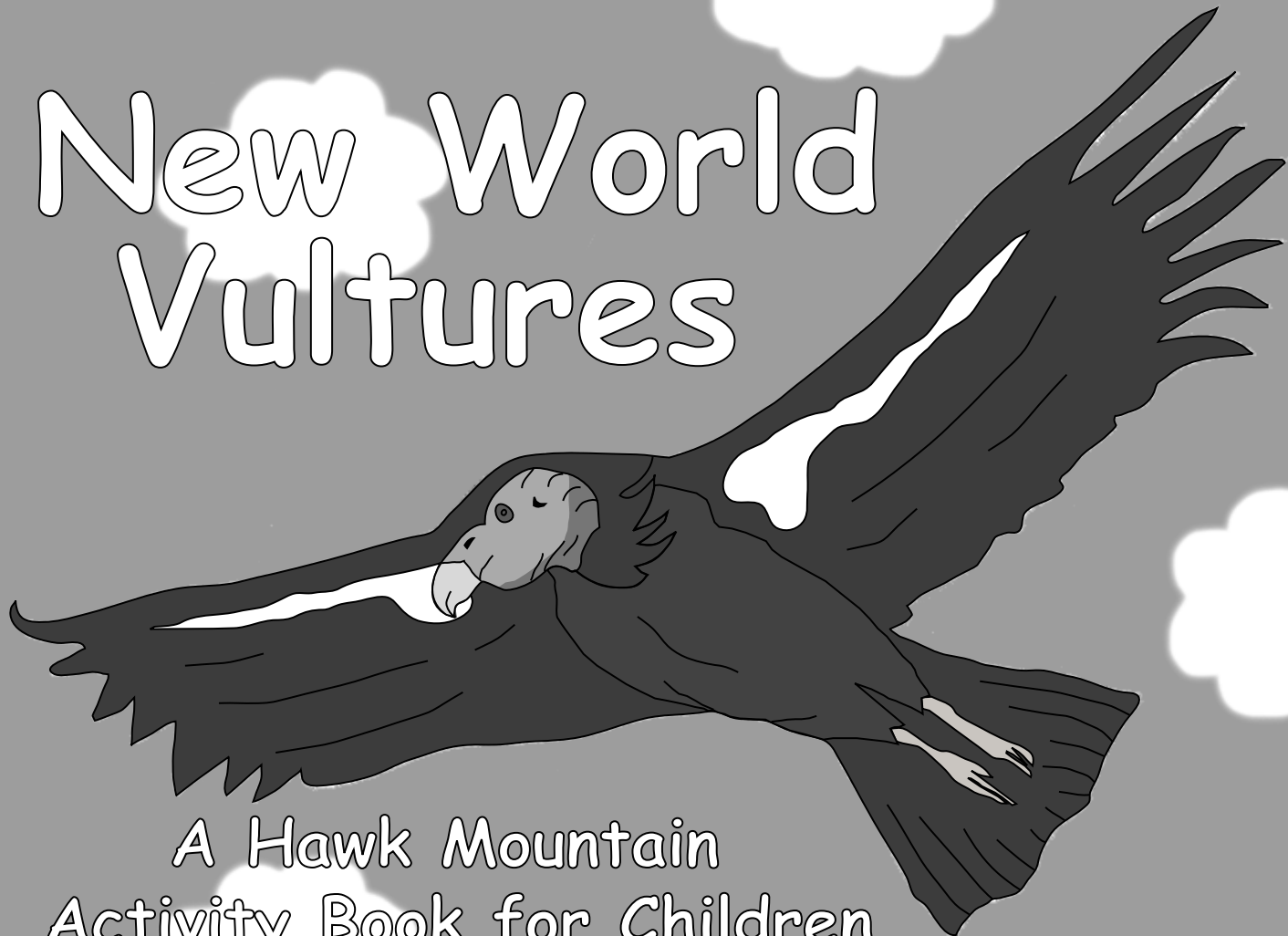
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Keith L. Bildstein and **Jeremy Scheivert**, Editors
Wendy Frew, Graphic Designer and Illustrator

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Activity Book for Children

Vultures are scavengers with special adaptations

New World vultures are vultures that live in North, Central, and South America.

There are seven species of New World vultures. Two are geographically widespread. The Black Vulture and Turkey Vulture live throughout the Americas both inside and outside of the tropics. Three of them, the King Vulture, the Lesser Yellow-headed Vulture, and the Greater Yellow-headed Vulture are found mainly or entirely in the tropics. The Andean Condor is found inside and outside of the southern tropics. The California Condor is found only in the western United States.

Vultures are scavenging raptors that feed on the meat of animals that have died from diseases, parasites, starvation, old age, and accidents. There are no animals better equipped to find dead animals than vultures. Their wide wings make them excellent flyers, and they use winds and thermals (pockets of warm rising air) to soar long distances while only occasionally flapping their wings. They have good eyesight and some of them also have a very keen sense of smell. New World vultures have bare skin on their head and neck, which allows them to keep clean after eating. They have large feet which they use to help hold food down while they tear off pieces of meat with their beaks. Vultures eat large amounts of food at each meal and do not need to feed every day.

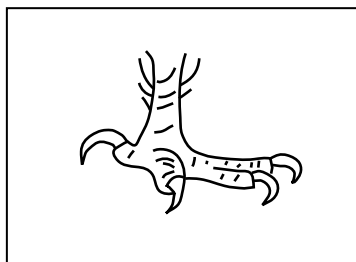
Vultures are very important birds because they scavenge and recycle the flesh of dead animals, thereby completing the cycle-of-life.

Vulture conservation

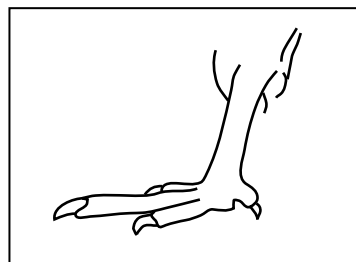
Vultures live in most habitats and often are taken for granted because they are so common. Scavengers such as vultures are particularly sensitive to human activities. Vultures benefit from people and spend time in disturbed areas where road kills can be an important food resource. People sometimes kill vultures because they think they spread diseases. This is wrong because vultures do not spread diseases. Instead they clean up diseased animals by eating them.

Differences between predatory raptors and scavenging raptors

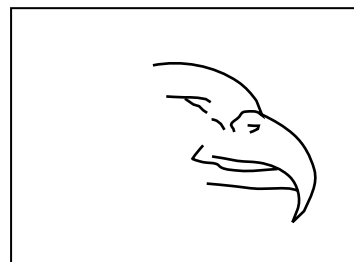
Unlike predatory raptors that have long toes and curved talons that work well when grasping struggling prey, vultures have relatively straight toes with short talons that are used to keep carcasses in place while feeding on them. The beaks of vultures are not as hooked as those predatory raptors but are powerful enough to tear apart the bodies of dead animals.



Foot of a predatory raptor



Foot of a scavenging raptor



Beak of a predatory raptor



Beak of a scavenging raptor

How to use this book

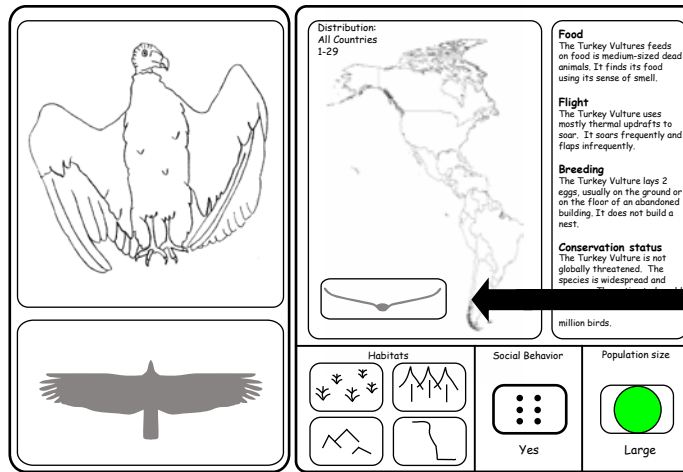
Turkey Vulture (*Cathartes aura*)

English name

Scientific name

Map the distribution of each species by countries using the country codes later in the book

Color the bird
(See color pages
later in book)



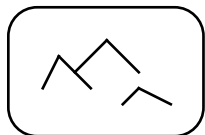
General Information
about the species

Head-on in-flight
silhouette

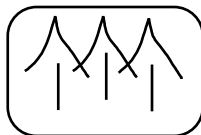
In-flight silhouette

Habitat, behavior, and
population information

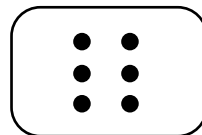
Icon descriptions



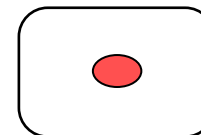
Rocky places



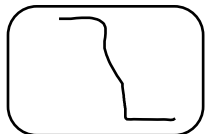
Forests



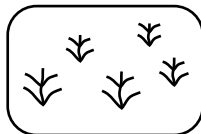
Social
Species



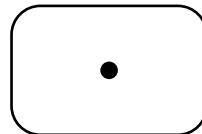
Small population
(Less than 100 birds)



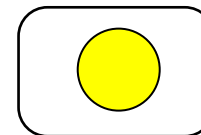
Cliff ledges



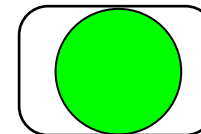
Open
habitats



Solitary
Species



Medium population
(Less than 1 million)



Large population
(More than 1 million)

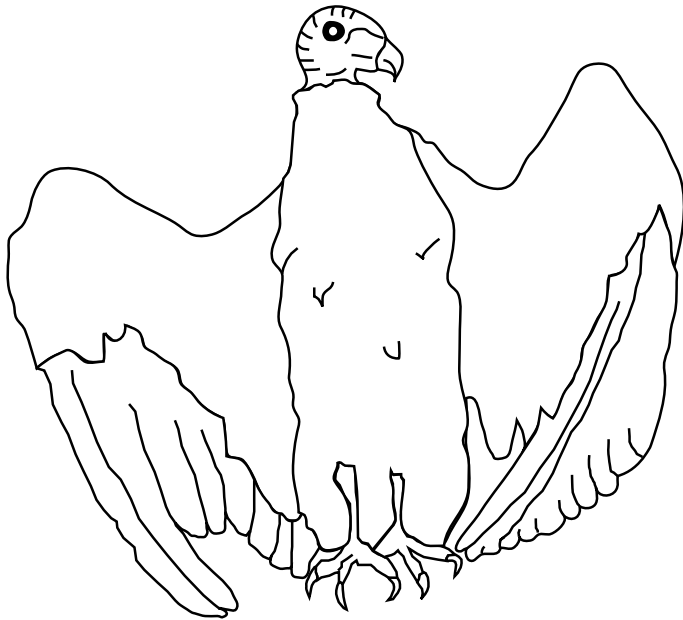
Country Map of the Americas



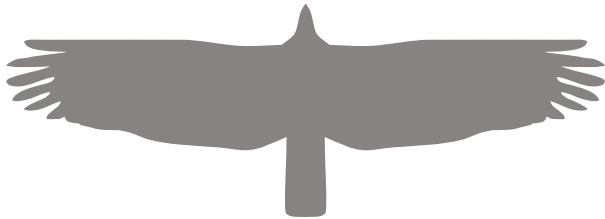
Country codes

- | | |
|------------------------|--------------------------|
| 1 - Canada | 16 - French Guiana |
| 2 - United States | 17 - Trinidad and Tobago |
| 3 - Mexico | 18 - Surinam |
| 4 - Puerto Rico | 19 - Guyana |
| 5 - Dominican Republic | 20 - Colombia |
| 6 - Haiti | 21 - Venezuela |
| 7 - Cuba | 22 - Ecuador |
| 8 - Jamaica | 23 - Peru |
| 9 - Belize | 24 - Paraguay |
| 10 - Guatemala | 25 - Uruguay |
| 11 - El Salvador | 26 - Bolivia |
| 12 - Honduras | 27 - Brazil |
| 13 - Nicaragua | 28 - Chile |
| 14 - Costa Rica | 29 - Argentina |
| 15 - Panama | 30 - Falkland Islands |

Turkey Vulture (*Cathartes aura*)



Color the bird



Distribution:
All Countries
1-30



Food

The Turkey Vulture feeds on medium-sized dead animals. It finds its food by both sight and smell.

Flight

The Turkey Vulture uses mostly thermal updrafts to soar. It soars and flaps infrequently.

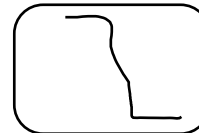
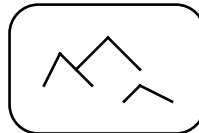
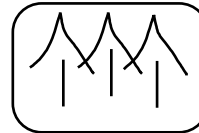
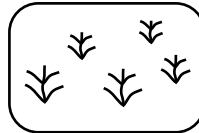
Breeding

The Turkey Vulture lays two eggs. It nests on the ground or on the floor of an abandoned building. It does not build a nest.

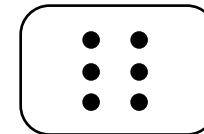
Conservation status

The Turkey Vulture is not globally threatened. The species is widespread and common. The estimated world population is more than five million birds.

Habitats

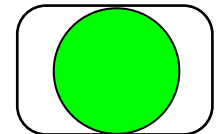


Social Behavior



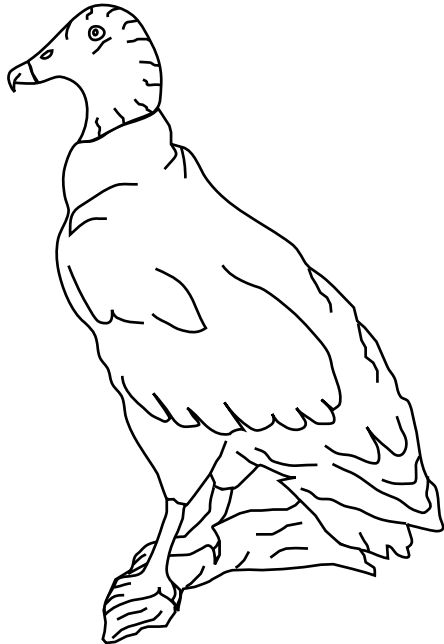
Yes

Population size

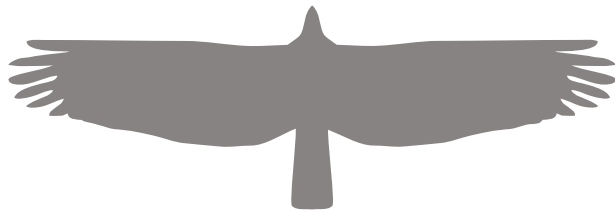


Large

Lesser Yellow-headed Vulture (*Cathartes burrovianus*)

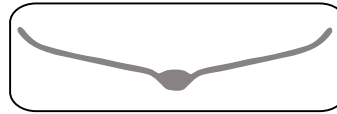


Color the bird



Distribution:

1,3,4,5,6,9,10,11,12,13,14,15,16,17,18,19,20,21,27



Food

The Lesser Yellow-headed Vulture feeds on the carcasses of small animals which it finds by both sight and smell.

Flight

The Lesser Yellow-headed Vulture glides low over open habitats while searching for food. It often perches on fence posts and other low perch sites.

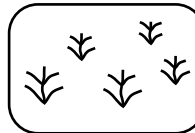
Breeding

The Lesser Yellow-headed Vulture lays two eggs. It nests in holes in large trees and on the ground.

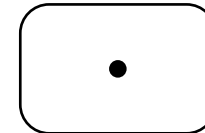
Conservation status

The Lesser Yellow-headed Vulture is not globally threatened but is widespread and relatively numerous.

Habitats

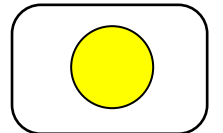


Social Behavior



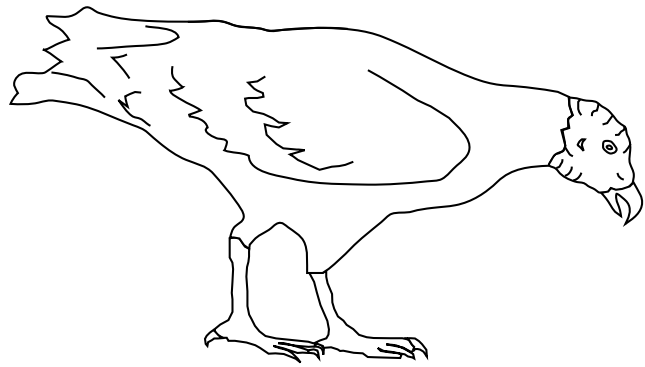
No

Population size

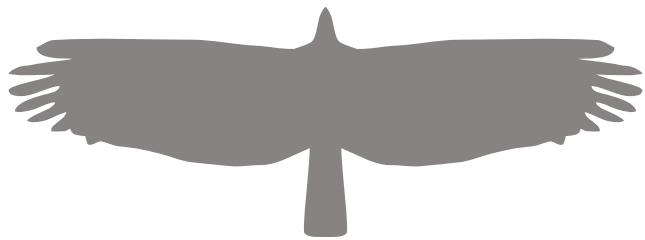


Medium

Greater Yellow-headed Vulture (*Cathartes melambrotus*)



Color the bird



Distribution:
3,4,7,9,10,11,12



Food

The Greater Yellow-headed Vulture feeds on dead animals and sometimes living opossums. This species finds food while flying low over forests.

Flight

The flight of the Greater Yellow-headed vulture is heavy and steady. The species flies with its wings held flat or slightly above the horizontal in a dihedral.

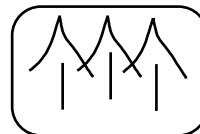
Breeding

The breeding biology of the Greater Yellow-headed Vulture is little known. One nest was found in a hole in a tree.

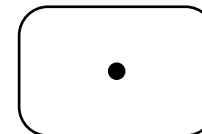
Conservation status

The Greater Yellow-headed Vulture is not globally threatened. The species is mainly confined to remote areas and usually is not found in disturbed forests.

Habitats

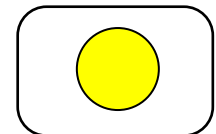


Social Behavior



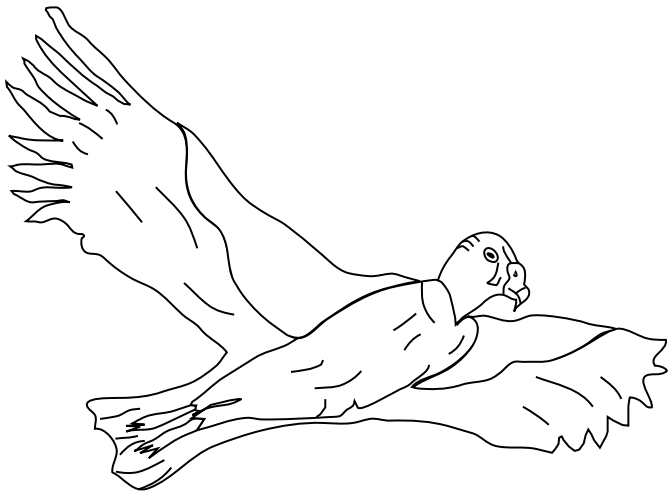
No

Population size

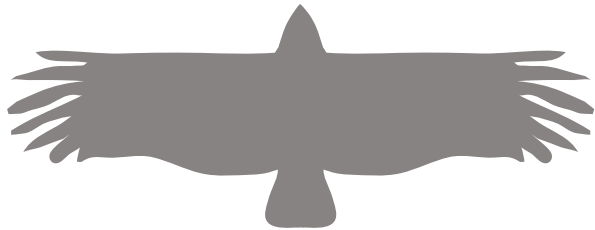


Medium

King Vulture (*Sarcoramphus papa*)



Color the bird



Distribution:

1,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,27



Food

The King Vulture feeds on the carcasses of large mammals. The species dominates smaller species of vultures at carcasses. King Vultures do not have the ability to find food by smell.

Flight

King Vultures are expert gliders that sometimes soar for hours without flapping their wings. Its wing beats are deep and strong.

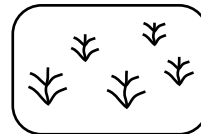
Breeding

The King Vulture lays one egg. It nests on the ground or in stumps of trees.

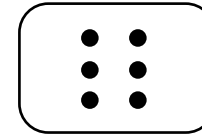
Conservation status

The King Vulture is not globally threatened. Very little information is available about this species in many parts of its range.

Habitats

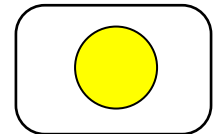


Social Behavior



Yes

Population size

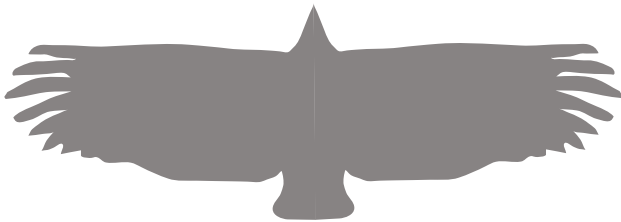


Medium

Black Vulture (*Coragyps atratus*)

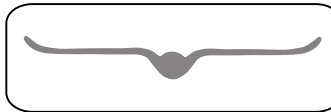


Color the bird



Distribution:

1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,
20, 21,27,28



Food

The Black Vulture is a generalist scavenger that feeds on almost any kind of dead animal. It will also consume live prey occasionally. It is not able to find food by smell.

Flight

The Black Vulture flaps frequently and its flight appears less efficient than that of other vultures.

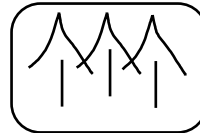
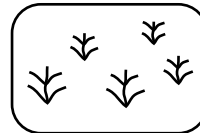
Breeding

The Black Vulture lays two eggs. It nests in small caves and on the ground at the base of trees. It does not build a nest.

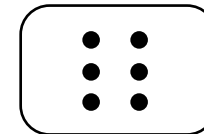
Conservation status

The Black Vulture is not globally threatened. The species is widespread and abundant in many places.

Habitats

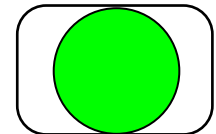


Social Behavior



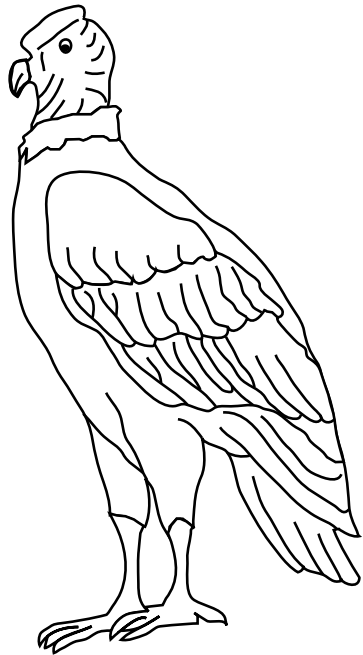
Yes

Population size

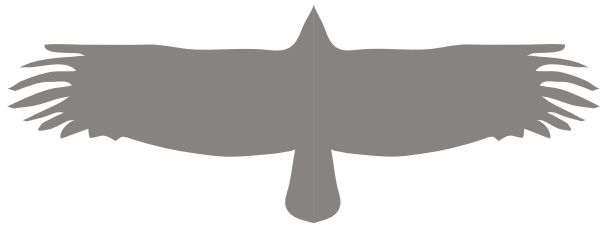


Large

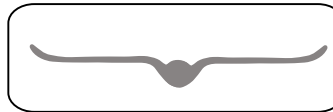
Andean Condor (*Vultur gryphus*)



Color the bird



Distribution:
1,2,4,7,8,9



Food

The Andean Condor feeds on the carcasses of large mammals. This species dominates smaller vultures at carcasses. The Andean Condor does not use its sense of smell to find carcasses.

Flight

The Andean Condor can soar for hours over steep mountainsides. It uses mostly thermals and mountain updrafts to soar and flaps infrequently.

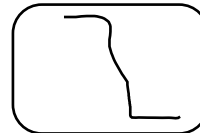
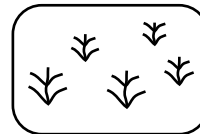
Breeding

The Andean Condor lays one egg and nests on cliffs.

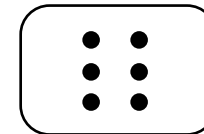
Conservation status

The Andean Condor is not globally threatened. There is little information available about its population size.

Habitats

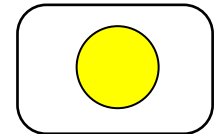


Social Behavior



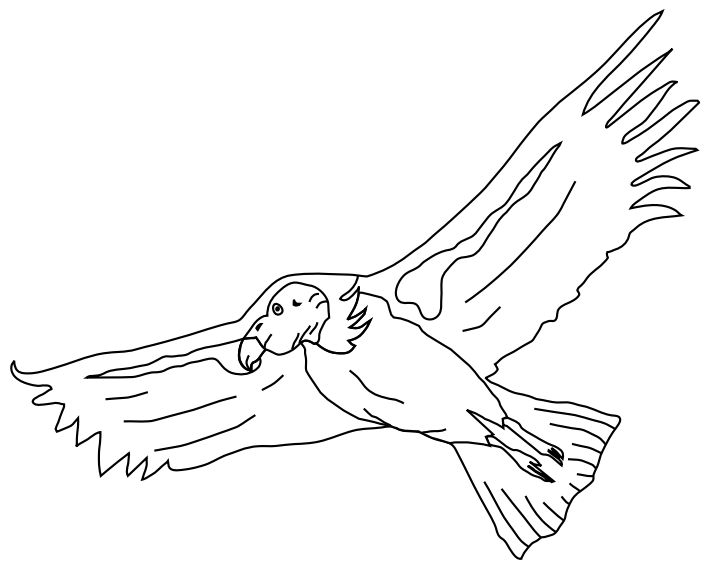
Yes

Population size

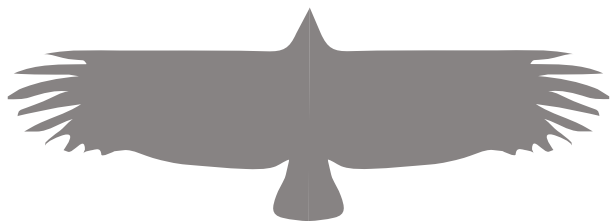


Medium

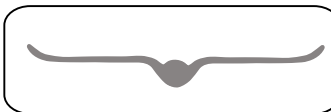
California Condor (*Gymnogyps californianus*)



Color the bird



Distribution:
27 (California and Arizona).



Food

The California Condor feeds on the carcasses of large mammals.

Flight

The California Condor flaps when taking off from the ground and then glides and soars for miles without flapping.

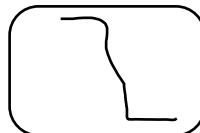
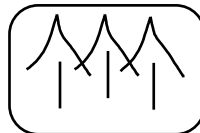
Breeding

The California Condor lays one egg. It nests in caves, holes and in cavities in large trees. It does not use nesting material.

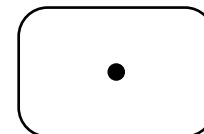
Conservation status

The California Condor is globally threatened and is one of the most critically endangered species of all birds. Several hundred condors occur in the wild.

Habitats

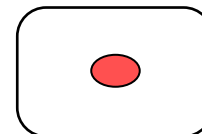


Social Behavior

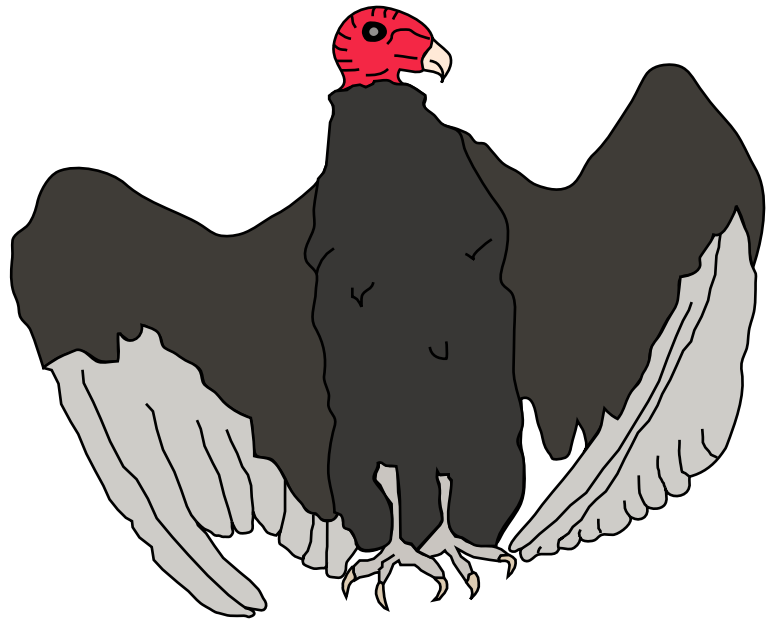


No

Population size



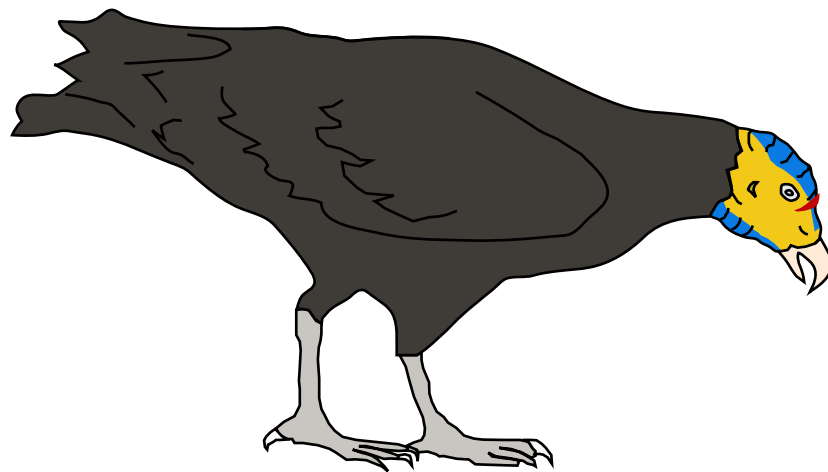
Small



Turkey Vulture



Lesser Yellow-headed Vulture

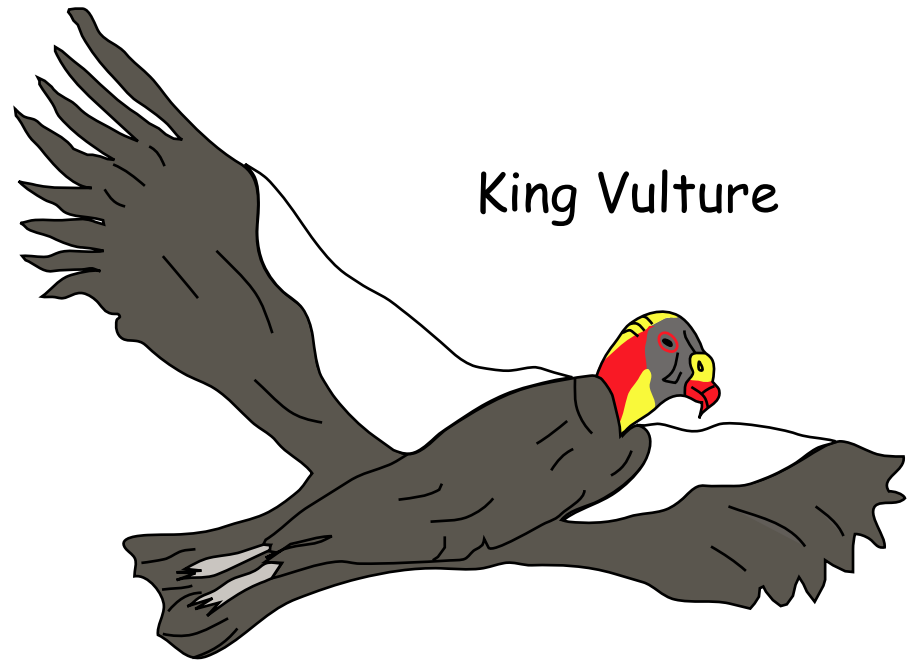


Greater Yellow-headed Vulture

Black Vulture



King Vulture



Andean Condor



California Condor



Activity 1

Vulture Mobile

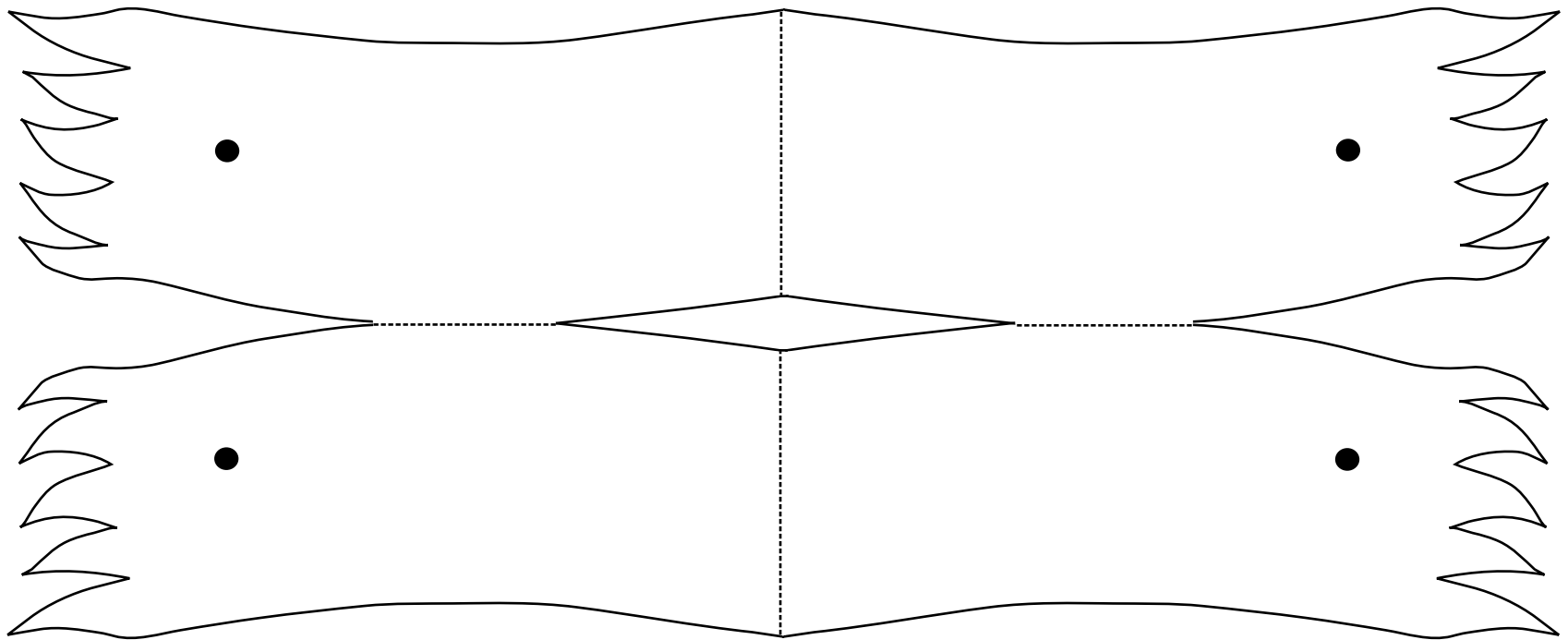
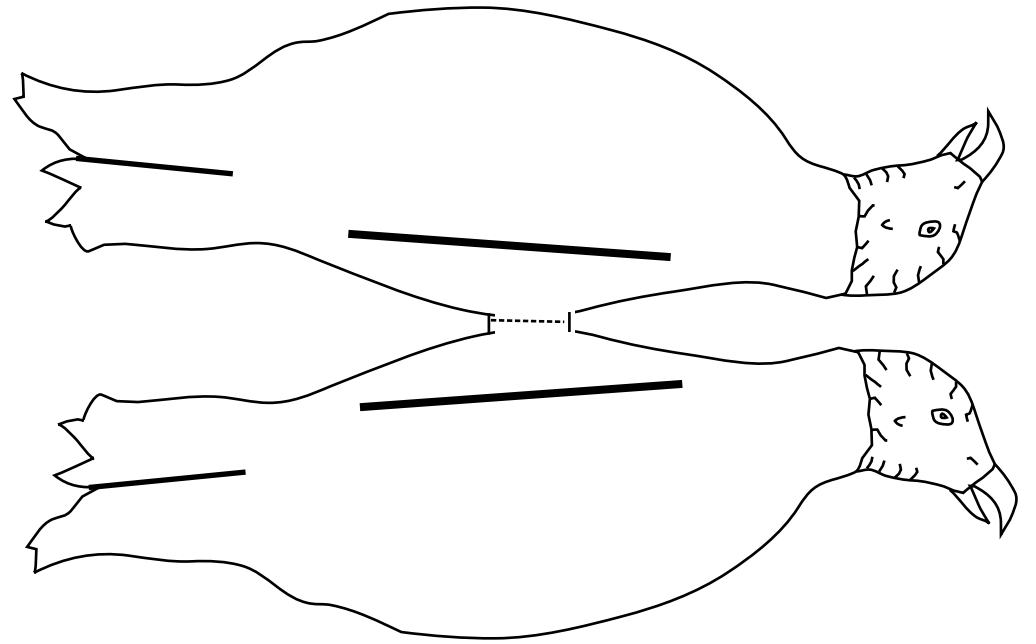
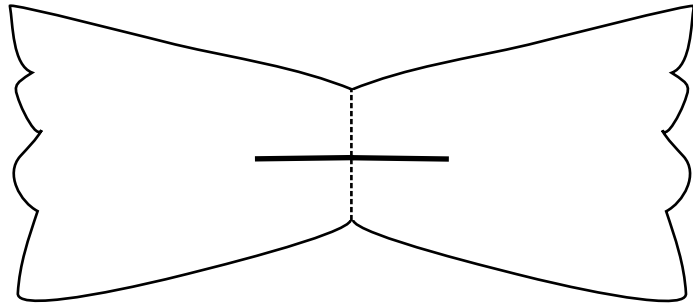
What you will need: scissors, glue, paper, paints or crayons, string, and a metal or plastic hanger

How to do it:

1. On the next page you will find a silhouette pattern of a Turkey Vulture. Using paint or crayons, color the pattern.
2. Then cut out all parts of the pattern.
3. Fold all parts of the pattern on the dotted lines, and then glue the insides of the silhouettes together to make one piece for each part of the silhouette. You should have three separate parts all glued by themselves.
3. Cut on the two lines marked on both patterns - one on the body and the other on the tail to insert the wings and the tail to the body.
4. Then make two holes on the top of the vulture wings marked on the pattern.
5. Finally, attach a string on each hole made on the patterns and join it to the metal or plastic hanger. Use the picture of the assembled model as a reference.
6. Hang your vulture mobile in your room.

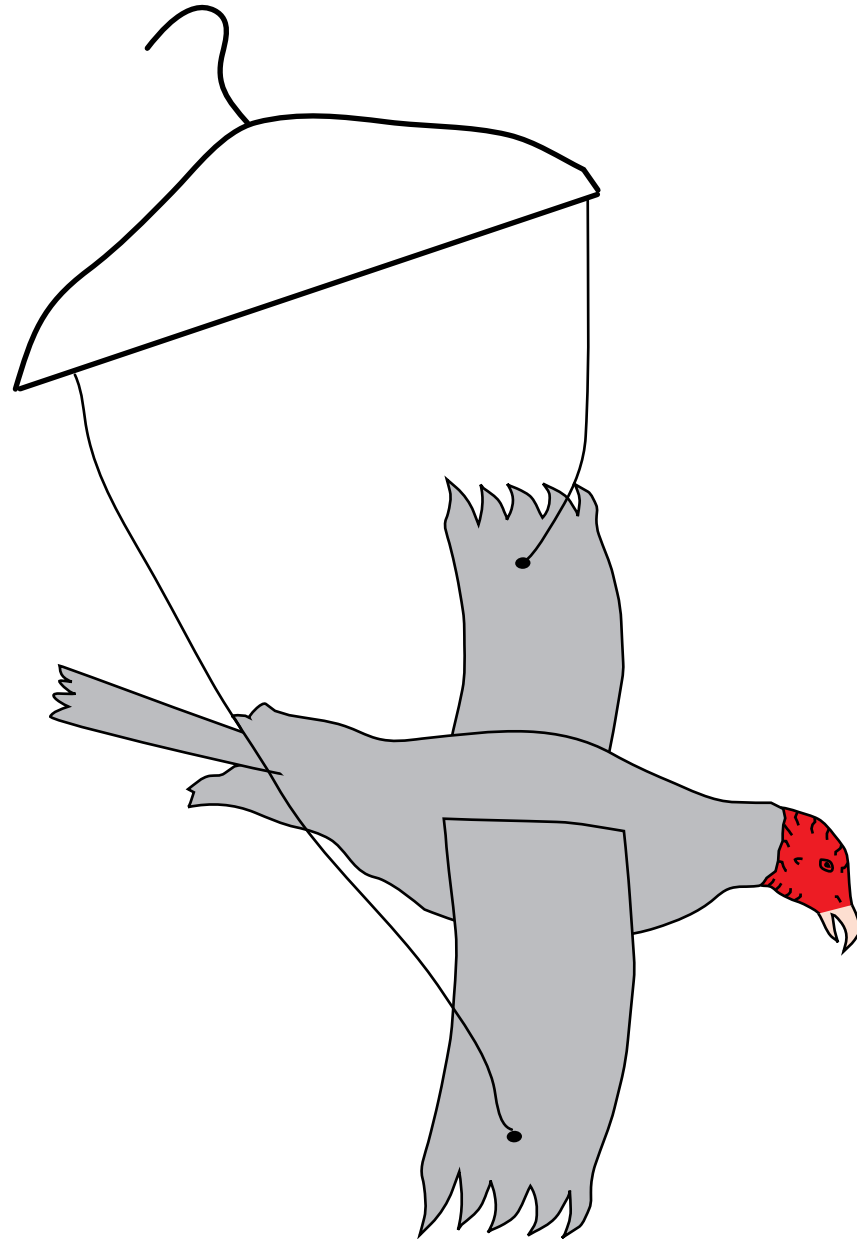
Activity 1

Vulture Mobile



Activity 1

Vulture Mobile Assembled



Activity 2

Eating Like a Vulture

What you will need: bathroom scale, pencils, and calculation card (found on the next page). Turkey Vultures feed on dead animals. They can increase their body weight by 5% in a single day. Turkey Vultures weigh about 1800 grams, or 4 pounds. This means they can gain 90 grams in a single day.

How to do it:

1. Use the calculation card on the next page to see how much you would have to eat in a single day to gain proportionately as much weight as the Turkey Vulture. You will calculate with hamburgers instead of dead animals (thank goodness!).

Activity 2

Eating like a Vulture calculation card

Eating Like a Vulture	
Name _____	Body Weight _____ lb.
Amount of weight to gain _____ lb. (Your weight x [i.e. 0.05])	
3500 calories consumed result in 1-pound weight gain.	
Each hamburger contains 250 calories.	
_____ times 3500 calories = _____ calories needed, (weight in pounds)	
divided by 250 calories per hamburger = _____ hamburgers you would need to eat!	

Activity 3

Vulture Refrigerator Magnets

What you will need: scissors, glue, poster board, flat magnets, and paint or crayons

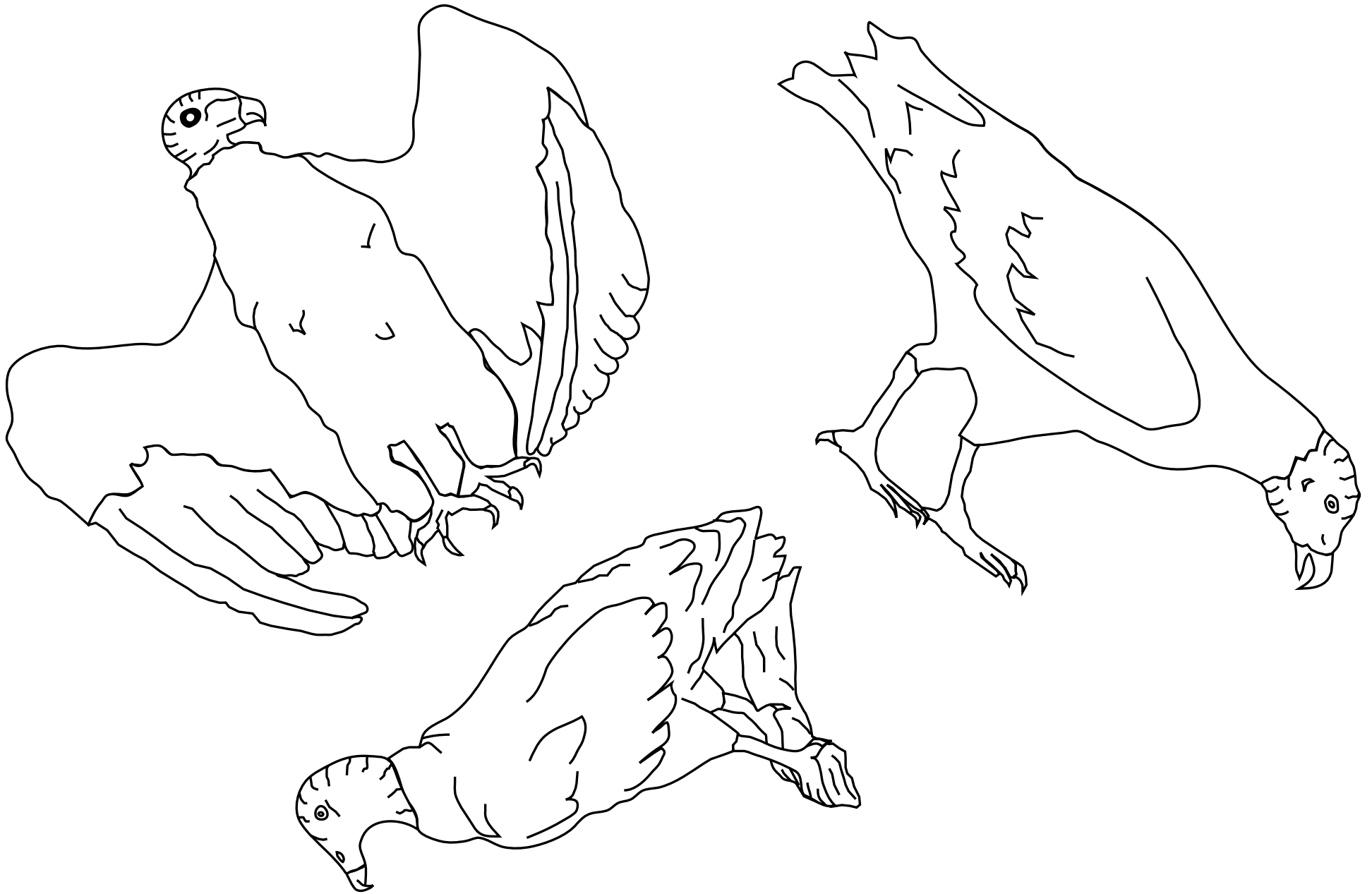
How to do it:

1. Choose the vulture from the next two pages that you would like to make into a magnet.
2. Glue the pattern to the poster board.
3. Cut out the vulture pattern and glue it to the flat magnet.
4. Once the glue dries, the magnet is ready to be used on your refrigerator.

*Think of more activities or patterned shapes and make more magnets!

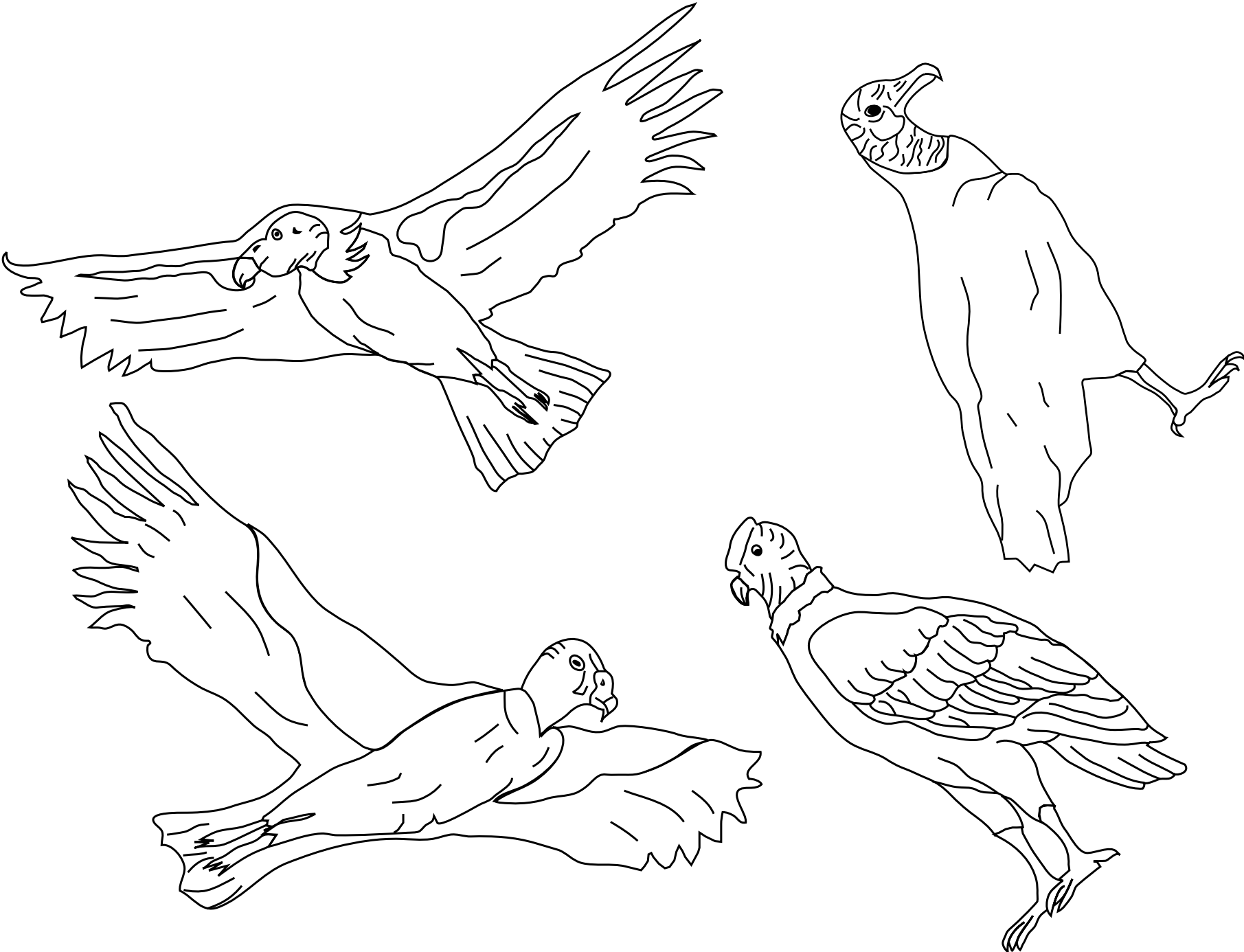
Activity 3

Vulture Refrigerator Magnets



Activity 3

Vulture Refrigerator Magnets



Activity 4

Smelling like a Vulture (The nose-knows)

What you will need: Car air fresheners (liquid pump bottles), cotton balls, coffee cans, pencils, yardstick or meterstick, Nose-knows card (found on the next page), distance markers

Unlike most birds of prey, Turkey Vultures have a good sense of smell. In fact, Turkey Vultures can smell the rotting carcass of a dead animal from several miles away. A Turkey Vulture's sense of smell is so acute that natural-gas workers use them to find leaks in gas pipelines. A chemical called ethyl mercaptan, which smells like rotting meat, is added to natural gas (so that people can detect leaking gas in their homes), and when a pipeline leak occurs, Turkey Vultures gather at the site of the leak, believing they have found a dead animal. Natural-gas workers see the vulture and fix the leak. How does your sense of smell compare with that of vultures? See how close you need to get in order to smell the mystery scent in the canister.

How to do it:

1. Develop three separate "smelling stations," each with a different car fragrance.
2. Add several cotton balls to three coffee cans and add a different car fragrance to the cotton in each coffee can.
3. Create three smelling stations by placing coffee cans 25 yards away from starting line (be careful to place stations far enough apart to eliminate any "cross-smelling").
4. Players rotate through each of the three smelling stations.
5. At each station, players begin at the starting line and slowly move toward the coffee can until they think they have identified the smell contained within.
6. Players record the smell on their "Nose-knows" card and mark their distance from the can.
7. Players then measure the distance from their marker to the coffee can and record this number on their "Nose-knows" card. Players should record the distance in feet and meters.
8. After each player rotates through the three stations and completes their "Nose-knows" card, discuss how their distances compare to that of the Turkey Vulture.
9. **Bonus exercise:** In a defined area, place a camouflaged coffee can with one of the three smells located within and have players locate the can using their sense of smell.

Activity 4

Smelling like a Vulture "Nose-knows" card

Nose-knows Card

Record your scents and distance from the can on the lines below

Station 1

scent: _____

distance from can: _____

Station 2:

scent: _____

distance from can: _____

Station 3:

scent: _____

distance from can: _____

Activity 5

Vulture Crossword Puzzle

What you will need: A pen or pencil

How to do it:

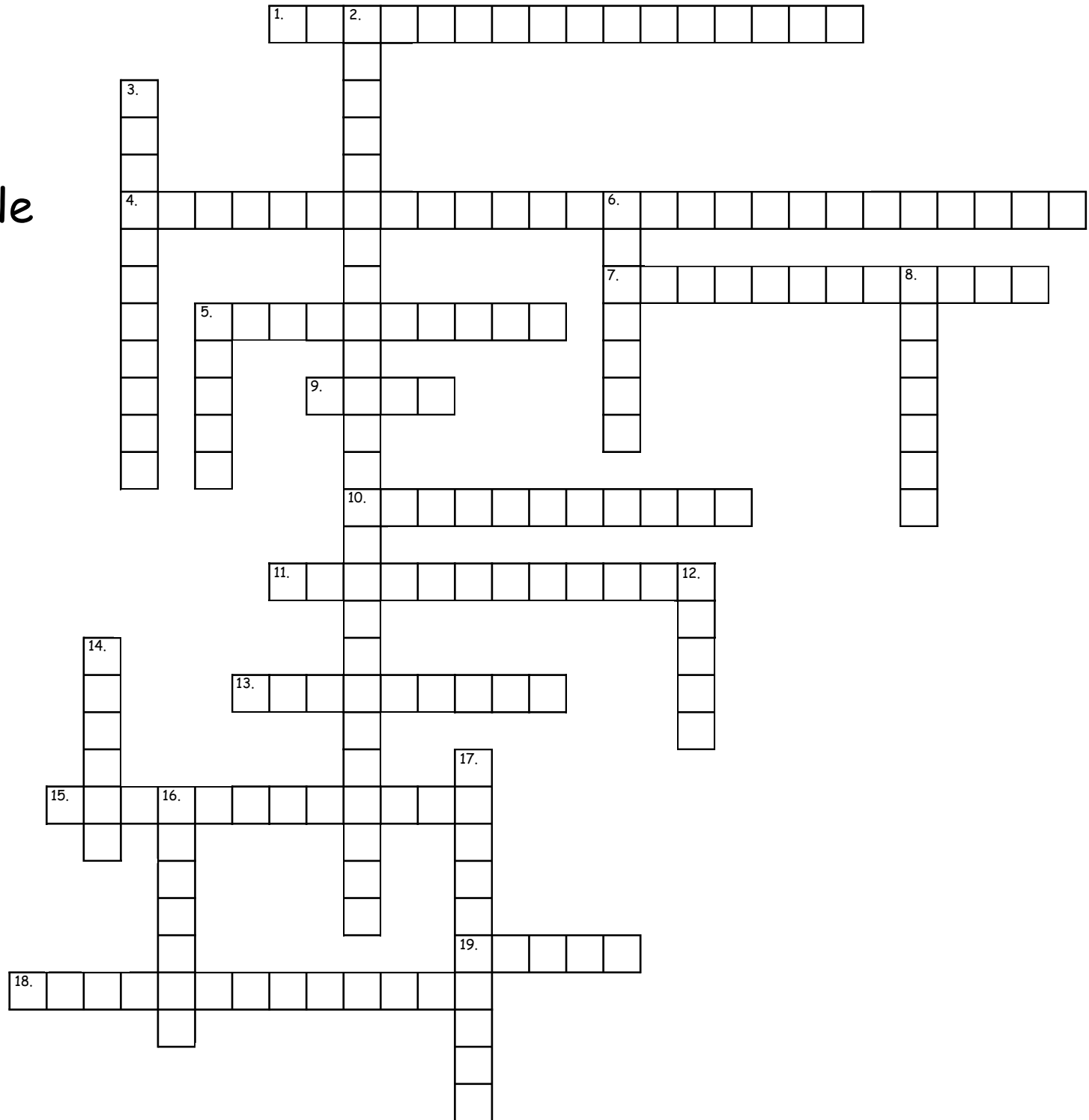
1. Read the next questions carefully and answer each of them. You can use this book to help answer each question carefully.
2. Once you have the answer, fill the crossword puzzle out on the next page according to the numbers.

Questions:

1. A large, eagle-sized bird with a featherless head that only lives in western United States.
2. A tropical vulture that glides very low over open habitats while searching for food.
3. The name of this species comes from the fact that it dominates smaller species of vultures at carcasses.
4. A tropical vulture that usually is confined to remote forests, and usually is not found in disturbed forests.
5. (Down) The place on a tree where vultures stand for short periods
5. (Across) All individuals of a vultures species within a geographic area.
6. The environment occupied by a vulture.
7. A widespread and abundant vulture with broad flat wings that flap a lot.
8. A column of warm, rising air that vultures soar in.
9. To fly without flapping while maintaining or even increasing altitude.
10. The living organisms and non-living things that surround a vulture.
11. The largest new world vulture. This species lives only in the Andes of South America.
12. The place where vultures usually rest at night.
13. An animal that feeds only on dead animals.
14. Bird of prey with strong, powerful feet, sharp talons, and a hooked beak.
15. The protection and careful use of natural resources.
16. A group of interbreeding plants or animals distinct from other groups of plants or animals.
17. A species that is in danger of extinction if the factor or factors threatening it continue to occur.
18. The most common and widespread new world vulture.
19. To fly without flapping while losing altitude.

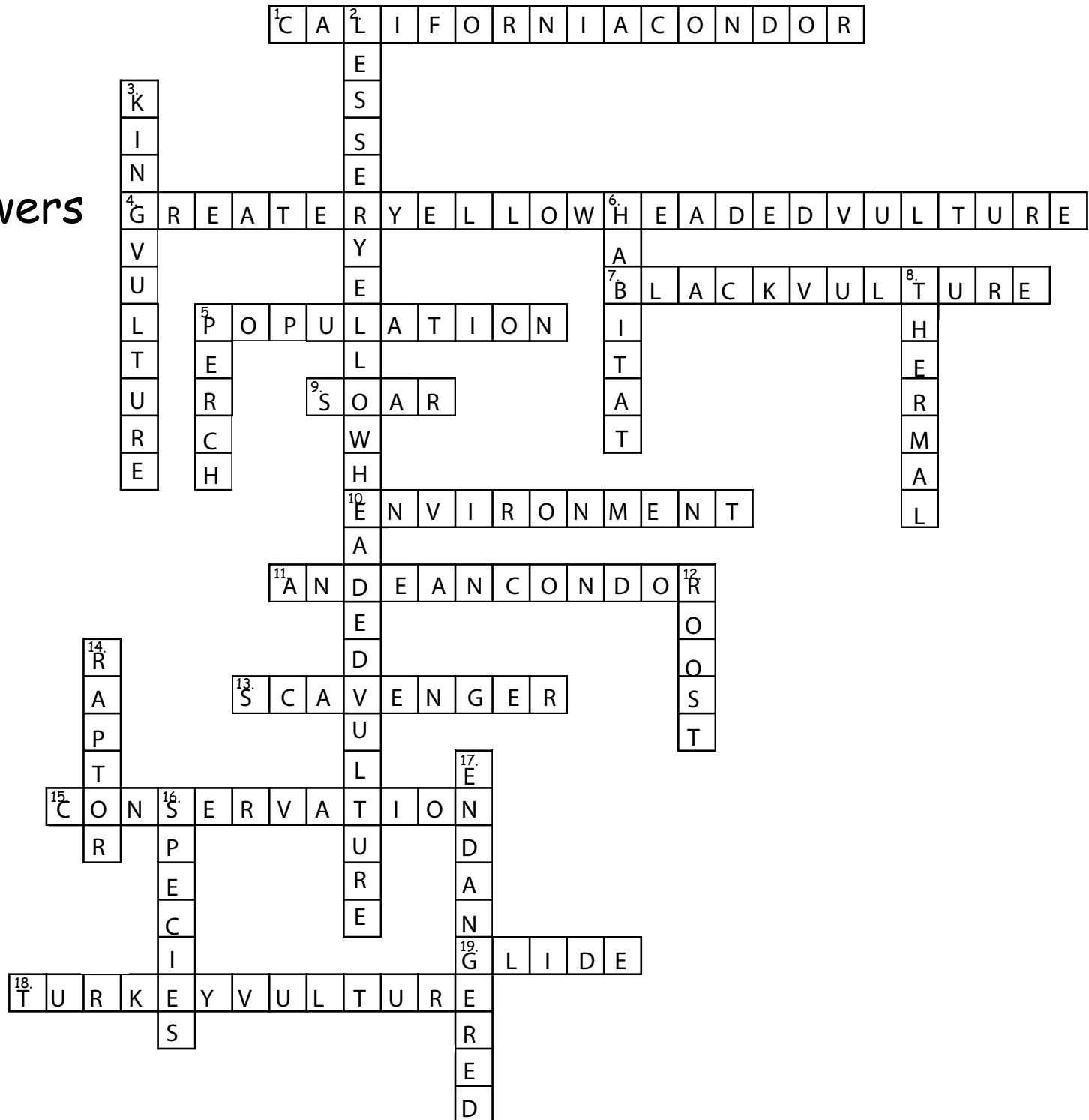
Activity 5

Crossword Puzzle



Activity 5

Crossword Puzzle Answers



Vulture Glossary

Abundant: A species that is common and is seen frequently.

Conservation status: A category assigned to a species that indicates its relative abundance and any threats to its existence.

Carrion: The meat of a dead animal. A carcass.

Condor: A large, eagle-sized scavenger with a featherless head. Condors are larger than vultures. Like vultures, condors do not have strong, powerful feet like other raptors.

Dihedral: The shape of a bird's flight profile in which its wings are held above the horizontal in a "V."

Disturbed areas: Natural areas that have been changed by human activities.

Endangered: A species that is in danger of extinction if the factor or factors threatening it continues to occur.

Environment: Both living organisms and non-living things that surround a vulture.

Glide: To fly without flapping while losing altitude (*compare with soaring*).

Habitat: The environment occupied by a vulture.

Habitat loss: When vultures can no longer live in their environment because people have removed or destroyed sources of food, water, or shelter.

Perch: To stand on a branch, a tree, a rock, the ground, etc. for short periods.

Population: All individuals of a species within a geographic area.

Raptor: A bird of prey with strong, powerful feet, sharp talons, and a hooked beak. Most raptors are predators. A few, including vultures and condors, are scavengers.

Recycle: The re-use of waste products.

Roosting: Resting, usually at night.

Vulture Glossary continued

Scavenger: An animal that feeds only on dead animals.

Soar: To fly without flapping while maintaining or even increasing altitude.

Social (behavior): When a vulture eats, flies, and roosts with other vultures.

Solitary: When a vulture eats, flies, and roosts alone.

Species: A group of plants or animals that is distinct from other groups of plants or animals.

Thermal: A column of warm, rising air that vultures use to soar. Rising columns of air form when the sun heats the surface of the Earth. Soaring in thermals allows vultures to save energy because they do not need to flap.

Vulture: A small to medium-sized scavenger with a featherless head. Vultures are smaller than condors. Like condors, vultures do not have strong powerful feet like other raptors.

Wildlife: The animals that live in an area.

Books about vultures

- del Hoyo, J., Elliott, and A. Sargatal, J. eds. (1994). Handbook of the birds of the world (Volume 2). New World Vultures to Guinea-fowl. Lynx Edicions.
- Houston, David. (2001). Vultures & Condors. World Library Series.
- Markle, S. (2006). Vultures (Animal Scavengers). Lerner Publications.
- Smith, R. and Ston, L.M. (1997). Vultures (Early Bird Nature Books). Lerner Publications.
- Sayer, A.P. and Jenkins, S. (2007). Vulture View. Henry Holt and Company.
- Wilbur, S. and Jackson, J. (1983). Vulture biology and management. University of California Press, Berkeley and Los Angeles, California.

New World Vulture Checklist

Fill in the form below when you see vultures in the field. Pay attention to how many vultures you saw, where you saw them, and when you saw them (time of day)!

Species	How many	Where and when seen
Turkey Vulture		
Lesser Yellow-headed Vulture		
Greater Yellow-headed Vulture		
Black Vulture		
King Vulture		
California Condor		
Andean Condor		

