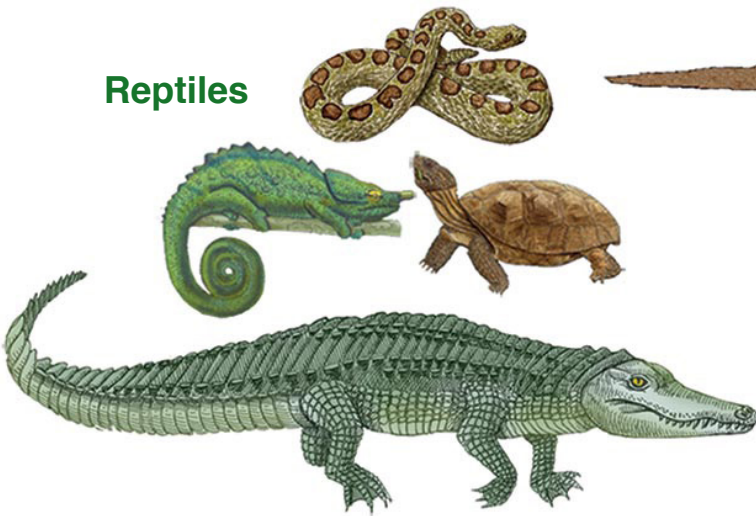


# Classification Bundle: Focus on Vertebrates

Amphibians



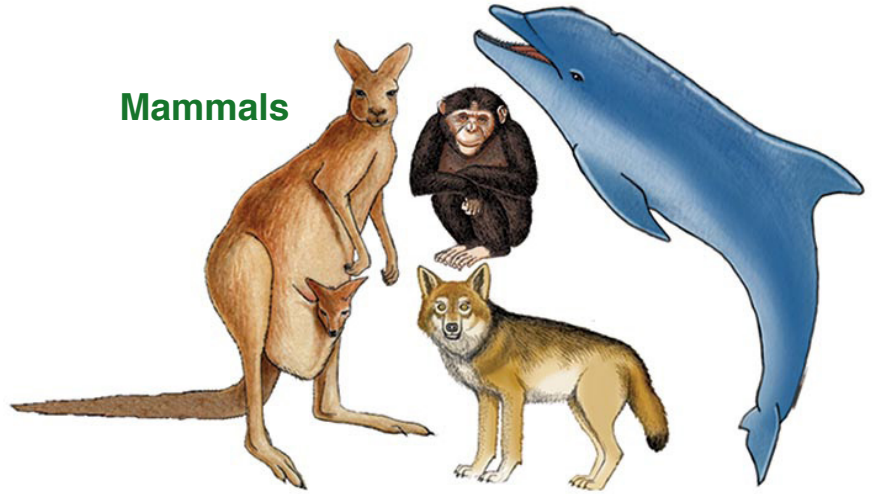
Reptiles



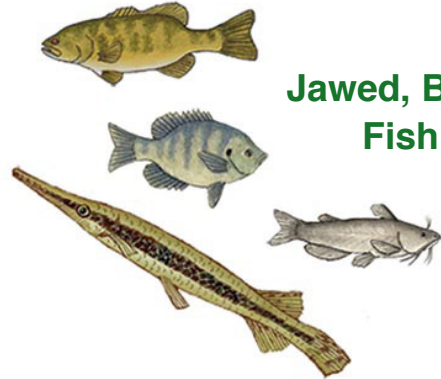
Birds



Mammals



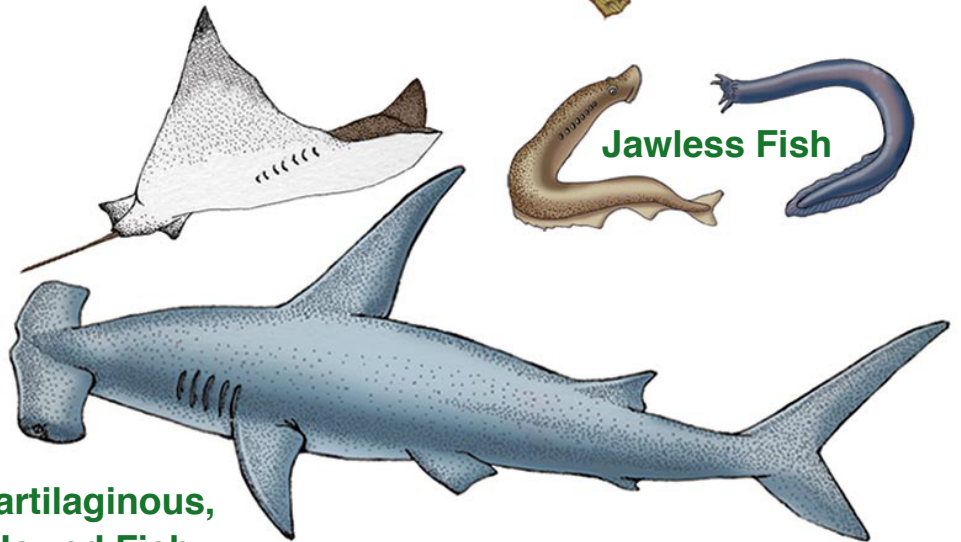
Jawed, Bony Fish



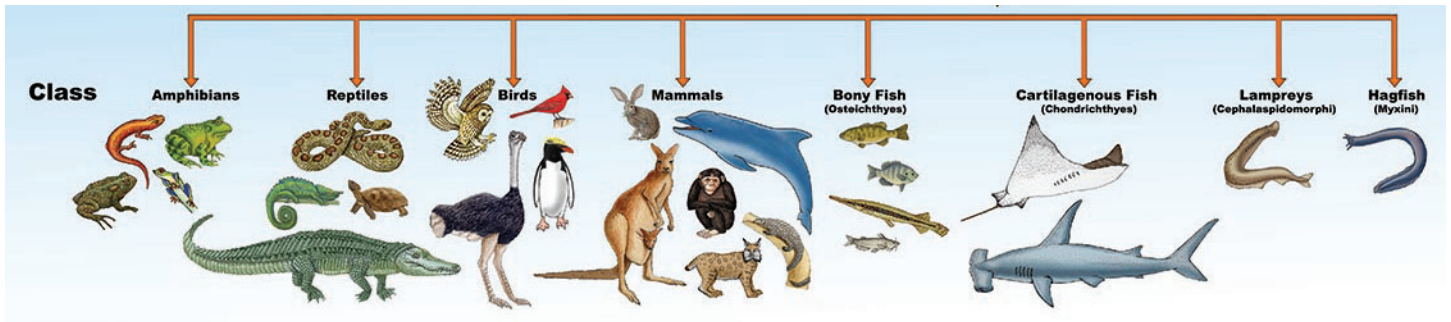
Jawless Fish



Cartilaginous,  
Jawed Fish



# Classification Bundle - Focus on Vertebrates



**This bundle includes 41 resources (64 pages total) including: Reading, Color Diagrams, Activities, and Assessment.** Copyright © 2021 Sheri Amsel • All rights reserved by author. Permission to copy for classroom use only. Electronic distribution limited to classroom use only.

Included in this Classification Bundle:

- Next Generation Science Standard related to Classification
- 1) Classification Of Living Things - Long Poster (3 Pages - Tape Together)
- 2) Animals of the Class Chordata Diagram and Animal Kingdom Classification Mini-poster (2 pages)
- 3) Animal Classes in the Phylum Chordata - Crossword and Answer Key (2 pages)
- 4) Mammals - Reading with Graphic (1 page)
- 5) Mammals - Graphic Diagram (1 page)
- 6) Mammals - Mini-Poster (1 page)
- 7) Mammals Coloring Page (1 page)
- 8) Mammals Short Answer Vocabulary Quiz with Answer Key (2 pages)
- 9) Mammals Word Search Answer Key (2 pages)
- 10) Mammals Multiple Choice with Answer Key (2 pages)
- 11) Birds - Reading with Graphic (1 page)
- 12) Birds - Graphic Diagram (1 page)
- 13) Birds - Mini-Poster (1 page)
- 14) Birds Coloring Page (1 page)
- 15) Birds - Short Answer Vocabulary Quiz with Answer Key (2 pages)
- 16) Birds Matching Traits with Answer Key (2 pages)
- 17) Birds - Word Search Answer Key (2 pages)
- 18) Birds - Multiple Choice with Answer Key (2 pages)
- 19) Amphibians Reading with Graphic (1 page)
- 20) Amphibians - Graphic Diagram (1 page)
- 21) Amphibians - Mini-Poster (1 page)
- 22) Amphibians Coloring Page (1 page)
- 23) Amphibians Short Answer Vocabulary Quiz with Answer Key (2 pages)
- 24) Amphibians Matching Traits with Answer Key (2 pages)
- 25) Amphibians Word Search Answer Key (2 pages)
- 26) Amphibians Multiple Choice with Answer Key (2 pages)
- 27) Reptiles - Reading with Graphic (1 page)
- 28) Reptiles - Graphic Diagram (1 page)
- 29) Reptiles - Mini-Poster (1 page)
- 30) Reptiles Coloring Page (1 page)
- 31) Reptiles - Short Answer Vocabulary Quiz with Answer Key (2 pages)
- 32) Reptiles Matching Traits with Answer Key (2 pages)
- 33) Reptiles - Word Search Answer Key (2 pages)
- 34) Reptiles Multiple Choice with Answer Key (2 pages)
- 35) Sharks, Rays, and Skates - Reading with Graphic (1 page)
- 36) Sharks, Rays, and Skates - Graphic Diagram (1 page)
- 37) Sharks and Rays Word Search Answer Key (2 pages)
- 38) Sharks, Rays, and Skates - Mini-Poster (1 page)
- 39) Fish - Reading with Graphic (1 page)
- 40) Fish - Graphic Diagram (1 page)
- 41) Fish - Mini-Poster (1 page)

## NEXT GENERATION SCIENCE STANDARDS

### Disciplinary Core Ideas

**LS1.A: Structure and Function** - All organisms have external parts. Different animals use their body parts in different ways to see, hear, grasp objects, protect themselves, move from place to place, and seek, find, and take in food, water and air. Plants also have different parts (roots, stems, leaves, flowers, fruits) that help them survive and grow. (1-LS1-1)

### Science and Engineering Practices

#### Constructing Explanations and Designing Solutions

Constructing explanations and designing solutions in K–2 builds on prior experiences and progresses to the use of evidence and ideas in constructing evidence-based accounts of natural phenomena and designing solutions.

- Use materials to design a device that solves a specific problem or a solution to a specific problem.

#### Obtaining, Evaluating, and Communicating Information

Obtaining, evaluating, and communicating information in K–2 builds on prior experiences and uses observations and texts to communicate new information.

- Read grade-appropriate texts and use media to obtain scientific information to determine patterns in the natural world. (1-LS1-2)

### Crosscutting Concepts

**Patterns** - Patterns in the natural and human designed world can be observed, used to describe phenomena, and used as evidence. (1-LS1-2)

**Structure and Function** - The shape and stability of structures of natural and designed objects are related to their function(s). (1-LS1-1)

**Performance Expectations:** Students who demonstrate understanding can:

**1-LS1-1. Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs.\*** *[Clarification Statement: Examples of human problems that can be solved by mimicking plant or animal solutions could include designing clothing or equipment to protect bicyclists by mimicking turtle shells, acorn shells, and animal scales; stabilizing structures by mimicking animal tails and roots on plants; keeping out intruders by mimicking thorns on branches and animal quills; and, detecting intruders by mimicking eyes and ears.]*

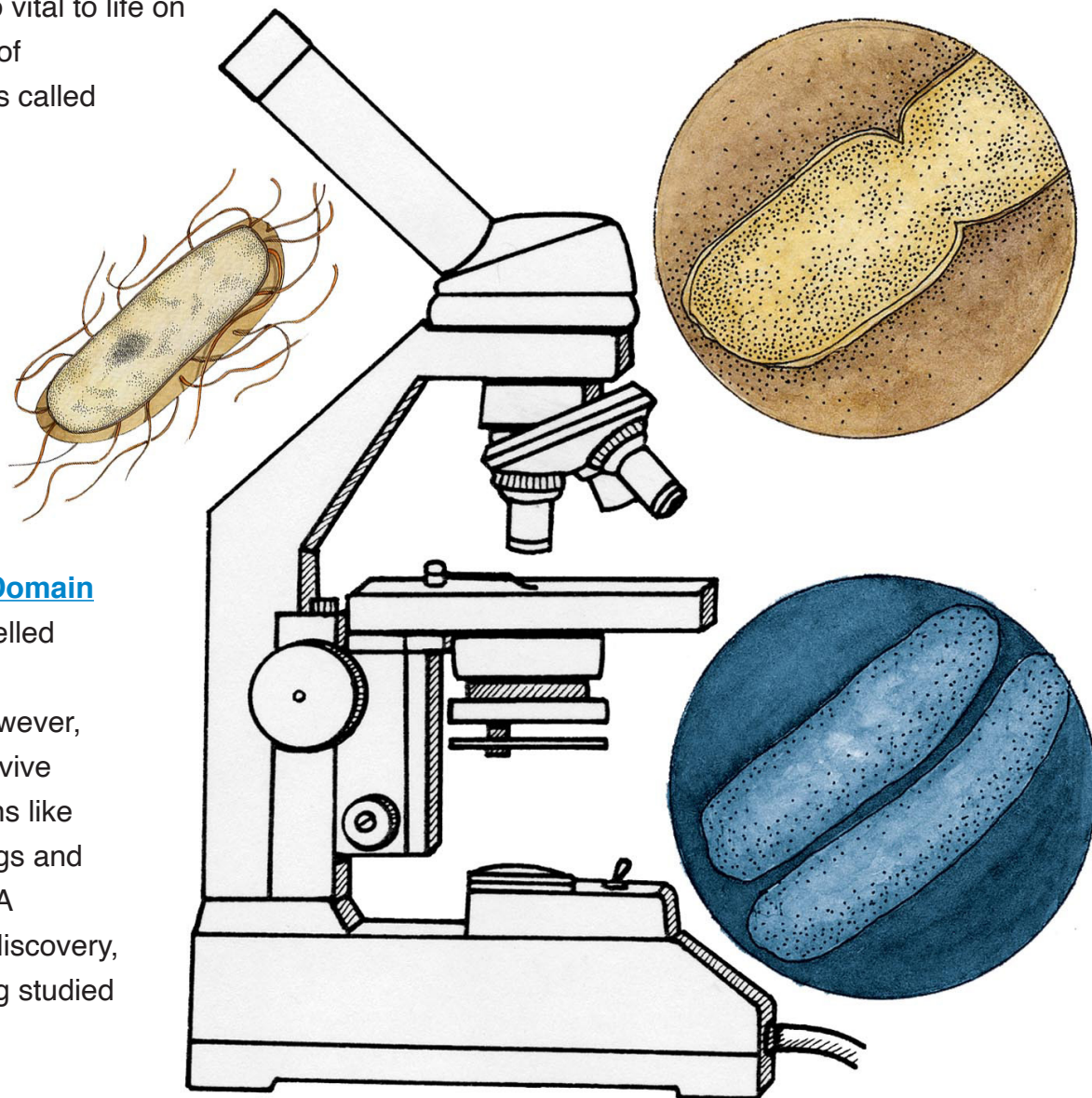


# Classification of Living Things

To help understand living things, scientists break them down into groups by their traits. This is called, **biological classification**. Presently, there are 8 levels of groups: **Domain, Kingdom, Phylum, Class, Order, Family, Genus, Species**.

New discoveries in genetics may cause some regrouping of organisms and their classification over time. The 3 **Domains** are the highest level of classification to date. They include all known living things on Earth. The 3 Domains are: **Archaea, Eubacteria** and **Eukaryota**.

I. The **Eubacteria Domain** is made up of **bacteria** – single-celled living things – also called **microorganisms**. They have no cell nucleus or organelles so are **prokaryotes**. Bacteria is found everywhere on Earth from the soil under our feet to inside our bodies. It can cause many human illness, but is also vital to life on Earth. The study of microorganisms is called **microbiology**.



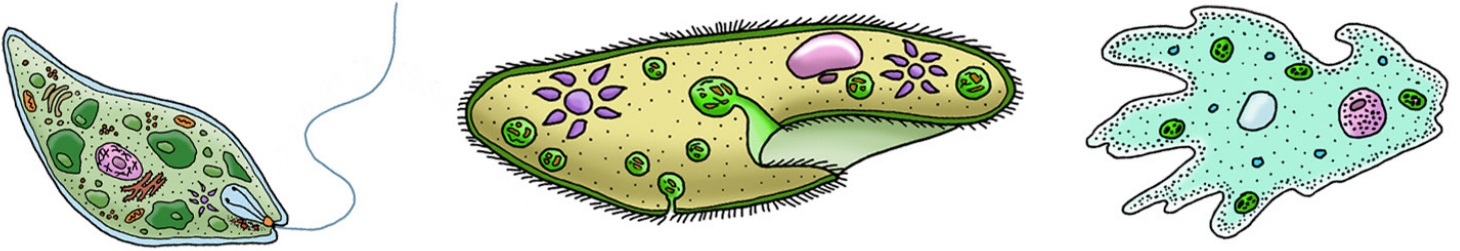
II. The **Archaea Domain** also has single-celled microorganisms (prokaryotes), however, archeons can survive extreme conditions like scalding hotsprings and very salty areas. A relatively recent discovery, they are still being studied and updated.



## Classification of Living Things (continued)

III. The **Eukaryota Domain** has more complex organisms with cells that have a nucleus and organelles. They are **eukaryotes**. This domain is, at present, broken down into 4 **Kingdoms**: **Protista, Fungi, Plantae, Animalia**.

1. The **Protista Kingdom** is a diverse group, including plant-like **algae**, animal-like **protozoans** and fungi-like **slime molds**.



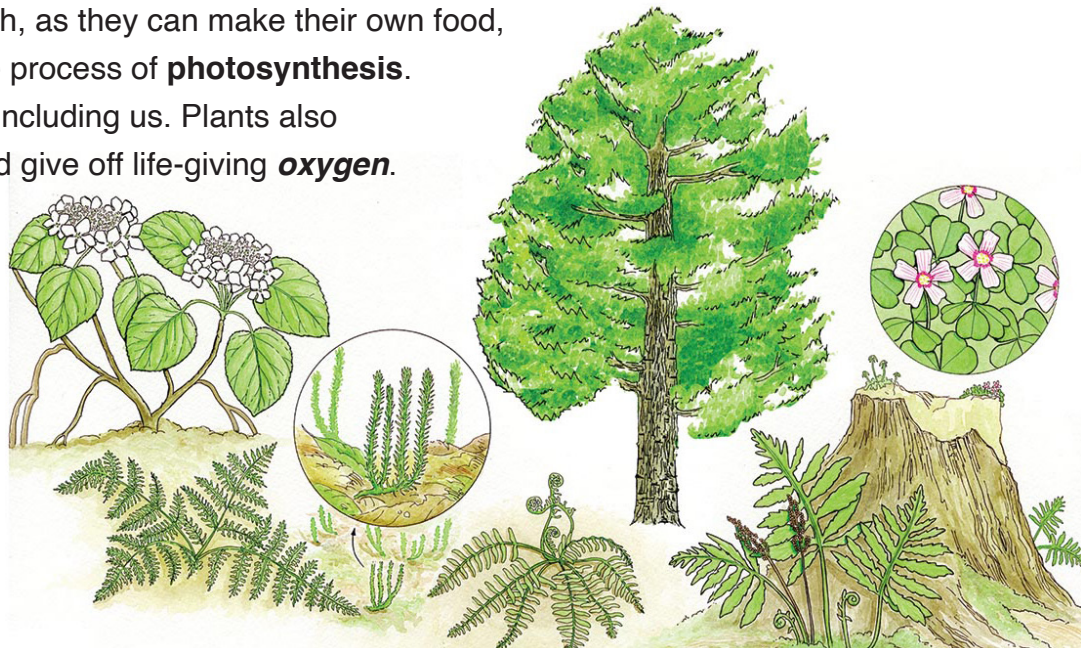
2. The **Fungi Kingdom** has mushrooms, yeasts, and molds. Important **detritivores**, they break down dead organisms and recycle nutrients back into the environment.

They cause problems when they invade an organism as a fungal infection, like *athlete's foot*. Yet, they are extremely important to humans, as the source of penicillin, which kills bacteria, and yeast, which drives fermentation and rising bread.



3. The **Plant Kingdom** includes trees, shrubs, flowers, grasses, ferns, and mosses. This group is essential to all life on Earth, as they can make their own food, using sunlight through the process of **photosynthesis**.

This feeds all animal life, including us. Plants also absorb carbon dioxide and give off life-giving **oxygen**.



# Classification of Living Things (continued)

4. The **Animalia Kingdom** includes 9 groups or **Phyla** (plural of phylum):

**Annelida** - Segmented Worms

**Nematoda** - Round Worms

**Platyhelminthes** - Flat Worms

**Arthropoda** - Insects, Spiders, Scorpions, Lobsters, Crabs, Centipedes, etc.

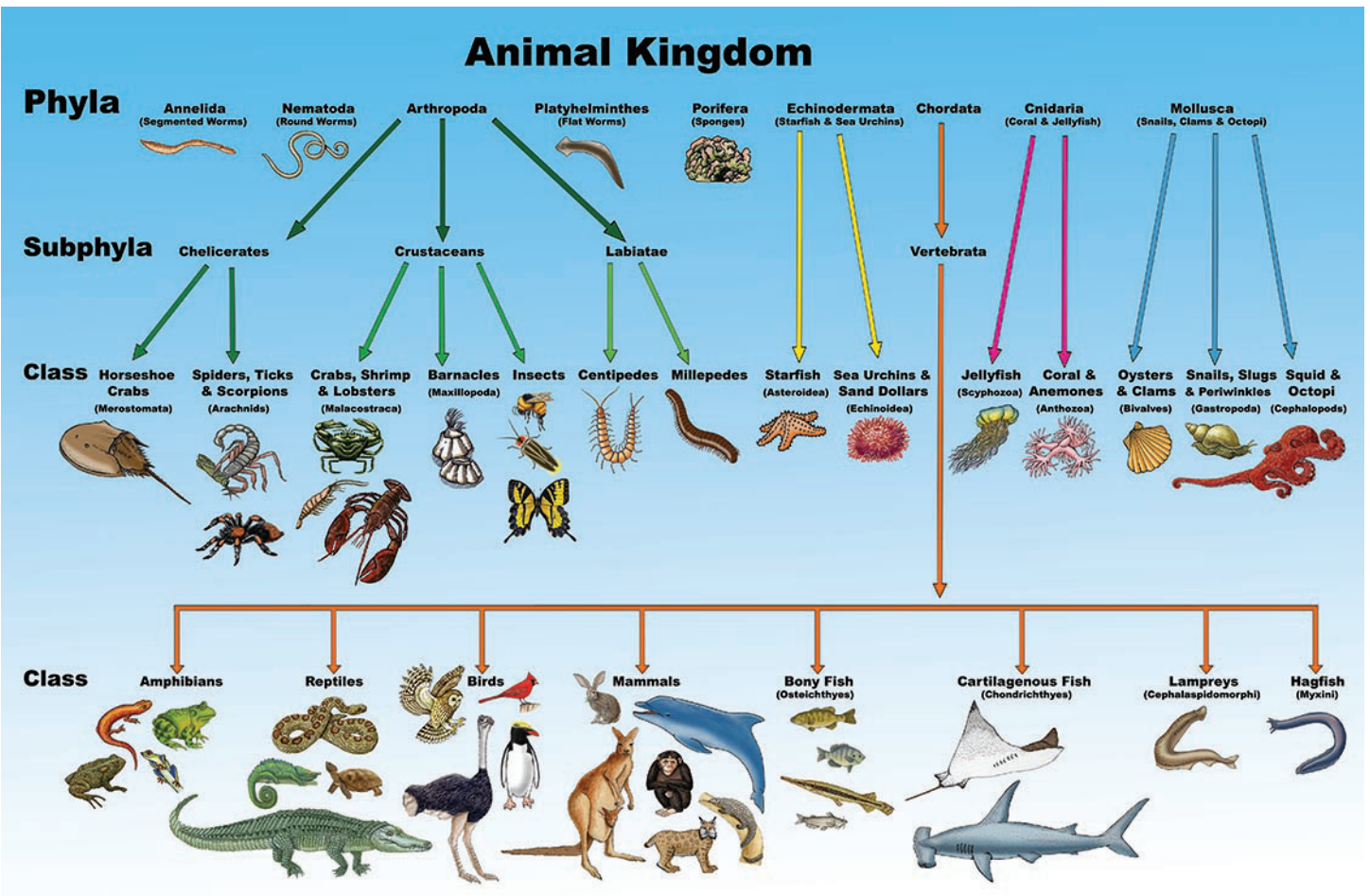
**Porifera** - Sponges

**Cnidaria** - Coral, Jellyfish, Anemones, etc.

**Echinodermata** - Starfish, Sea Urchins, Sand Dollars, etc.

**Mollusca** - Snails, Slugs, Clams, Mussels, Squid, Octopuses, etc.

**Chordata** - Mammals, Birds, Reptiles, Fish, Amphibians, Shark, Rays, etc.





# Animals of the Class Chordata

## Vertebrates (with Backbones)

The **Class Chordata** includes 8 groups or **Phyla** (plural of phylum):

**Agnatha** - Jawless Fish: Lampreys and Hagfish

**Amphibia** - Amphibians: Frogs, Toads, Salamanders, etc.

**Aves** - Birds

**Chondrichthyes** - Cartilaginous Fishes: Sharks, Skates, and Rays

**Mammalia** - Mammals

**Osteichthyes** - Boney Fishes

**Reptilia** - Reptiles: Snakes, Lizards, Turtles, etc.

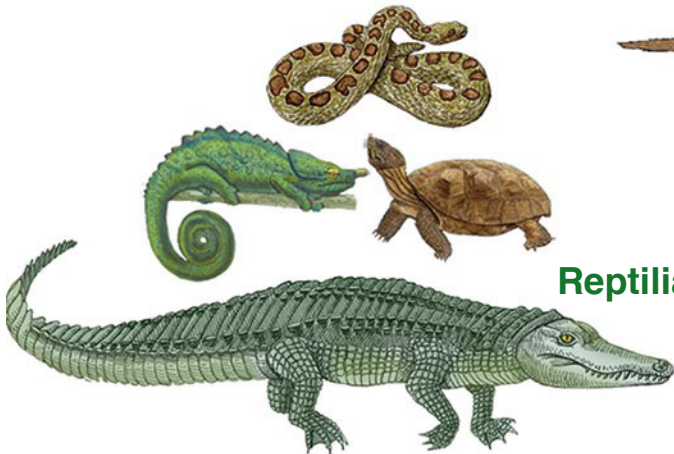
**Amphibia**



**Mammalia**



**Reptilia**



**Osteichthyes**



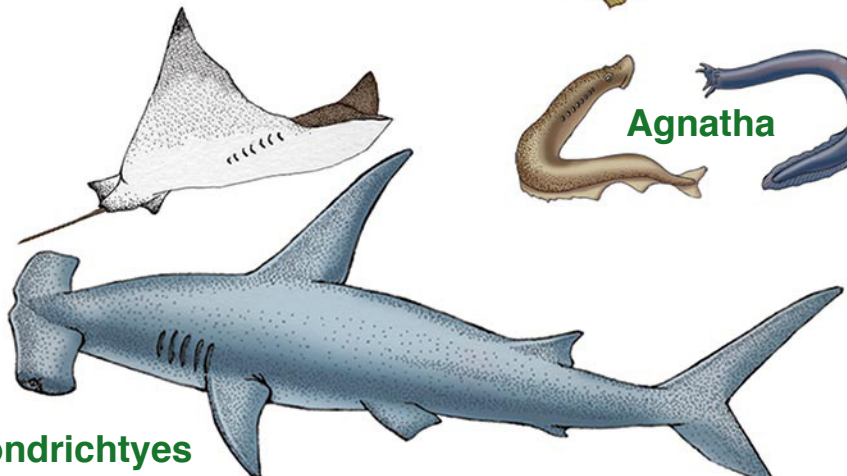
**Aves**



**Agnatha**

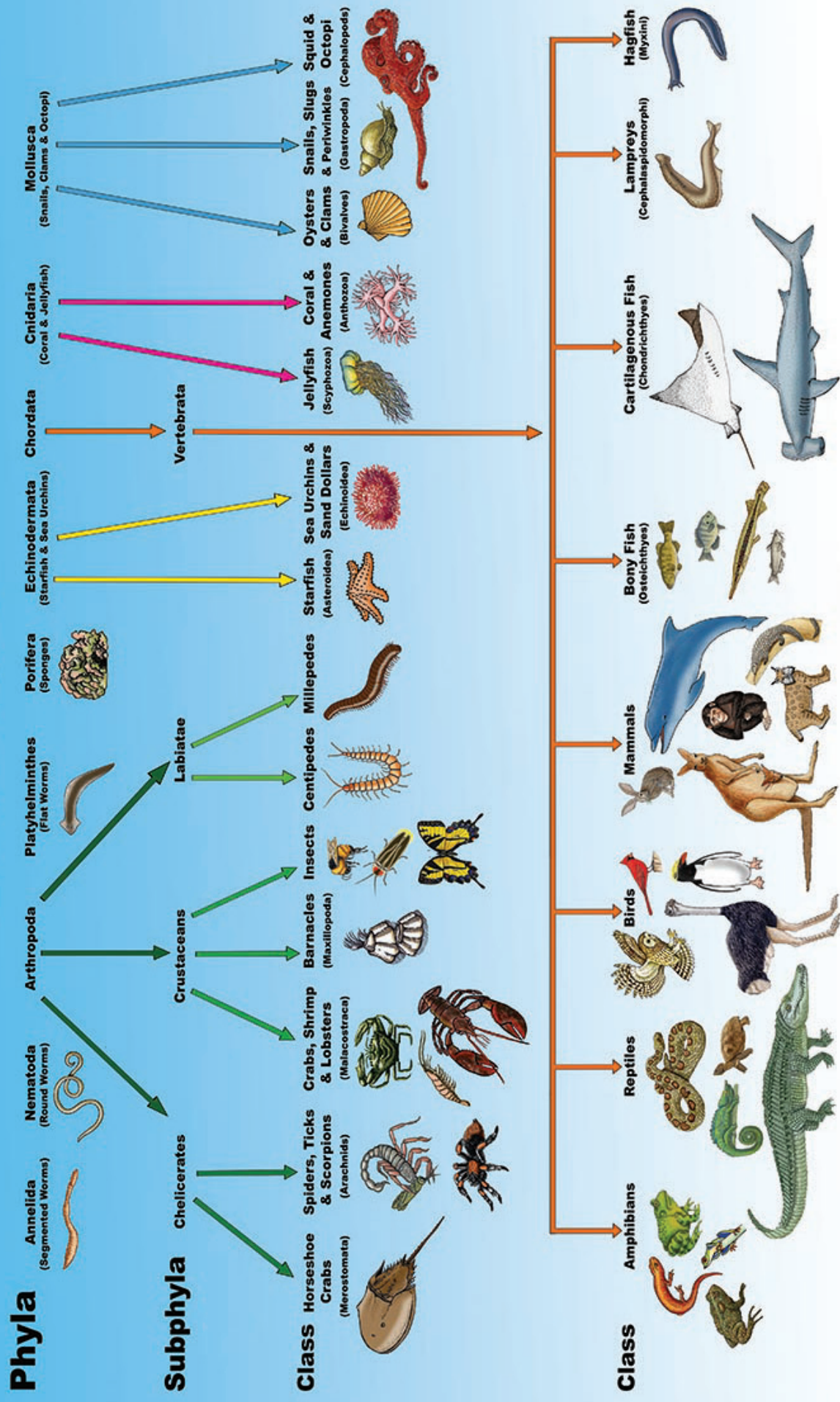


**Chondrichthyes**



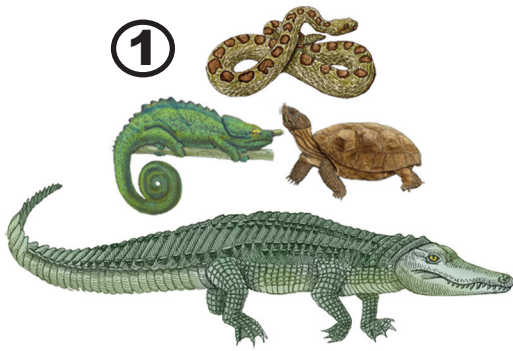


# Animal Kingdom



# Animal Classes in the Phylum Chordata (Vertebrates = with Backbones)

Write in the names of these eight "Classes" of animals with backbones.



①



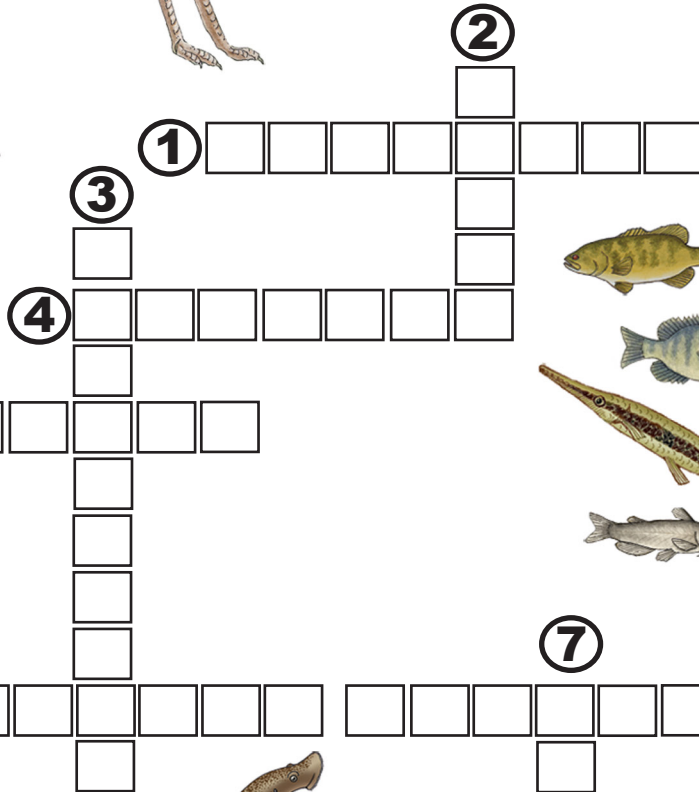
②



③



④



②

①

③

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⑤



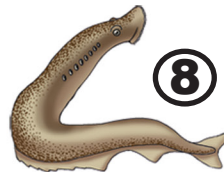
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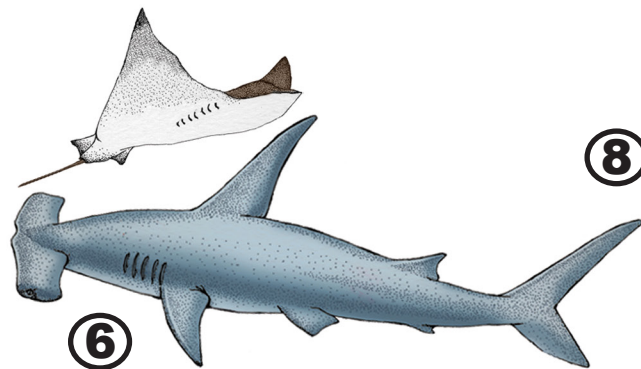


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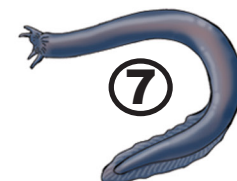


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⑧



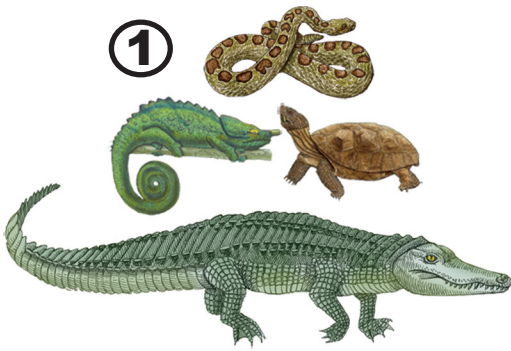
⑥



⑦

# Animal Classes in the Phylum Chordata Key

Write in the names of these eight "Classes" of animals with backbones.



①



②

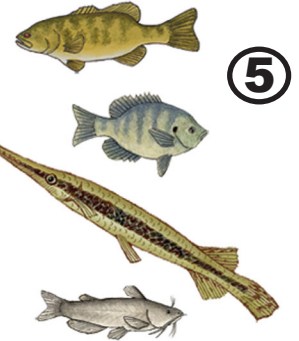


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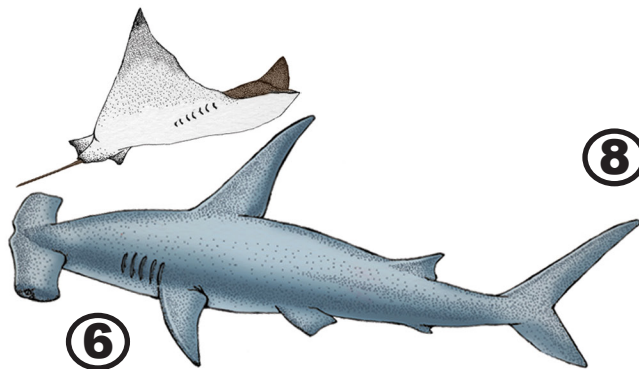
②  
B  
① R E P T I L E S  
R  
D  
③  
A  
④ M A M M A L S  
P  
⑤ B O N Y F I S H E S  
I  
B  
I  
S  
⑥ C A R T I L A G E N O U S F I S H E S  
S



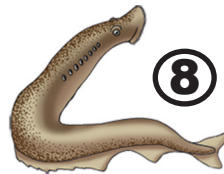
⑤

⑤ B O N Y F I S H E S

⑥ C A R T I L A G E N O U S F I S H E S



⑥



⑧

⑧ L A M P R E Y S

⑦

A  
G  
F  
I  
H



⑦

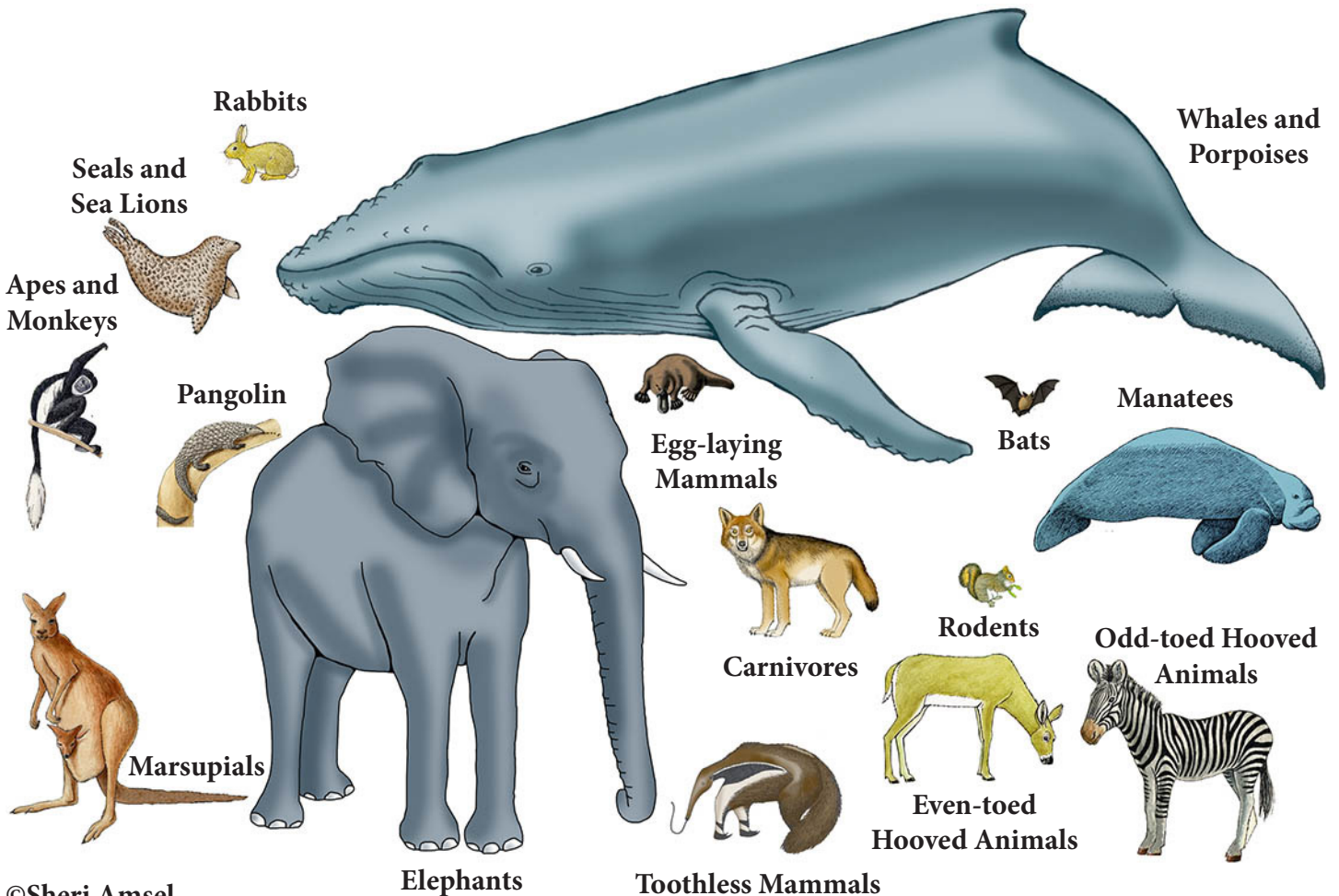


# Mammals

Mammals are one group (Class) of animals. They share some important traits.

- 1) Mammals have **body hair** (except for marine mammals, such as dolphins and whales).
- 2) A mammal's hair is important for **keeping warm** and **protection from the sun**.
- 3) A mammal's **hair can be adapted as a protective tool**, such as the quills on a porcupine or the shield on an armadillo.
- 4) A mammal's **hair can act as camouflage** to blend into the habitat.
- 5) Female mammals **make milk to feed their young**.
- 6) Mammals **protect their young from predators**.
- 7) Mammals provide a **safe home for their newborn young**.
- 8) Mammals are **warm blooded**.
- 9) Mammals have a **backbone**, which helps them move quickly and easily.
- 10) Mammals have **specialized teeth** with some for cutting or grabbing and some for tearing or crushing and some for grinding.
- 11) Mammals have **three middle ear bones that greatly improves hearing**.

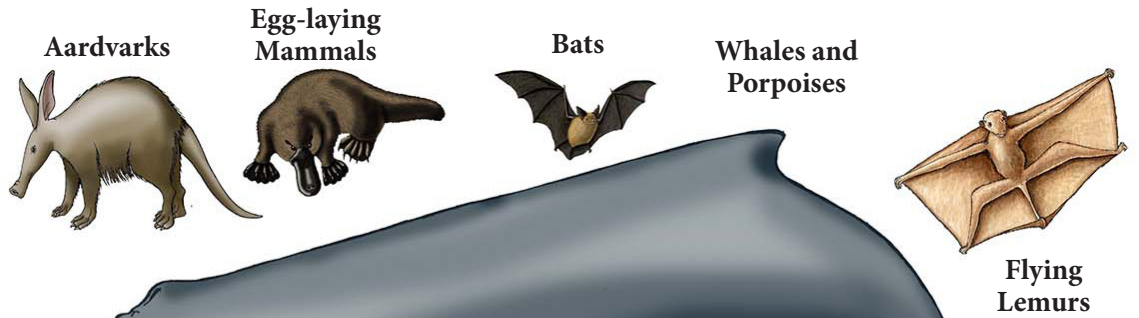
Mammals are broken down into about 26 groups (called **Orders**). Here are a few:



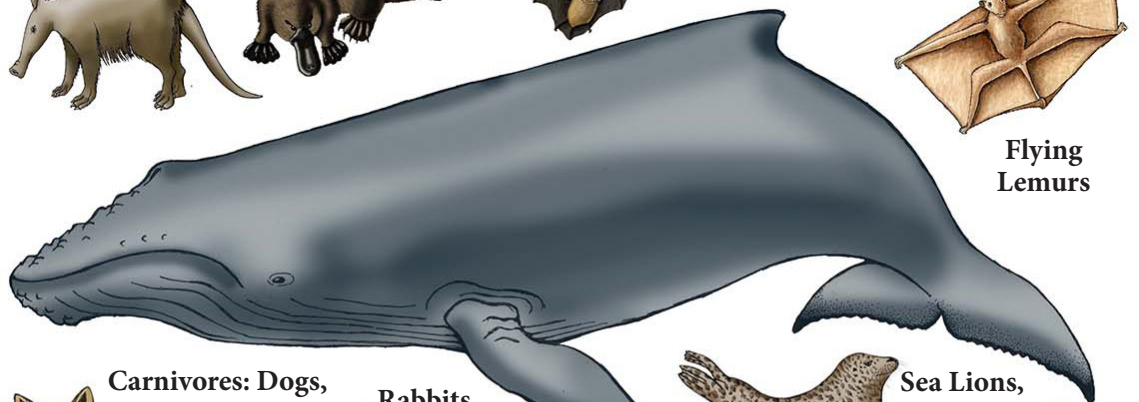
# Mammals

Mammals are in one group (or Class) of animals.  
All mammals share some traits.

They have body hair.



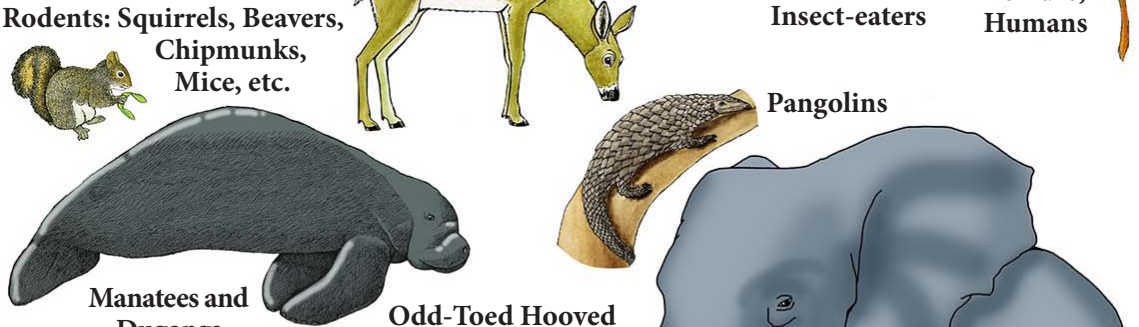
They have milk to feed their young.



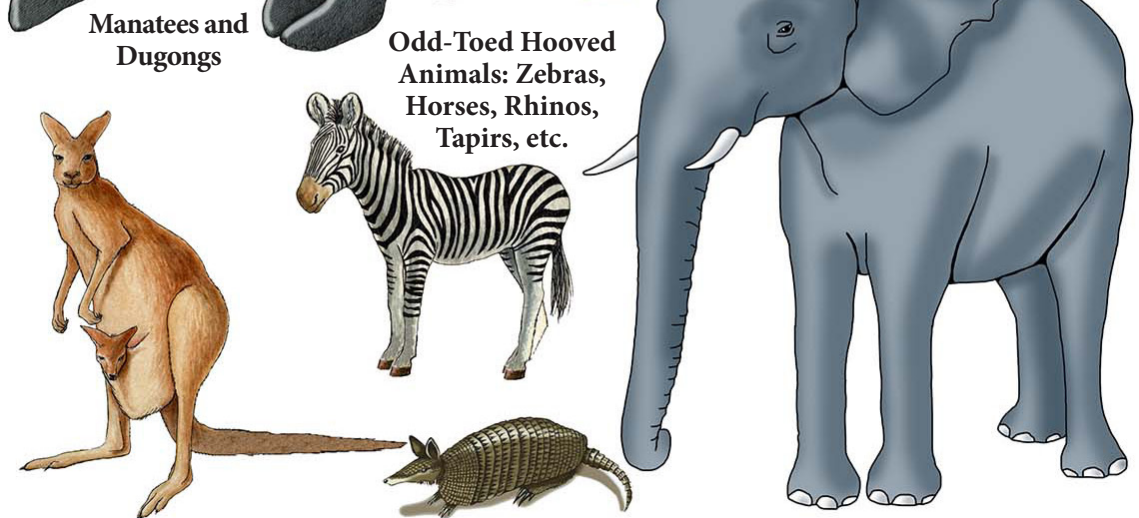
They are warm blooded.



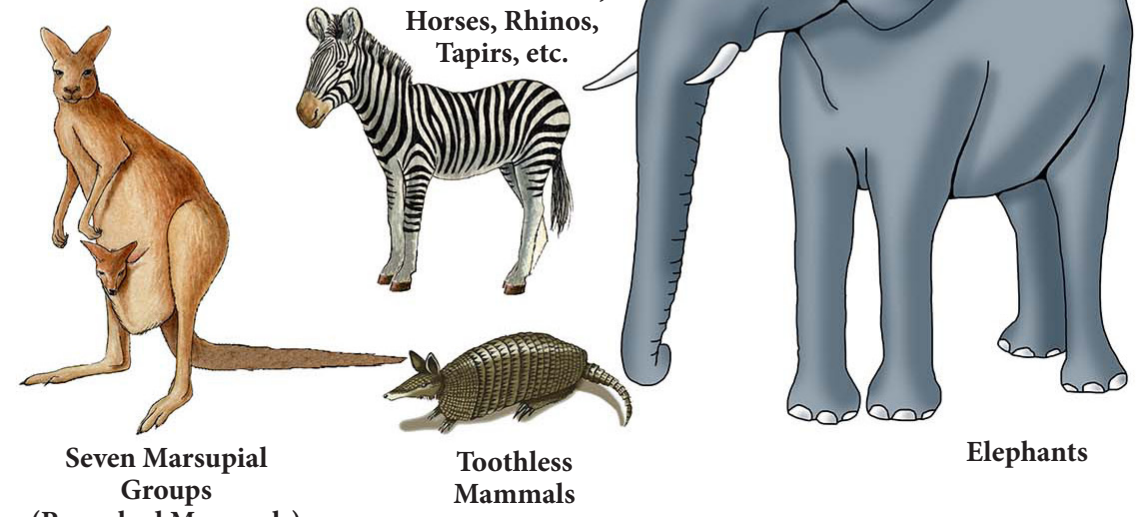
They protect their young.



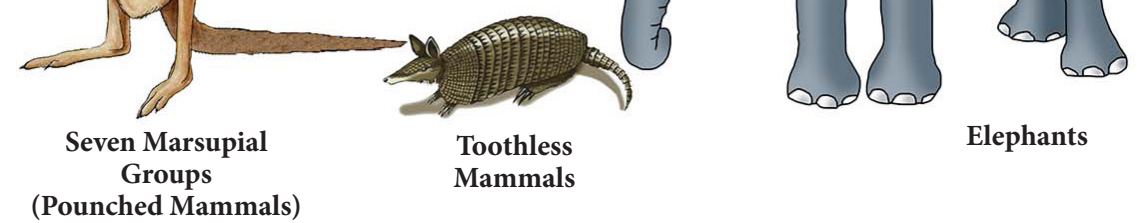
They have a backbone.



They have specialized teeth.

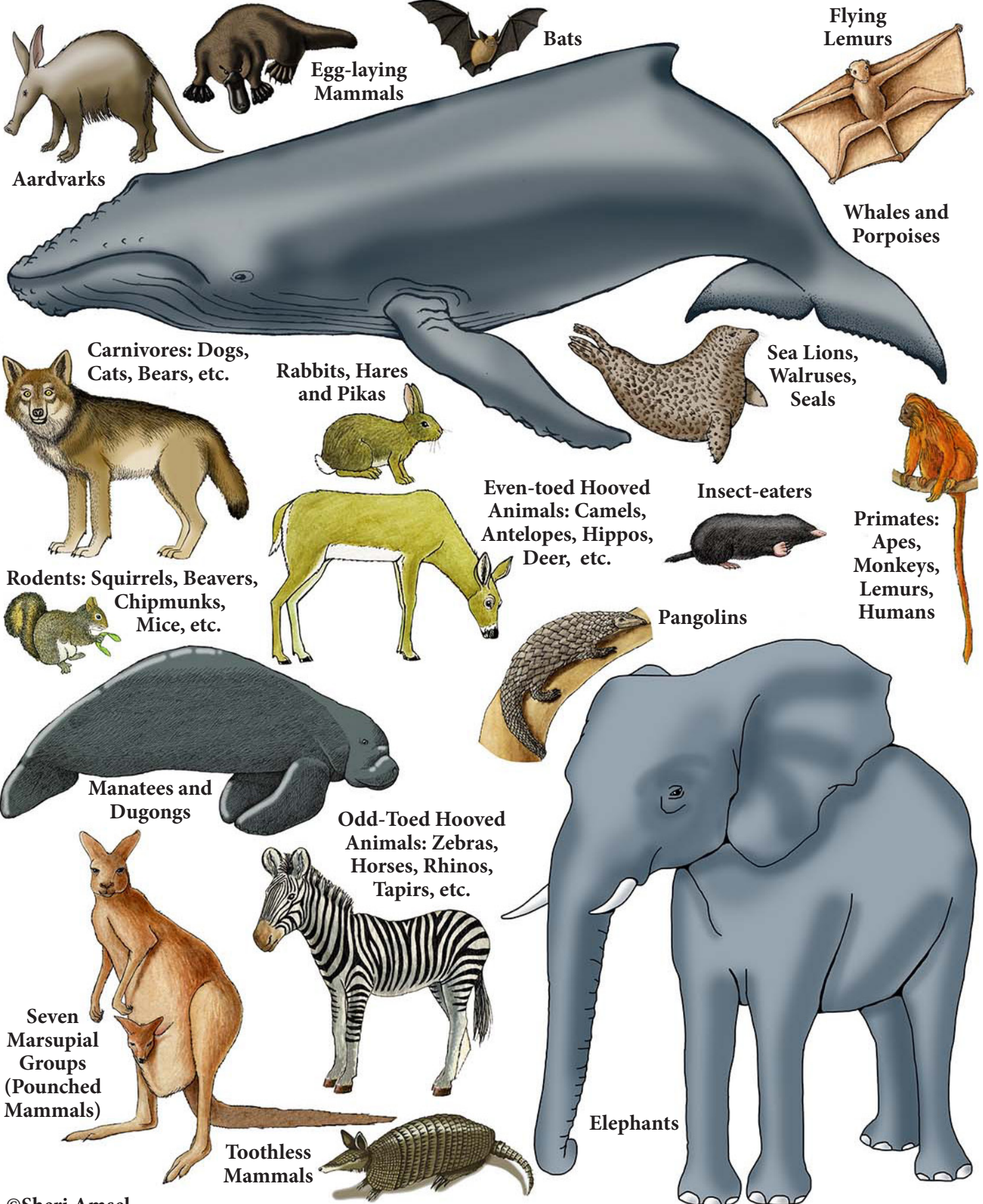


They have 3 middle ear bones.



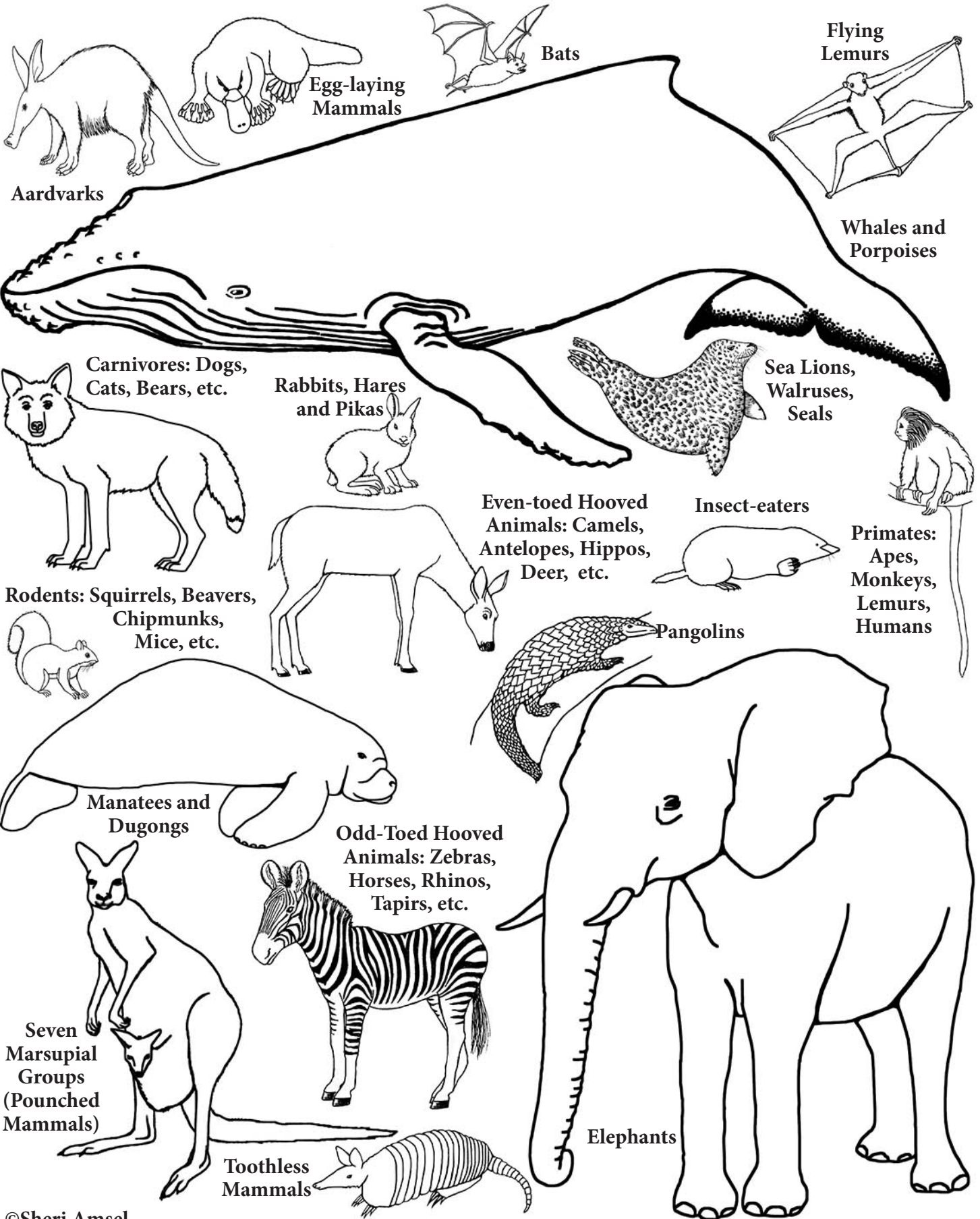


# Mammal Groups (Orders)





# Mammal Groups (Orders) Coloring



# Mammals Short Answer Quiz

- 1) Mammals have \_\_\_\_\_ (except for marine mammals, such as dolphins and whales).
- 2) A mammal's hair is important for keeping \_\_\_\_\_ in cold climates.
- 3) A mammal's hair can give protection from the \_\_\_\_\_.
- 4) A mammal's hair can be adapted as a protective tool, such as the \_\_\_\_\_ on a porcupine or the shield on an armadillo.
- 5) A mammal's hair can also act as \_\_\_\_\_ to help them blend into the habitat.
- 6) Female mammals make \_\_\_\_\_ to feed their young.
- 7) Mammals \_\_\_\_\_ their young from predators.
- 8) They make a safe \_\_\_\_\_ for their newborn young.
- 9) Mammals may teach their growing young how to find \_\_\_\_\_.
- 10) Mammals are \_\_\_\_\_ blooded.
- 11) Mammals also have a \_\_\_\_\_ which helps them move quickly and easily.
- 12) Mammals have specialized \_\_\_\_\_ with some for cutting, some for grabbing and tearing and some for crushing and grinding.
- 13) Mammals have three middle \_\_\_\_\_ bones that greatly improves hearing.

## Vocabulary Bank:

backbone	home	teeth
body hair	milk	warm
camouflage	protect	warm
ear	quills	
food	sun	

# Mammals Short Answer Quiz KEY

- 1) Mammals have **BODY HAIR** (except for marine mammals, such as dolphins and whales).
- 2) A mammal's hair is important for keeping **WARM** in cold climates.
- 3) A mammal's hair can give protection from the **SUN**.
- 4) A mammal's hair can be adapted as a protective tool, such as the **QUILLS** on a porcupine or the shield on an armadillo.
- 5) A mammal's hair can also act as **CAMOUFLAGE** to help them blend into the habitat.
- 6) Female mammals make **MILK** to feed their young.
- 7) Mammals **PROTECT** their young from predators.
- 8) They make a safe **HOME** for their newborn young.
- 9) Mammals may teach their growing young how to find **FOOD**.
- 10) Mammals are **WARM** blooded.
- 11) Mammals also have a **BACKBONE** which helps them move quickly and easily.
- 12) Mammals have specialized **TEETH** with some for cutting, some for grabbing and tearing and some for crushing and grinding.
- 13) Mammals have three middle **EAR** bones that greatly improves hearing.

## Vocabulary Bank:

backbone	home	teeth
body hair	milk	warm
camouflage	protect	warm
ear	quills	
food	sun	



# Mammal Word Search

U O S E Z Y R L E R R I U Q S  
T I G E R O A L W W M S J Z G  
E P B P W U E M H N P B J K X  
F R S C V P B T A X O Q N E B  
A M S B H U I V L S E I X C M  
T Z O A A B O C E P H K L U Z  
B E N U B A D N A P W K E L U  
P T F A S E J V W O L F J O J  
Q T R F B E W H Q Z O Y T Y G  
O A V Q A I F G Y R S S V R X  
L Q D F D R A Q E T P R E Y F  
C S K F C W I U K A D E P H N  
W X X J Q Z V G N M D Y B J G  
U J F M C V Y A O I W C G A Y  
G G B U Z N A V M K B M N L T

BAT

MONKEY

WHALE

BEAR

MOUSE

WOLF

DEER

PANDA

YOU

ELEPHANT

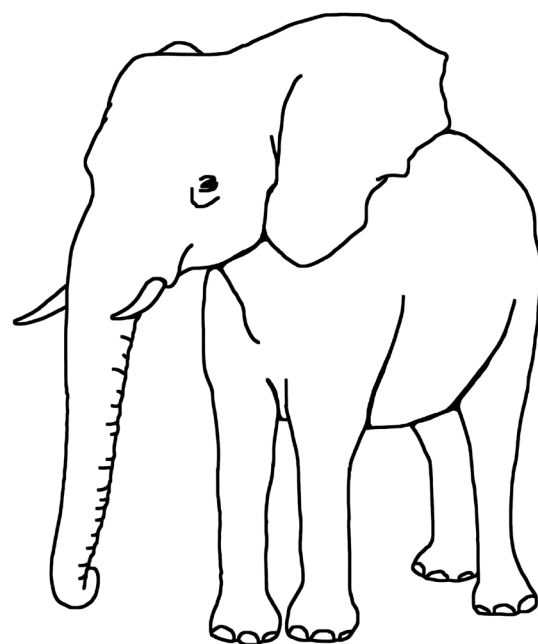
RABBIT

GIRAFFE

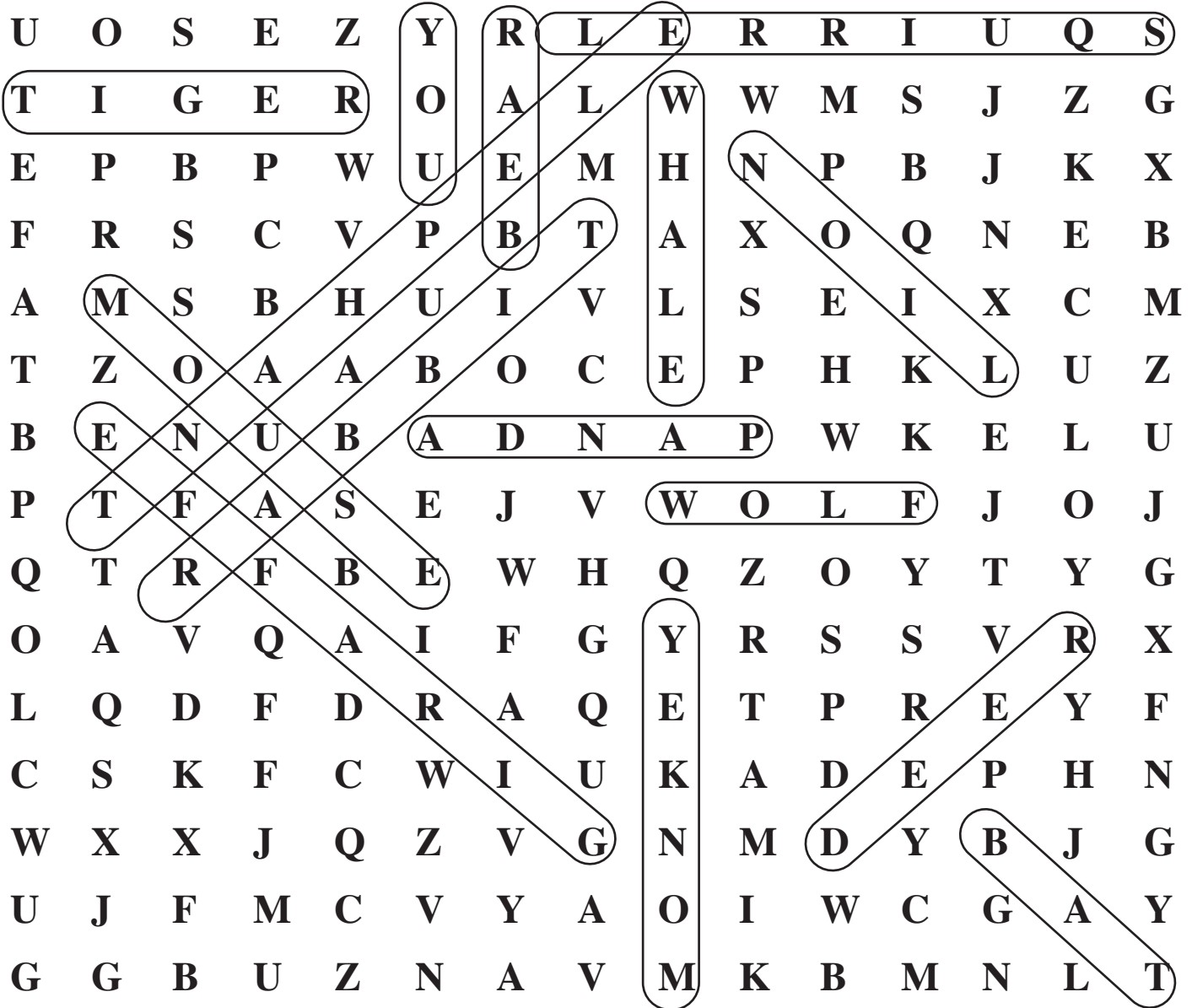
SQUIRREL

LION

TIGER



# Mammal Word Search KEY



BAT

MONKEY

WHALE

BEAR

MOUSE

WOLF

DEER

PANDA

YOU

ELEPHANT

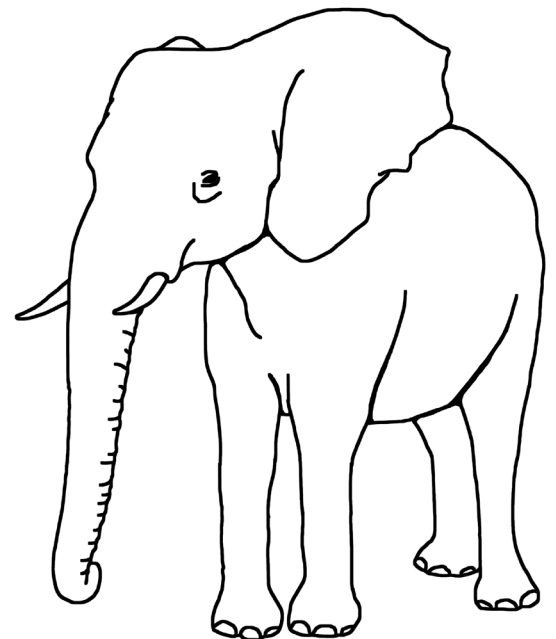
RABBIT

GIRAFFE

SQUIRREL

LION

TIGER



# Mammals – Multiple Choice Test

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Name: \_\_\_\_\_ Class: \_\_\_\_\_

**1** Which of the following animals is a mammal?

- A** duck
- B** rabbit
- C** frog
- D** fish
- E** shark

**2** Which of the following mammals is not covered with fur/hair?

- A** whale
- B** horse
- C** mouse
- D** monkey
- E** squirrel

**3** Female mammals feed their newborn young:

- A** grass.
- B** insects.
- C** meat.
- D** milk.
- E** all of the above.

**4** Mammals:

- A** protect their young.
- B** provide a safe home for young.
- C** feed their young.
- D** all of the above.

**5** Why do mammals have fur/hair?

- A** To stay warm.
- B** To protect them from sunburn.
- C** To protect them from scratches.
- D** To help them blend in.
- E** All of the above.

**6** Which of the following mammals has hairs adapted for defending against predators?

- A** horse
- B** fur seal
- C** mouse
- D** porcupine

**7** Mammals have all the following traits, EXCEPT:

- A** warm blooded.
- B** backbone.
- C** hair or fur.
- D** scales.

**8** Which of the following is not a mammal?

- A** person
- B** ape
- C** elephant
- D** duck
- E** armadillo



# Mammals – Multiple Choice Test KEY

©Sheri Amsel • www.exploringnature.org

Name: \_\_\_\_\_ Class: \_\_\_\_\_

1 Which of the following animals is a mammal?

- A duck
- B rabbit
- C frog
- D fish
- E shark

2 Which of the following mammals is not covered with fur/hair?

- A whale
- B horse
- C mouse
- D monkey
- E squirrel

3 Female mammals feed their newborn young:

- A grass.
- B insects.
- C meat.
- D milk.
- E all of the above.

4 Mammals:

- A protect their young.
- B provide a safe home for young.
- C feed their young.
- D all of the above.

5 Why do mammals have fur/hair?

- A To stay warm.
- B To protect them from sunburn.
- C To protect them from scratches.
- D To help them blend in.
- E All of the above.

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- B fur seal
- C mouse
- D porcupine

7 Mammals have all the following traits, EXCEPT:

- A warm blooded.
- B backbone.
- C hair or fur.
- D scales.

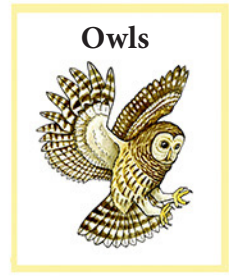
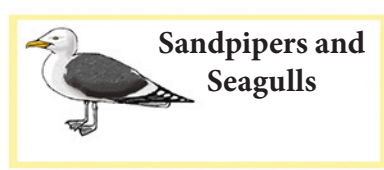
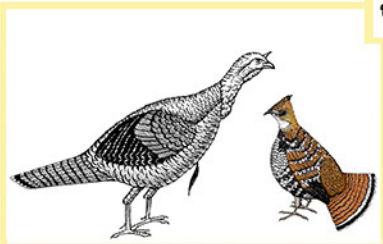
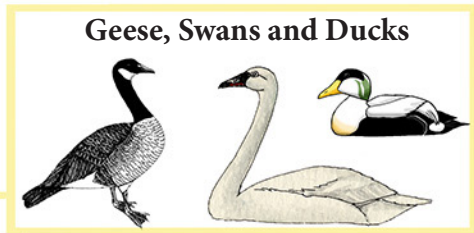
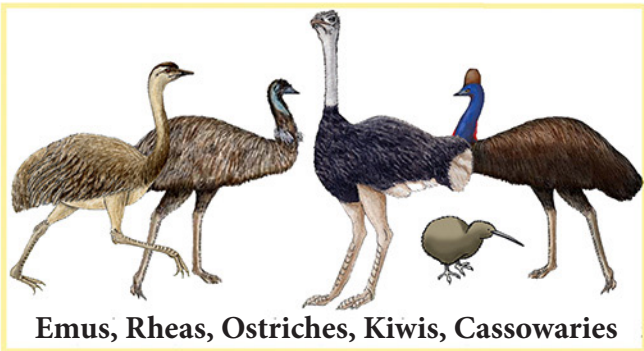
8 Which of the following is not a mammal?

- A person
- B ape
- C elephant
- D duck
- E armadillo

# Birds

Birds are in one group or **Class** of animals. They share some common traits.

1. Birds are the only animal group that has **feathers** as their body covering.
2. Birds have a **beak** or **bill** instead of teeth. Instead of biting and chewing their food, they tear off pieces with the beak or **talons** (clawed feet) and swallow it whole. The food is stored in the **crop** to slow digestion, then passed into the stomach to mix with digestive juices. From there it passes into a muscular **gizzard** that grinds it down for digestion.
3. Birds have **wings** instead of front feet or arms. Many have large, well developed **chest muscles** for **flight**. They also have **hollow bones** to make their skeleton lighter.
4. Birds are **warm blooded**.
5. Birds do not have live young, like mammals, but **lay eggs**.
6. Most birds **build some kind of nest** and **take care of their young**, feeding them until they are old enough to find their own food.
7. Many birds **fly south** to warmer climates in winter (**migrate**) and return north in summer to feed and nest.
8. Most birds can **fly**, so have **large chest muscles** for wing power and **hollow bones** to make them lighter.
9. Some birds are **flightless**, such as the ostrich, emu, kiwi, or penguin. They have other ways to protect themselves, than flight. Some run fast, or swim, or have a powerful kick.
10. There are many **Orders** of birds, including these groups below:



# Birds

There are many groups (**Classes**) of animals.

Birds are in one group. All birds share some traits.

They lay  
eggs.

They take  
care of their  
young.

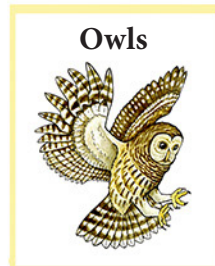
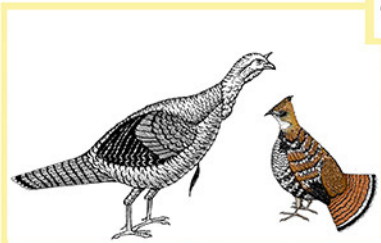
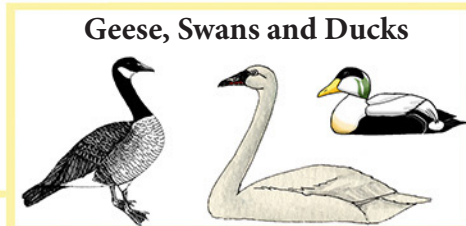
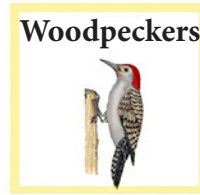
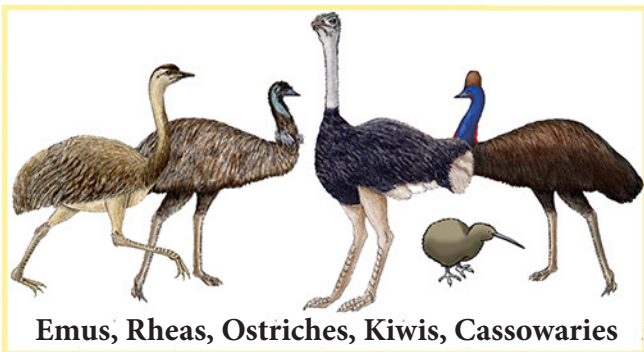
They are warm  
blooded.

They have beaks  
instead of teeth.

They have  
feathers.

They have  
wings.

There are many groups of birds (called **Orders**), including these groups below:





# Birds of the World

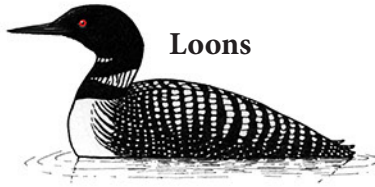
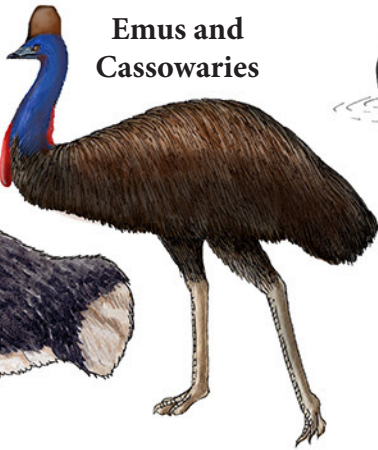
Common Names of Different Bird Orders

Hummingbirds



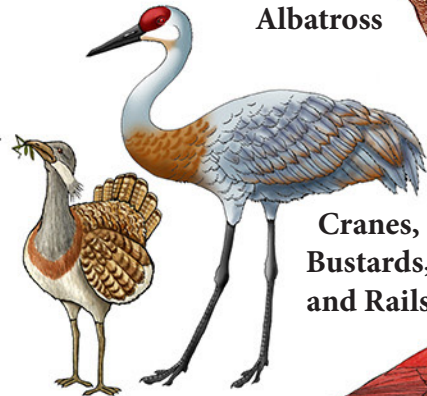
Ostriches

Emus and Cassowaries



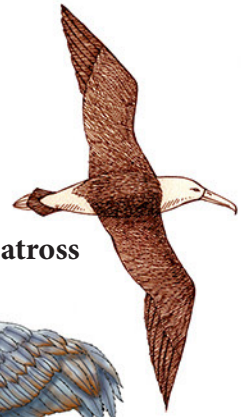
Loons

Woodpeckers



Albatross

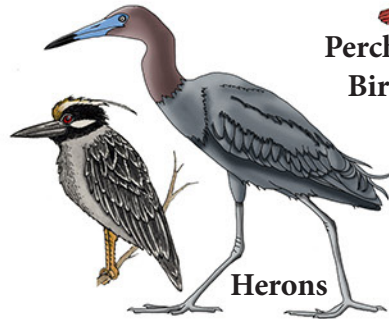
Cranes, Bustards, and Rails



Perching Birds



Nightjars



Hérons

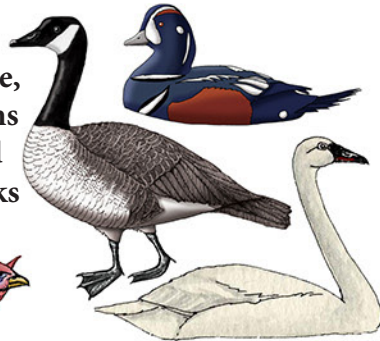
Sandgrouse



Doves and Pigeons



Geese, Swans and Ducks



Owls



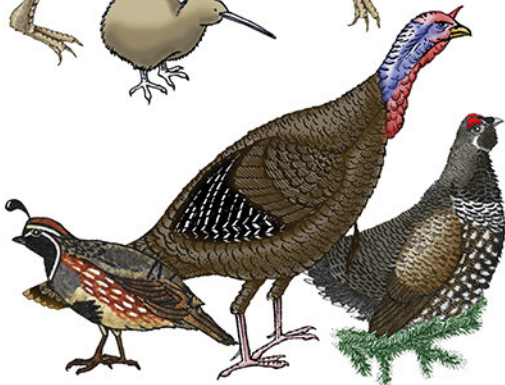
Hawks, Eagles and Vultures



Sandpipers and Seagulls



Grouse, Quails, Pheasants, Turkeys



Pelicans



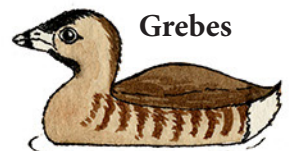
Kingfishers



Macaws and Parrots



Grebes



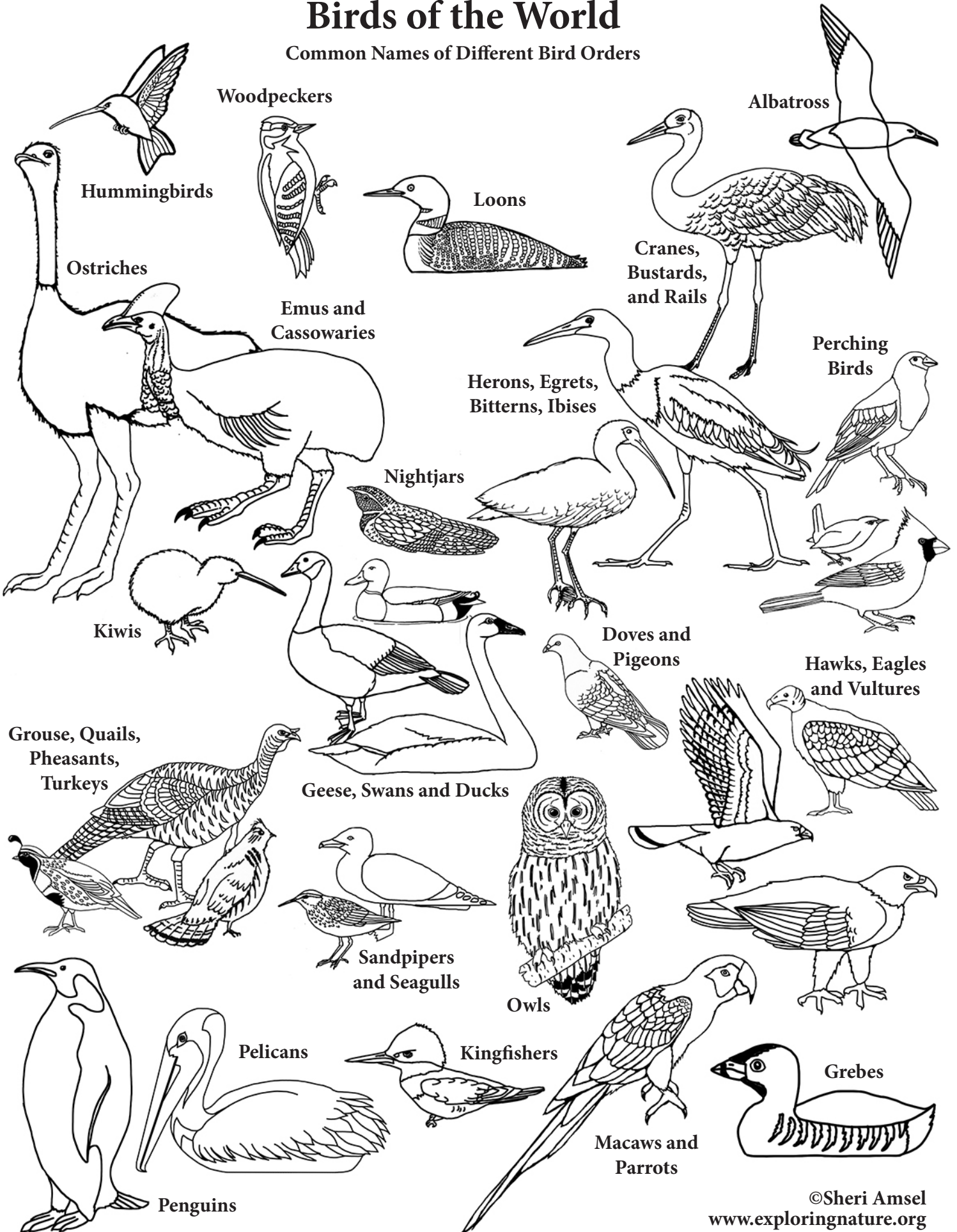
Penguins





# Birds of the World

Common Names of Different Bird Orders



# Birds Short Answer Quiz

- 1) Birds have \_\_\_\_\_ instead of hair or fur.
- 2) Birds have a \_\_\_\_\_ instead of teeth.
- 3) Instead of biting their food, they tear off pieces with the beak or \_\_\_\_\_ (clawed feet) and swallow it whole.
- 4) The food is stored in the \_\_\_\_\_ to slow digestion, then passed into the stomach to mix with digestive juices.
- 5) From the stomach, food passes into a muscular \_\_\_\_\_ that grinds it down for digestion.
- 6) Birds have \_\_\_\_\_ instead of front feet or arms.
- 7) Many have large, well developed chest muscles for \_\_\_\_\_.
- 8) They also have \_\_\_\_\_ bones to make their skeleton lighter.
- 9) Birds are \_\_\_\_\_ blooded.
- 10) Birds do not have live young, like mammals, but \_\_\_\_\_.
- 11) Most birds build some kind of \_\_\_\_\_.
- 12) Most birds take care of their \_\_\_\_\_.
- 13) Many birds fly south to warmer climates in winter. They \_\_\_\_\_ south and return north in summer to feed and nest.
- 14) Some birds are \_\_\_\_\_, such as the ostrich or penguin.
- 15) Birds that cannot fly may protect themselves by \_\_\_\_\_, swimming or kicking.

## Vocabulary Bank:

beak or bill	gizzard	running
crop	hollow	talons
feathers	lay eggs	warm
flight	migrate	wings
flightless	nest	young



# Birds Short Answer Quiz KEY

- 1) Birds have **FEATHERS** instead of hair or fur.
- 2) Birds have a **BEAK OR BILL** instead of teeth.
- 3) Instead of biting their food, they tear off pieces with the beak or **TALONS** (clawed feet) and swallow it whole.
- 4) The food is stored in the **CROP** to slow digestion, then passed into the stomach to mix with digestive juices.
- 5) From the stomach, food passes into a muscular **GIZZARD** that grinds it down for digestion.
- 6) Birds have **WINGS** instead of front feet or arms.
- 7) Many have large, well developed chest muscles for **FLIGHT**.
- 8) They also have **HOLLOW** bones to make their skeleton lighter.
- 9) Birds are **WARM** blooded.
- 10) Birds do not have live young, like mammals, but **LAY EGGS**.
- 11) Most birds build some kind of **NEST**.
- 12) Most birds take care of their **YOUNG**.
- 13) Many birds fly south to warmer climates in winter. They **MIGRATE** south and return north in summer to feed and nest.
- 14) Some birds are **FLIGHTLESS**, such as the ostrich or penguin.
- 15) Birds that cannot fly may protect themselves by **RUNNING**, swimming or kicking.

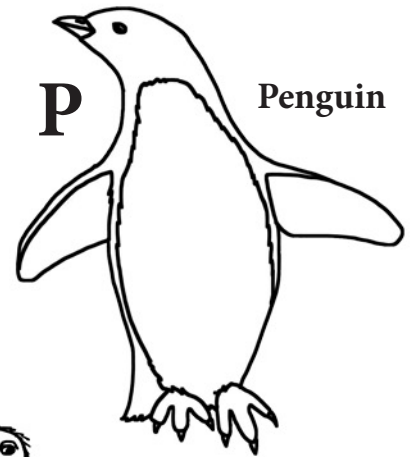
## Vocabulary Bank:

beak or bill	gizzard	running
crop	hollow	talons
feathers	lay eggs	warm
flight	migrate	wings
flightless	nest	young

# Birds Matching Traits

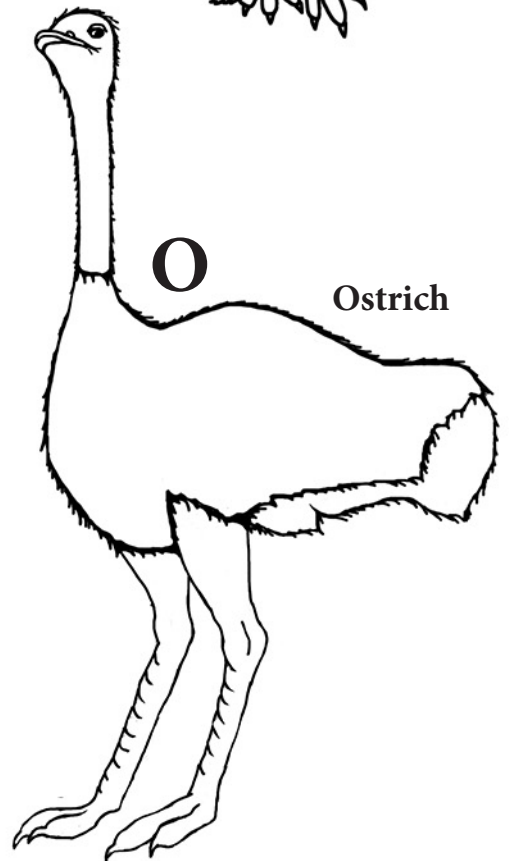
Add the letters **P**, **O**, **OW** for **Penguin**, **Ostrich** or **Owl** to each trait that they have.

- Has feathers \_\_\_\_\_
- Has a beak or bill \_\_\_\_\_
- Uses talons to tear food \_\_\_\_\_
- Has wings \_\_\_\_\_
- Can fly \_\_\_\_\_
- Is flightless \_\_\_\_\_
- Can run fast \_\_\_\_\_
- Can swim in the ocean \_\_\_\_\_
- Is warm blooded \_\_\_\_\_
- Takes care of young \_\_\_\_\_



**P**

Penguin



**O**

Ostrich



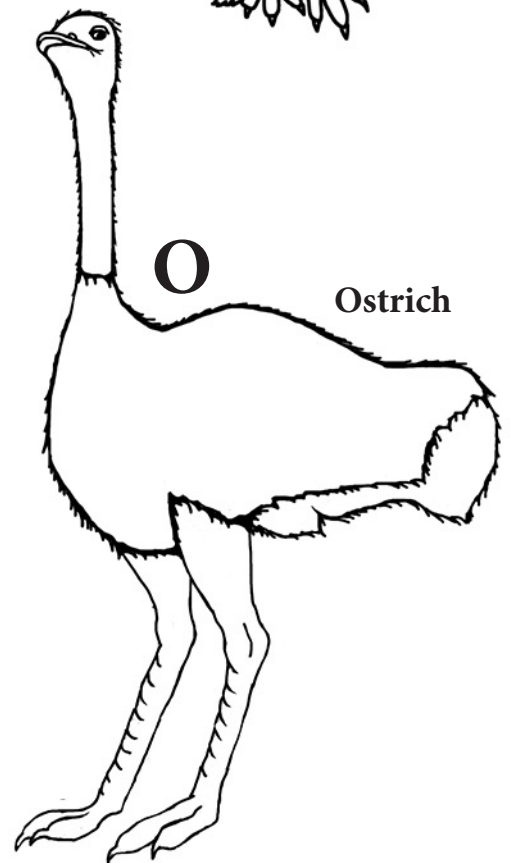
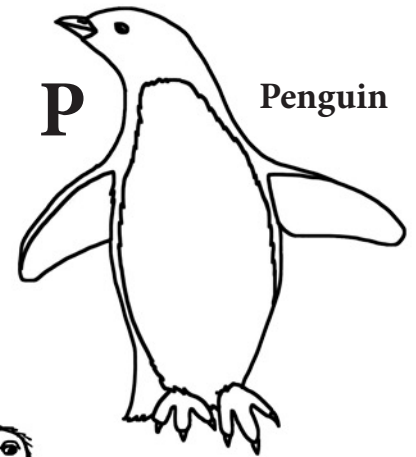
**Ow**

Owl

# Birds Matching Traits KEY

Add the letters **P**, **O**, **OW** for **Penguin**, **Ostrich** or **Owl** to each trait that they have.

- Has feathers **P, O, OW**
- Has a beak or bill **P, O, OW**
- Uses talons to tear food **OW**
- Has wings **P, O, OW**
- Can fly **OW**
- Is flightless **P O**
- Can run fast **O**
- Can swim in the ocean **P**
- Is warm blooded **P, O, OW**
- Takes care of young **P, O, OW**





# Bird Word Search

W G H U K E P P H X E D M W X  
C D C V M C E P U A R L C K C  
R U I U M H L N E A W K G C B  
O N R V W C I S L N S K W A E  
W L T N S T C L L H G O P J E  
H V S I A U A V U L T U R E H  
T S O B V M N E D W F U I C N  
U G O O S E Z G Z F G J N N W  
X M Z R N Z N M I M P I F B A  
Y E K R U T M N L Z F L W O V  
Q I P H J W V M W T J O Q K R  
U N K A D U Y M Q P S U Y M C  
V T L F V B X T M F G T R H I  
Q Z A N L X M Q P Z O O R M E  
S K Y D B B J A C Z L K M O Z

CROW

EAGLE

EMU

FINCH

GOOSE

HAWK

MALLARD

OSTRICH

OWL

PELICAN

PENGUIN

PUFFIN

ROBIN

TURKEY

VULTURE



# Bird Word Search

W G H U K E P P H X E D M W X  
 C D C V M C E P U A R L C K C  
 R U I U M H L N E A W K G C B  
 O N R V W C I S L N S K W A E  
 W L T N S T C L L H G O P J E  
 H V S I A U A V U L T U R E H  
 T S O B V M N E D W F U I C N  
 U G O O S E Z G Z F G J N N W  
 X M Z R N Z N M I M P I F B A  
 Y E K R U T M N L Z F L W O V  
 Q I P H J W V M W T J O Q K R  
 U N K A D U Y M Q P S U Y M C  
 V T L F V B X T M F G T R H I  
 Q Z A N L X M Q P Z O O R M E  
 S K Y D B B J A C Z L K M O Z

CROW

EAGLE

EMU

FINCH

GOOSE

HAWK

MALLARD

OSTRICH

OWL

PELICAN

PENGUIN

PUFFIN

ROBIN

TURKEY

VULTURE



# Bird Traits - Multiple Choice Test

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Name: \_\_\_\_\_ Date: \_\_\_\_\_ Class: \_\_\_\_\_

1 Birds are the only animal group that:  
(hint: think about other animals that might have these traits.)

**A** can fly.  
**B** has wings.  
**C** has feathers.  
**D** builds a nest.

2 Birds and mammals have the following trait in common:

**A** They both lay eggs.  
**B** They both are warm blooded.  
**C** They both have feathers.  
**D** They both have teeth.

3 All the following traits help birds fly, EXCEPT:

**A** They have wings.  
**B** They have hollow bones.  
**C** They have large chest muscles.  
**D** They have feathers.  
**E** They have a beak.

4 Birds flying south for the winter is called:

**A** migration.  
**B** hibernation.  
**C** extinction.  
**D** molting.

5 Which of the following birds can fly?

**A** ostrich  
**B** emu  
**C** eagle  
**D** penguin  
**E** kiwi

6 Sometimes birds \_\_\_\_\_ to attract a mate.

**A** dance  
**B** sing  
**C** build nests  
**D** show their colors  
**E** All of the above

7 The following bird has a beak shaped for collecting nectar:

**A** eagle  
**B** hummingbird  
**C** sparrow  
**D** loon

8 Which bird is the largest?

**A** duck  
**B** ostrich  
**C** eagle  
**D** wild turkey



# Bird Traits - Multiple Choice Test KEY

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Name: \_\_\_\_\_ Date: \_\_\_\_\_ Class: \_\_\_\_\_

1	<p>Birds are the only animal group that: (hint: think about other animals that might have these traits.)</p> <p><b>A</b> can fly. <b>B</b> has wings. <b>C</b> has feathers. <b>D</b> builds a nest.</p>
2	<p>Birds and mammals have the following trait in common:</p> <p><b>A</b> They both lay eggs. <b>B</b> They both are warm blooded. <b>C</b> They both have feathers. <b>D</b> They both have teeth.</p>
3	<p>All the following traits help birds fly, EXCEPT:</p> <p><b>A</b> They have wings. <b>B</b> They have hollow bones. <b>C</b> They have large chest muscles. <b>D</b> They have feathers. <b>E</b> They have a beak.</p>
4	<p>Birds flying south for the winter is called:</p> <p><b>A</b> migration. <b>B</b> hibernation. <b>C</b> extinction. <b>D</b> molting.</p>

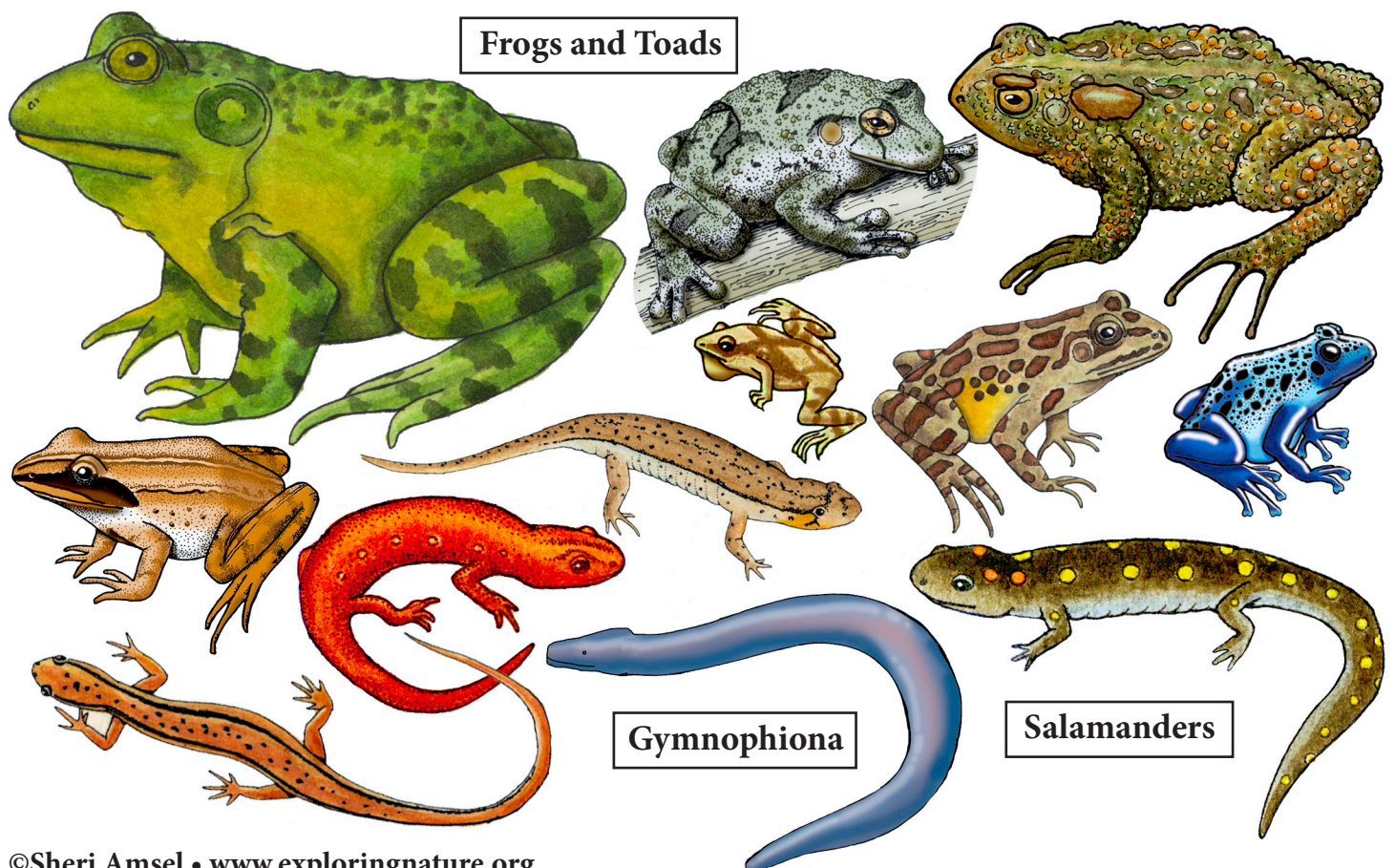
5	<p>Which of the following birds can fly?</p> <p><b>A</b> ostrich <b>B</b> emu <b>C</b> eagle <b>D</b> penguin <b>E</b> kiwi</p>
6	<p>Sometimes birds _____ to attract a mate.</p> <p><b>A</b> dance <b>B</b> sing <b>C</b> build nests <b>D</b> show their colors <b>E</b> All of the above</p>
7	<p>The following bird has a beak shaped for collecting nectar:</p> <p><b>A</b> eagle <b>B</b> hummingbird <b>C</b> sparrow <b>D</b> loon</p>
8	<p>Which bird is the largest?</p> <p><b>A</b> duck <b>B</b> ostrich <b>C</b> eagle <b>D</b> wild turkey</p>

# Amphibians

Amphibians are in one animal group (or **Class**) called **Amphibia** that includes frogs, toads, salamanders, and newts. They have several **traits** in common:

- 1) They **lay their eggs in water**.
- 2) When they first hatch from their eggs in water, they **breathe through gills**.
- 3) As they grow into adults, they develop and **breathe through lungs**, instead of gills.
- 4) They live in or near water; ponds, lakes, rivers, streams or wetlands.
- 5) Amphibian bodies change as they mature. This change is called **metamorphosis**. **Frogs** hatch as tadpoles and over time grow front and back legs and lose their long tail. As adult, they can live on land. Salamanders have legs that are all about the same size. Frogs have much bigger back legs.
- 6) Though adult amphibians spend time on land, they **come back to the water to mate** and lay eggs.
- 7) Amphibians are **cold blooded**. They are not active in cold weather. Those in northern regions, spend the winter months sleeping (in **torpor**), buried in mud or under leaf litter.
- 8) The Amphibian Class is broken down into smaller groups or **Orders**.

- Caudata (Urodela) Salamanders
- Anura (Salientia) Frogs and Toads
- Gymnophiona wormlike amphibian



# Amphibians

There are many groups (called Classes) of animals.  
Amphibians are in one group. All amphibians share some traits.

They lay eggs  
in water.

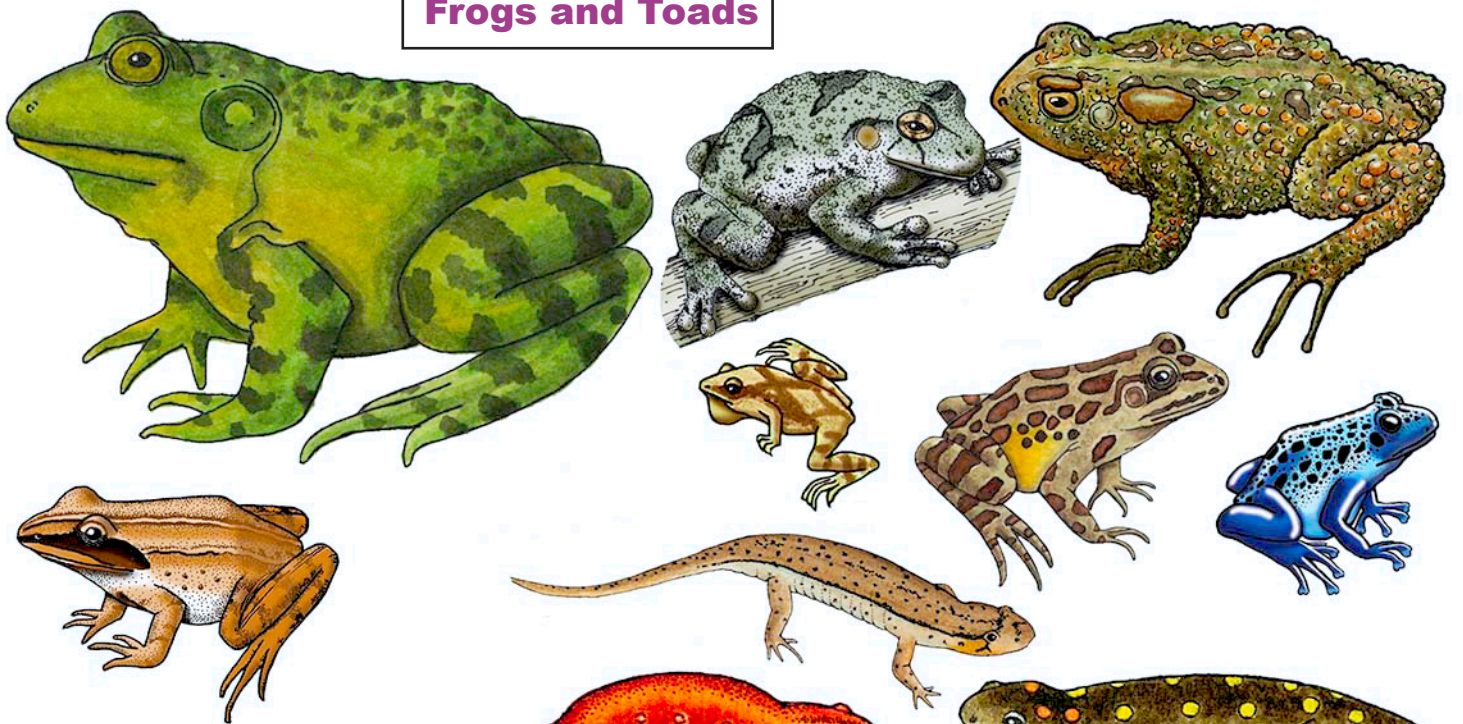
They  
are cold  
blooded.

They breathe with gills  
when young and develop  
lungs over time.

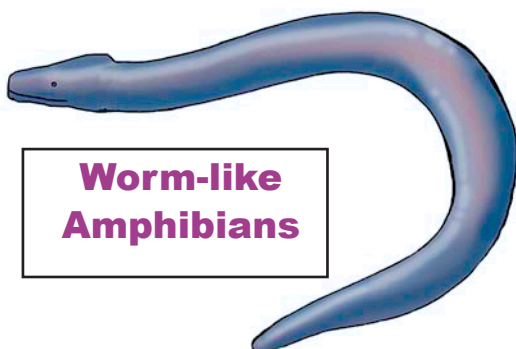
They change for life on  
land - Metamorphosis.

They return to the water  
to mate and lay eggs.

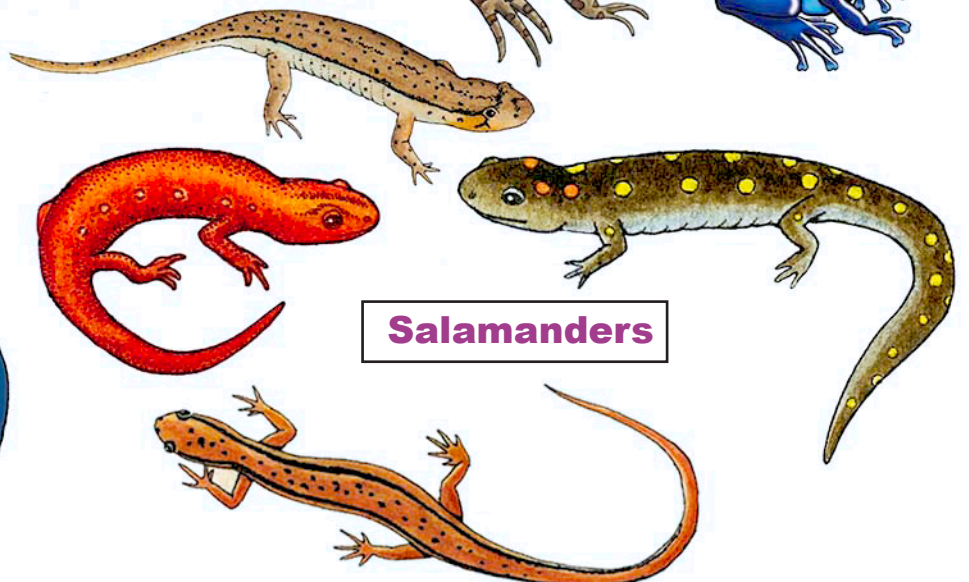
**Frogs and Toads**



**Salamanders**

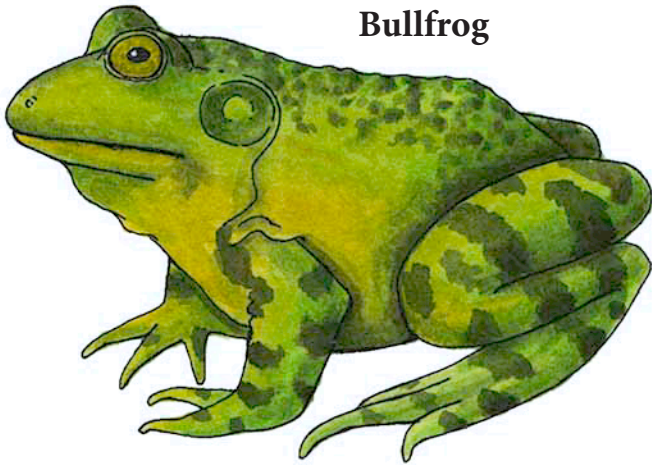


**Worm-like  
Amphibians**

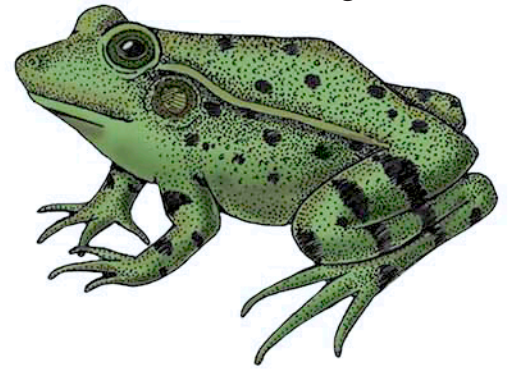




# Amphibians



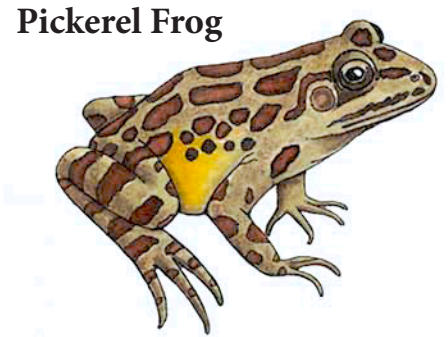
Bullfrog



Green Frog



Spring Peeper

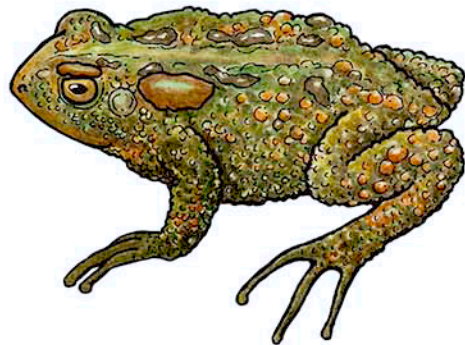


Pickerel Frog



Wood Frog

Gray Treefrog

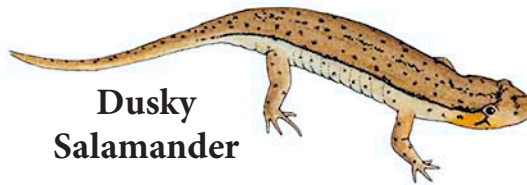


American Toad

Red\_eyed Treefrog



Blue Poison Dart Frog

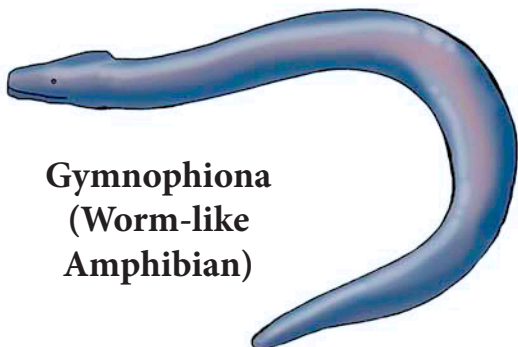


Dusky Salamander



Spotted Salamander

Red Eft (Newt)



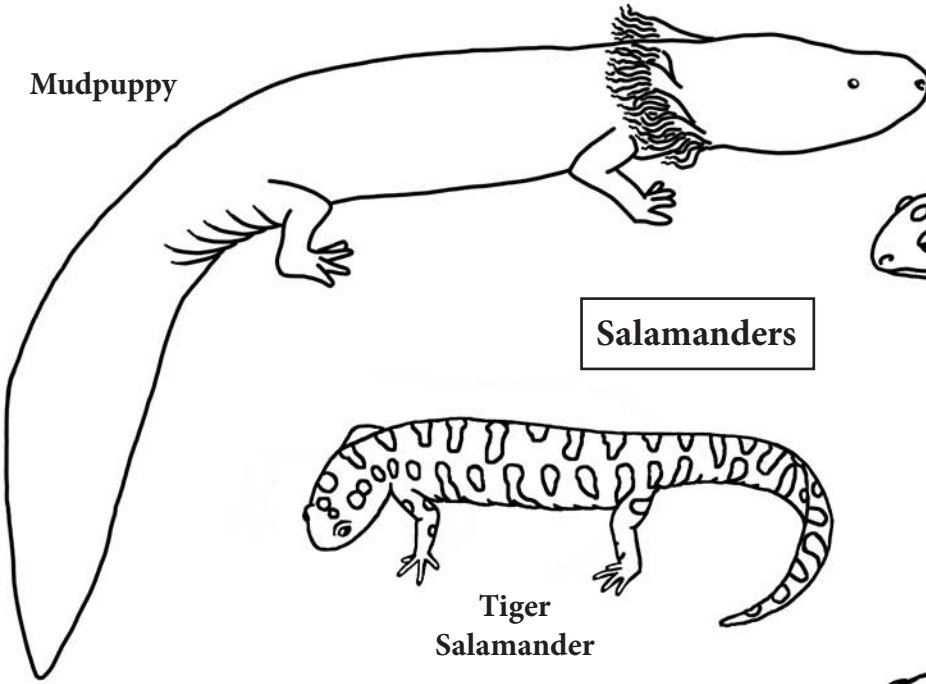
Gymnophiona  
(Worm-like  
Amphibian)

Northern  
Two-lined  
Salamander



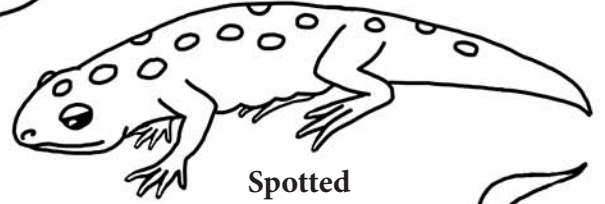
# Amphibians

Mudpuppy

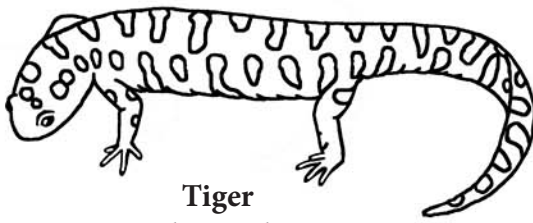


Salamanders

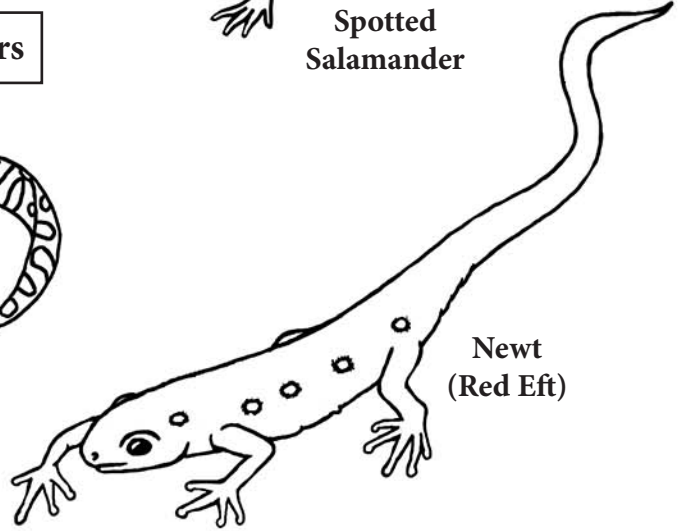
Spotted Salamander



Tiger Salamander



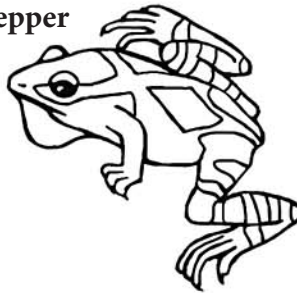
Newt (Red Eft)



Bullfrog



Spring Pepper



Gray Treefrog



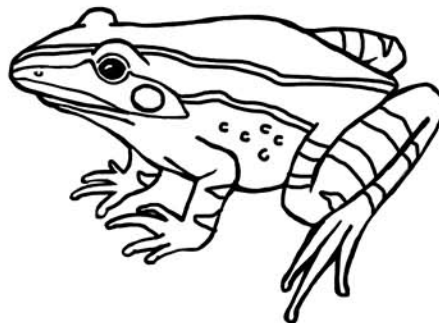
Frogs

Toads

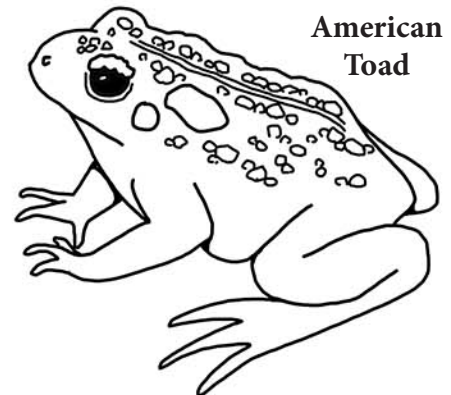
Leopard Frog



Wood Frog



American Toad



# Amphibians Short Answer Quiz

1. Amphibians lay their eggs in the \_\_\_\_\_.
2. When amphibians first hatch from eggs in the water, they breathe through \_\_\_\_\_.
3. As they grow, amphibians form \_\_\_\_\_, so they can breathe while living on land.
4. Frogs hatch out of their eggs as \_\_\_\_\_.
5. As a frog grows up, it grows front and back \_\_\_\_\_.
6. As a frog grows up, it loses its \_\_\_\_\_.
7. This change is called \_\_\_\_\_.
8. Though adult amphibians may spend time on land, they always come back to the water to \_\_\_\_\_.
9. They also come back to \_\_\_\_\_.
10. Amphibians are \_\_\_\_\_ blooded.
11. Amphibians in cold regions, spend the winter \_\_\_\_\_.
12. Amphibians are broken down into smaller groups. One group includes frogs and \_\_\_\_\_ . Another group includes salamanders.
13. Salamanders look different from frogs, as they have a long \_\_\_\_\_.
14. Salamanders have legs that are all about the same size. Frogs have much bigger \_\_\_\_\_ legs.

## Vocabulary Bank for Amphibians:

back	mate	tails
cold	metamorphosis	toads
gills	sleeping	water
lay eggs	tadpoles	
legs	tail	



# Amphibians Short Answer Quiz KEY

1. Amphibians lay their eggs in the **WATER**.
2. When amphibians first hatch from eggs in the water, they breathe through **GILLS**.
3. As they grow, amphibians form **LUNGS**, so they can breathe while living on land.
4. Frogs hatch out of their eggs as **TADPOLES**.
5. As a frog grows up, it grows front and back **LEGS**.
6. As a frog grows up, it loses its **TAIL**.
7. This change is called **METAMORPHOSIS**.
8. Though adult amphibians may spend time on land, they always come back to the water to **MATE**.
9. They also come back to **LAY EGGS**.
10. Amphibians are **COLD** blooded.
11. Amphibians in cold regions, spend the winter **SLEEPING**.
12. Amphibians are broken down into smaller groups. One group includes frogs and **TOADS**. Another group includes salamanders.
13. Salamanders look different from frogs, as they have a long **TAIL**.
14. Salamanders have legs that are all about the same size. Frogs have much bigger **BACK** legs.

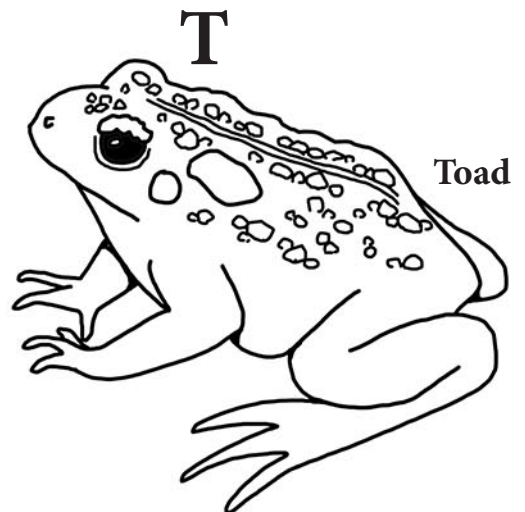
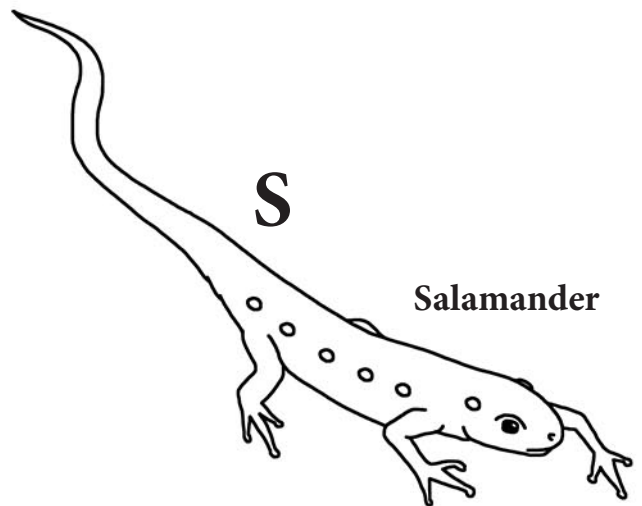
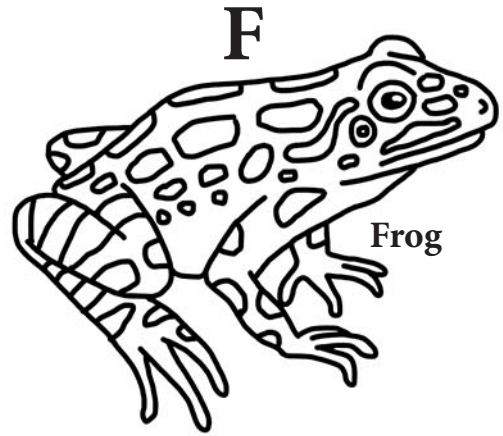
## Vocabulary Bank for Amphibians:

back	mate	tails
cold	metamorphosis	toads
gills	sleeping	water
lay eggs	tadpoles	
legs	tail	

# Amphibians Matching Traits

Add the letters **F**, **S**, **T** (for **F**rog, **S**alamander or **T**oad) to each trait they have, listed on left.

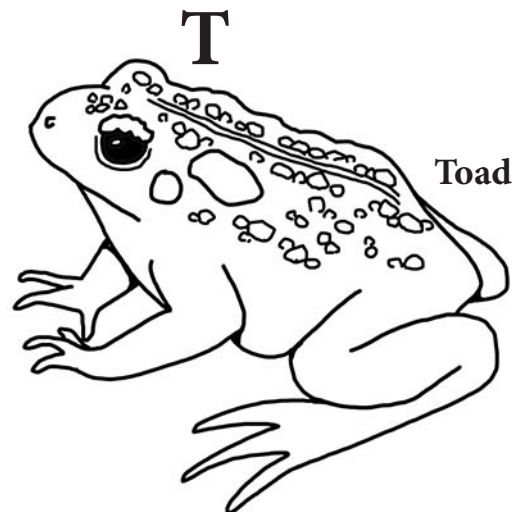
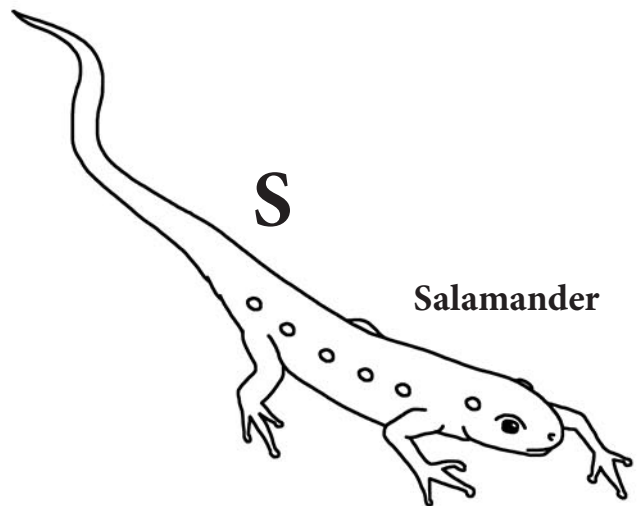
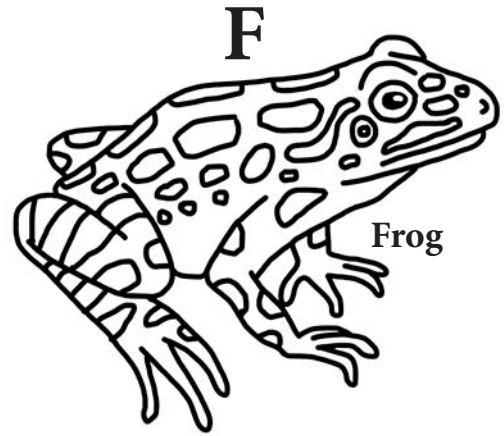
- Adults can jump \_\_\_\_\_
- Adults have 4 same-sized legs \_\_\_\_\_
- Adults have a tail \_\_\_\_\_
- Adults have bigger back legs \_\_\_\_\_
- Adults lose their tail \_\_\_\_\_
- Born with a tail \_\_\_\_\_
- Born with gills \_\_\_\_\_
- Eggs laid in water \_\_\_\_\_
- Cold blooded \_\_\_\_\_
- Mate in the water \_\_\_\_\_



# Amphibians Matching Traits KEY

Add the letters **F**, **S**, **T** (for **F**rog, **S**alamander or **T**oad) to each trait they have, listed on left.

- Adults can jump     **F, T**
- Adults have 4 same-sized legs     **S**
- Adults have a tail     **S**
- Adults have bigger back legs     **F, T**
- Adults lose their tail     **F, T**
- Born with a tail     **F, S, T**
- Born with gills     **F, S, T**
- Eggs laid in water     **F, S, T**
- Cold blooded     **F, S, T**
- Mate in the water     **F, S, T**





# Amphibian Word Search

G W L G T R E E F R O G W F Z  
Q E A P O F U J L S T Q O A H  
X A H T H R U X A G R A O Z O  
A U U B E P F L W G P N D K X  
L M T H E R A L P H F I F T R  
D F A E G M D G L D J T R W P  
E E P Y A O M O X U K A O E X  
U E S N B V R P G N B S G N Y  
R Z D A O T D F R T I N M P P  
C E T O O F E D A P S E P A D  
R P N U O X F O H K B U E Z W  
E R D N C M J A H E P V M P G  
Q C W K S T S Q R D Y W A H E  
K J V C J L W M U W E J C Y I  
W W E I A H G M E K I U B N B

BULLFROG

EFT

ENSATINA

FROG

MUDPUPPY

NEWT

PEEPER

SALAMANDER

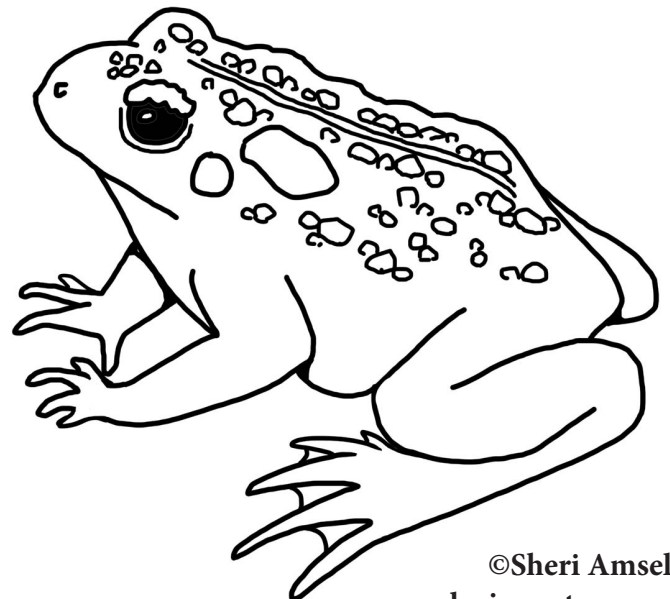
SPADEFoot

TOAD

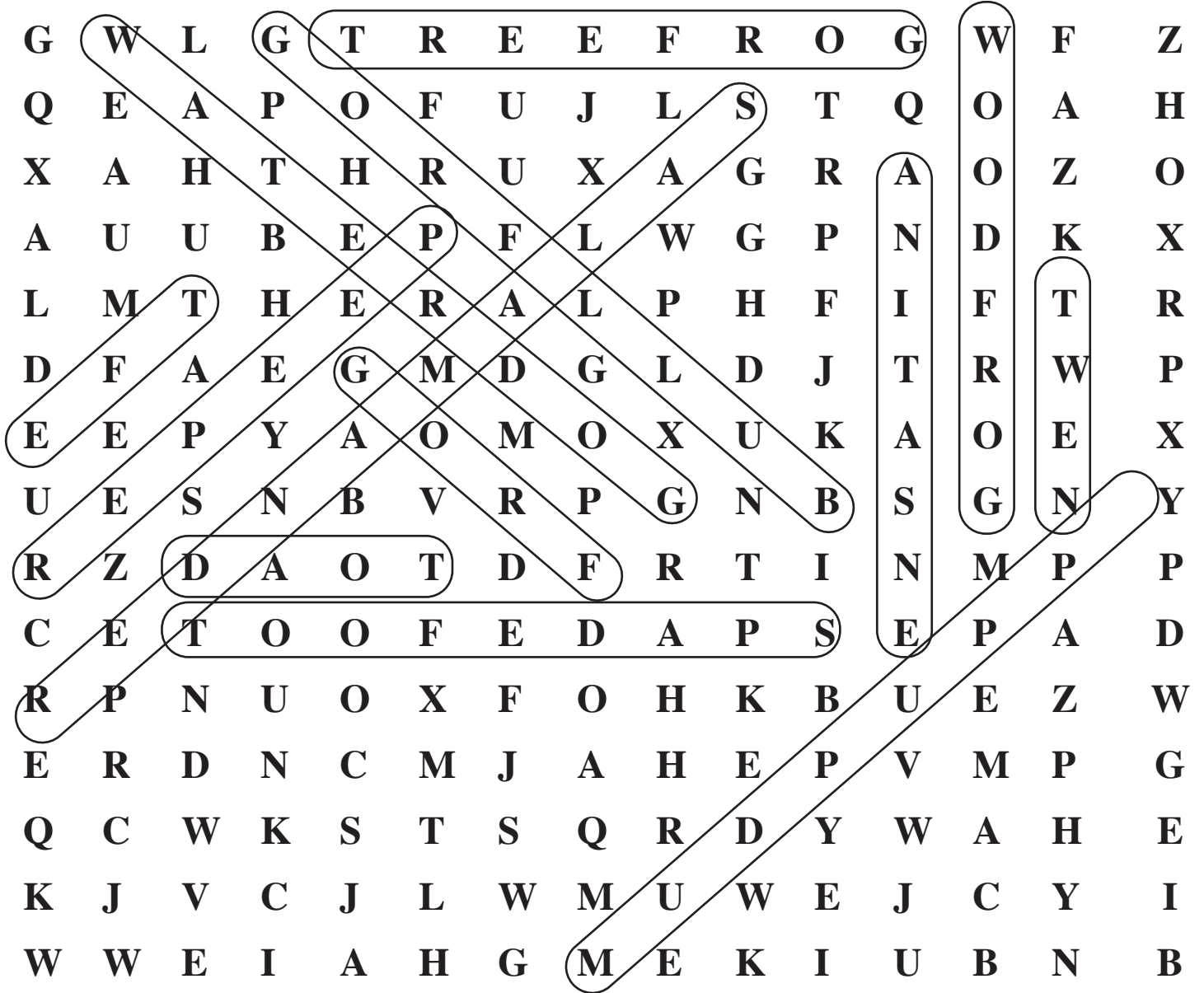
TREEFROG

WATERDOG

WOODFROG



# Amphibian Word Search



BULLFROG

EFT

ENSATINA

FROG

MUDPUPPY

NEWT

PEEPER

SALAMANDER

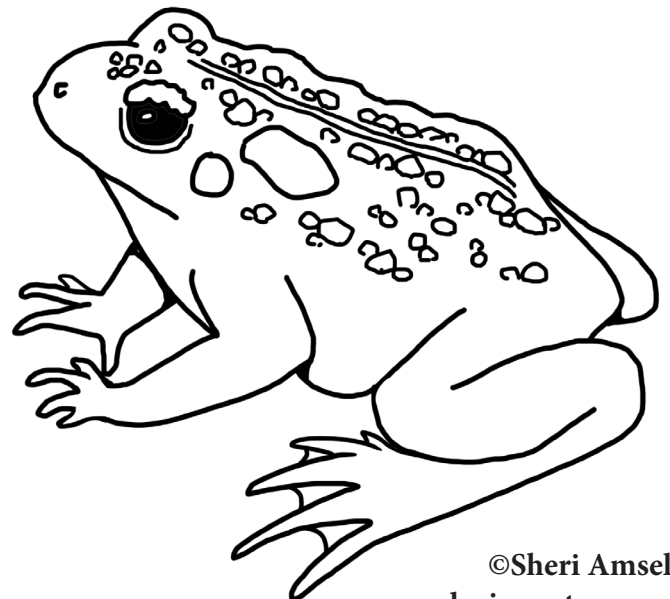
SPADEFOOT

TOAD

TREEFROG

WATERDOG

WOODFROG



# Amphibians – Multiple Choice Test

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Name: \_\_\_\_\_ Date: \_\_\_\_\_ Class: \_\_\_\_\_

**1** The Class Amphibian includes all the following, EXCEPT:

- A** frogs.
- B** salamanders.
- C** toads.
- D** snakes.

**2** Amphibians:

- A** lay their soft-shelled eggs in water.
- B** lay their hard-shelled eggs on land.
- C** lay their hard-shelled eggs in water.
- D** lay their soft-shelled eggs on land.
- E** all of the above.

**3** Amphibians hatch out of their eggs with:

- A** lungs and develop gills later.
- B** lungs and keep them their whole lives.
- C** gills and develop lungs later.
- D** All of the above.

**4** Amphibians are:

- A** cold blooded and stay active all winter.
- B** cold blooded and go into torpor in winter.
- C** warm blooded and stay active all winter.
- D** warm blooded and go into torpor in winter.

**5** Of the following amphibians, which keeps its tail its whole life?

- A** green frogs
- B** toads
- C** salamanders
- D** bullfrogs

**6** Of the following amphibians, which returns to the water to lay its eggs?

- A** green frogs
- B** toads
- C** salamanders
- D** bullfrogs
- E** All of the above

**7** Which habitat are amphibians never far from?

- A** wetlands
- B** deserts
- C** polar regions
- D** dry scrublands

**8** What is the name for the early stage of the amphibian metamorphosis?

- A** caterpillar
- B** pup
- C** fry
- D** tadpole



# Amphibians – Multiple Choice Test KEY

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Name: \_\_\_\_\_ Date: \_\_\_\_\_ Class: \_\_\_\_\_

1 The Class Amphibian includes all the following, EXCEPT:

- A frogs.
- B salamanders.
- C toads.
- D snakes.

2 Amphibians:

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- B lay their hard-shelled eggs on land.
- C lay their hard-shelled eggs in water.
- D lay their soft-shelled eggs on land.
- E all of the above.

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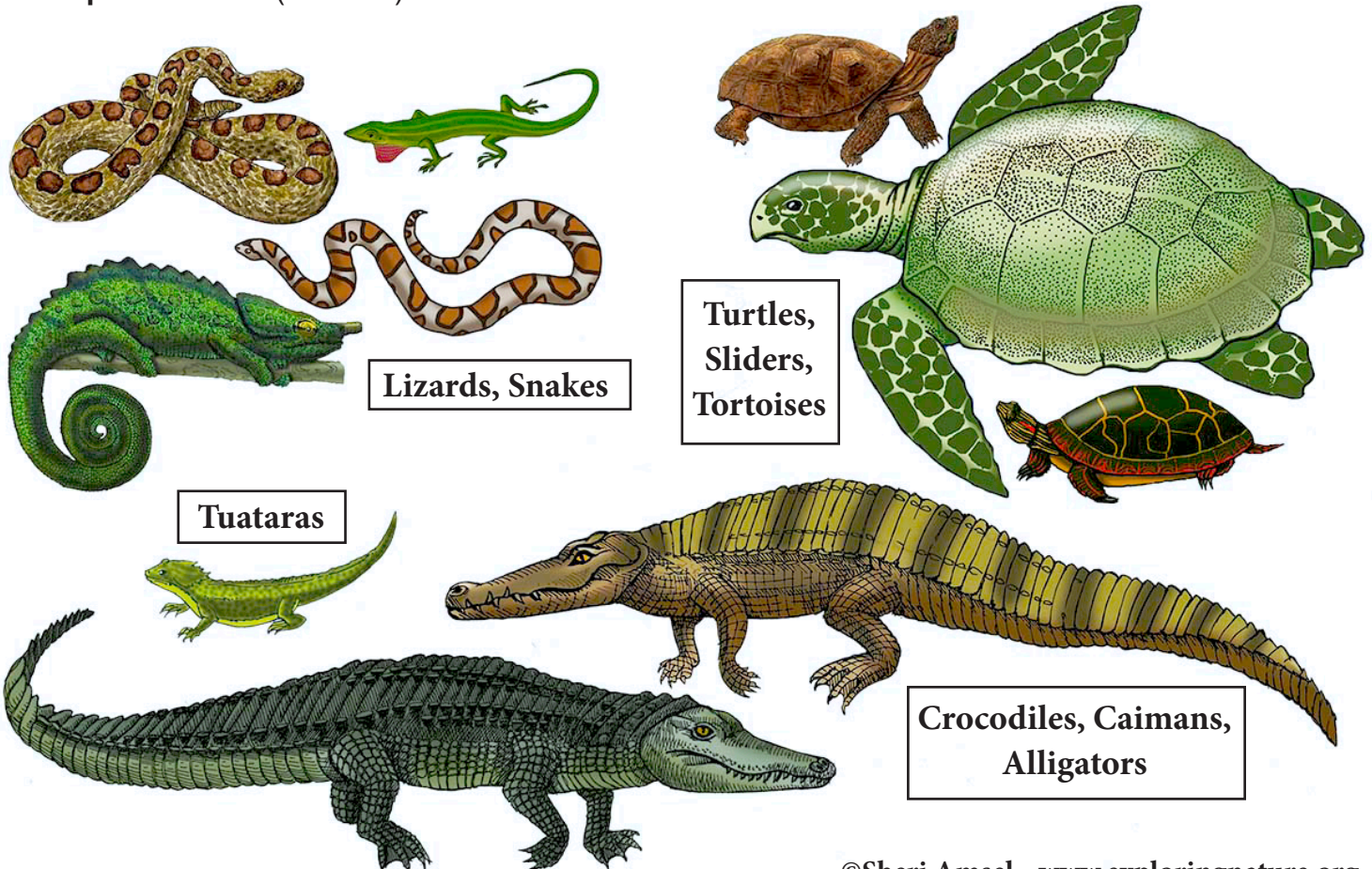
8 What is the name for the early stage of the amphibian metamorphosis?

- A caterpillar
- B pup
- C fry
- D tadpole

# Reptiles

Reptiles are one group (or Class) of animals. They share some important traits.

- 1) Most reptiles **lay eggs (oviparous)**, though some can give birth to live young.
- 2) Their **eggs are laid on land** in loose soil or sand.
- 3) Their eggs **have a leathery shell** to protect them from drying out.
- 4) Reptiles are **covered with tough, dry skin** and protective scales or plates.
- 5) Reptiles are **cold-blooded**. This means that their body temperature is regulated by the air temperature. If the air is not warm enough, they seek out direct sunlight. They spend the winter months (in colder climates) in a kind of hibernation called **torpor**, buried in mud or leaf litter. In very hot climates, they may also hibernate when it's too hot. This is called **estivation**.
- 5) Unlike mammals, reptile **teeth are usually the same shape and size throughout their mouth**.
- 6) Unlike mammals, reptiles can **take care of themselves very soon after hatching**. Some species of reptiles, like the American alligator will watch over newly hatched young for a time.
- 7) Some reptiles have a **venomous bite**.
- 8) The study of reptiles is called **herpetology**.
- 9) Reptiles are broken down into 4 groups (**Orders**) living today.
  - **Crocodylia** (crocodiles, caimans, alligators, gharials)
  - **Testudines** (turtles, terrapins, sliders, tortoises)
  - **Squamata** is broken down into 2 suborders: Lacertilia or Sauria (lizards) and Serpentes (snakes)
  - **Sphenodontia** (tuataras)



# Reptiles

There are many groups (or Classes) of animals.  
Reptiles are in one group. All reptiles share some traits.

They lay leathery-shelled eggs on dry land.

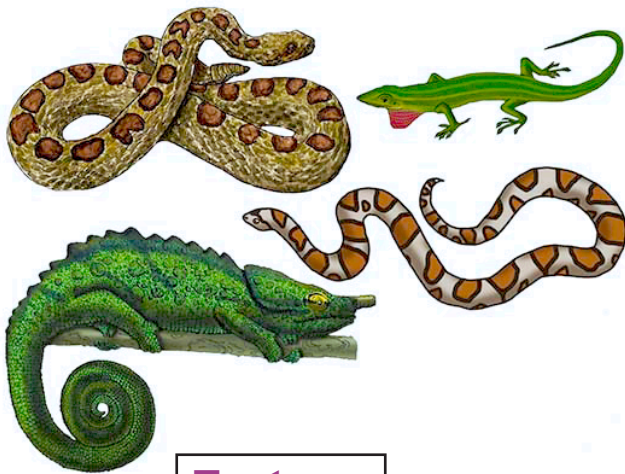
They are cold blooded.

They are covered with tough, dry skin and protective scales or plates.

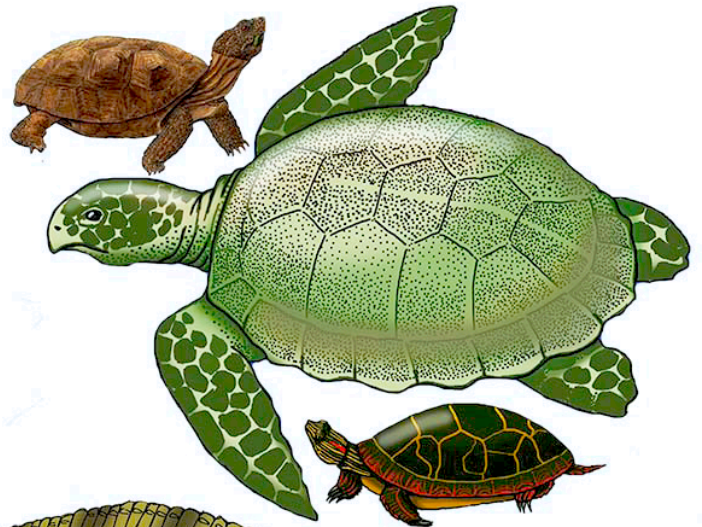
They take care of themselves very soon after hatching.

Some reptiles have a venomous bite.

**Lizards, Snakes**

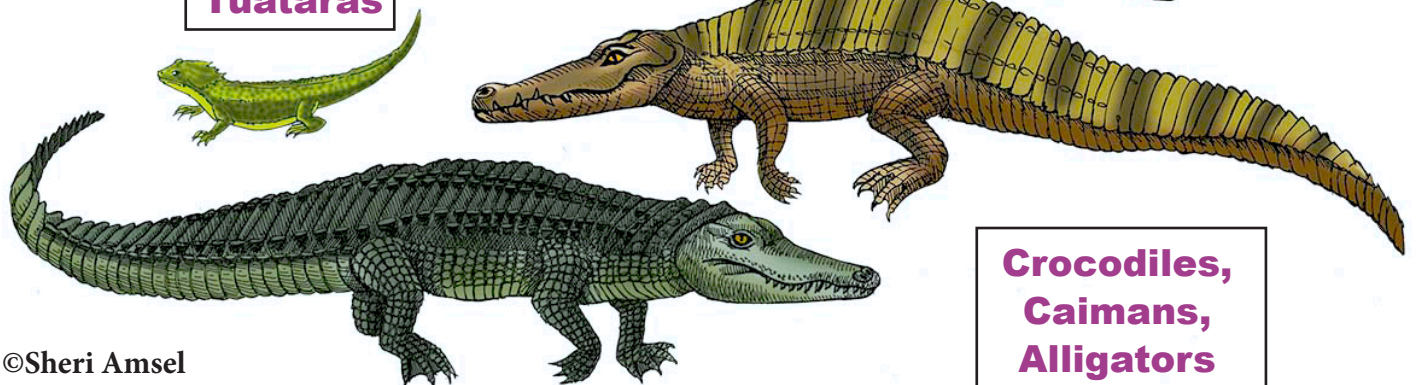


**Turtles, Sliders, Tortoises**



**Tuataras**

**Crocodiles, Caimans, Alligators**





# Reptiles

Rattlesnake



Chameleon



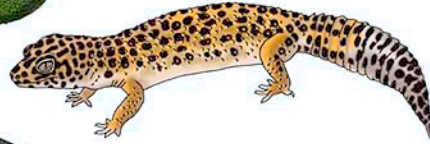
Skink



Milk Snake



Gecko



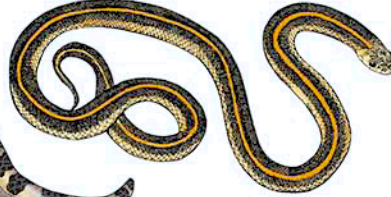
Anole



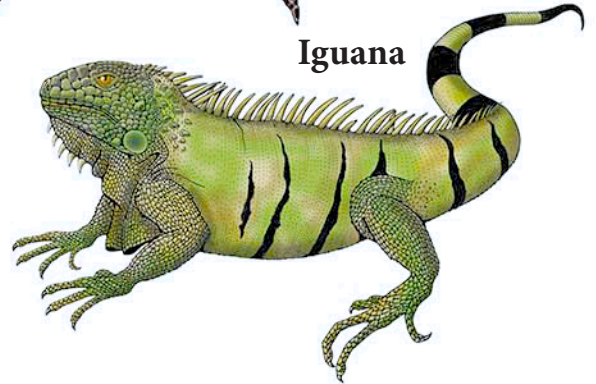
Anaconda



Garter Snake



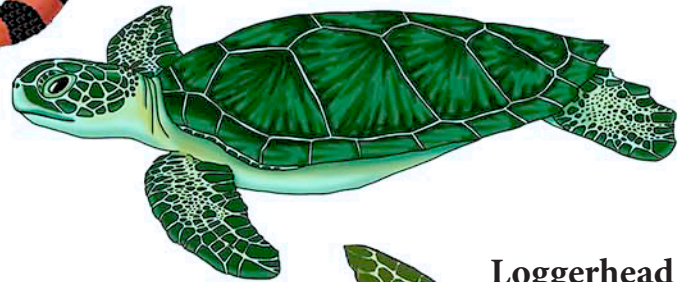
Iguana



Gila Monster



Green Sea Turtle



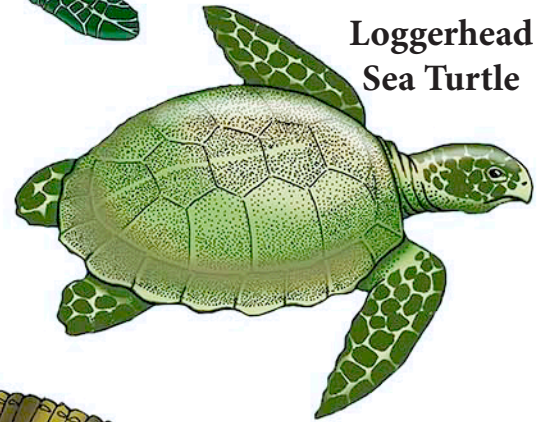
Box Turtle



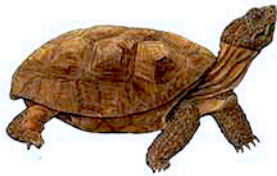
Painted Turtle



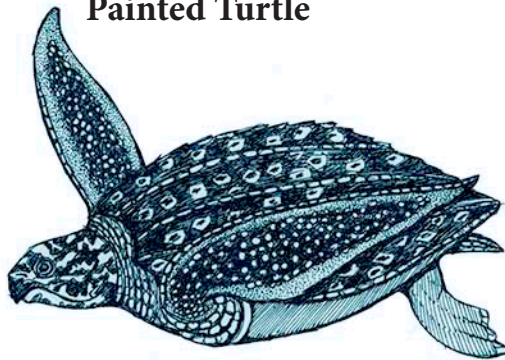
Loggerhead Sea Turtle



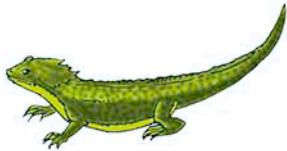
Desert Tortoise



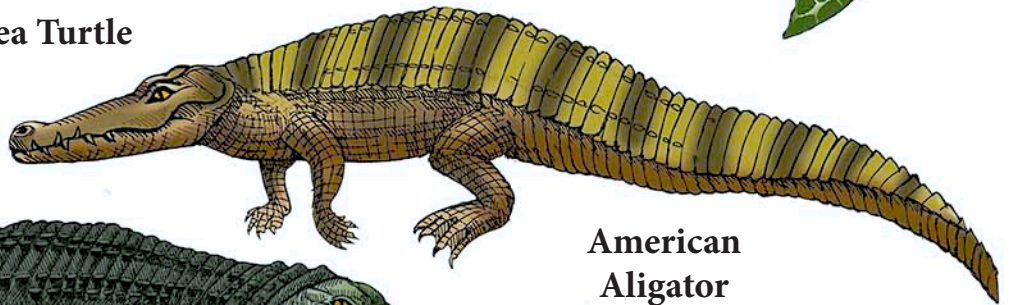
Leatherback Sea Turtle



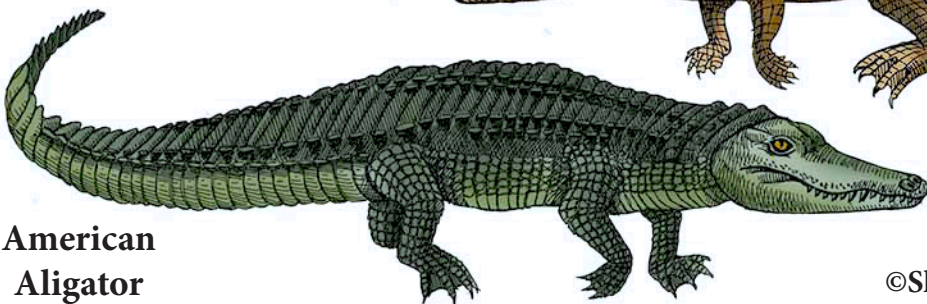
Tuataras



American Alligator



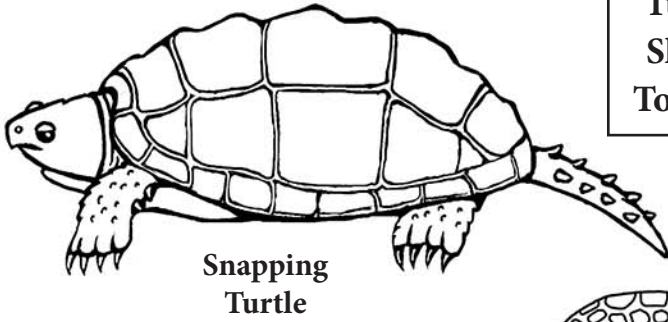
American Alligator



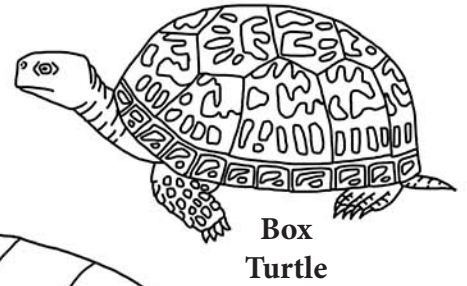


# Reptiles

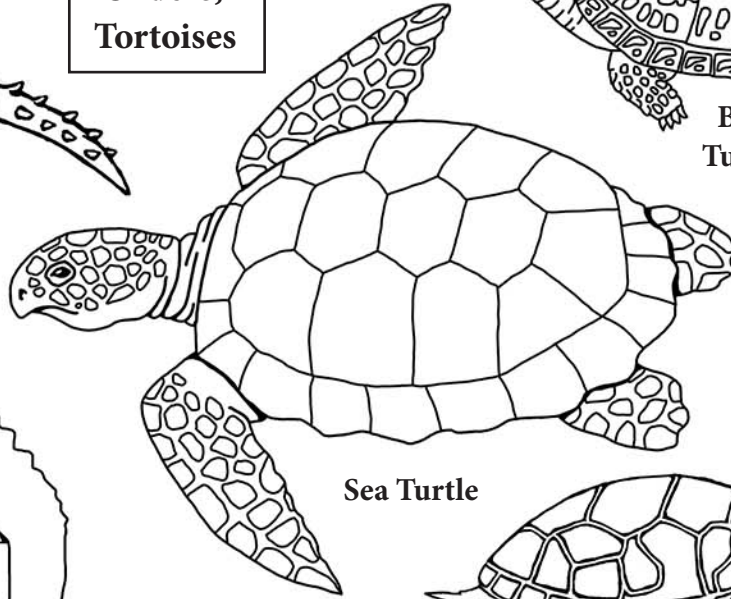
Turtles,  
Sliders,  
Tortoises



Snapping  
Turtle

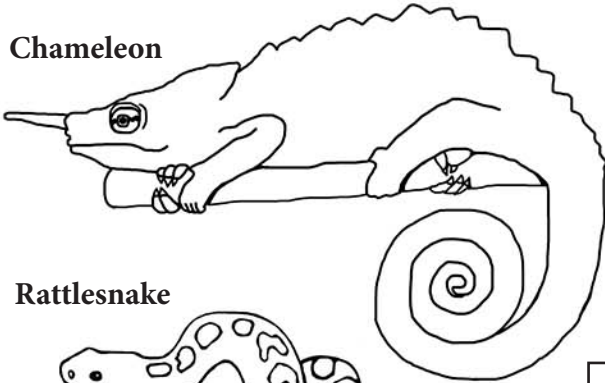
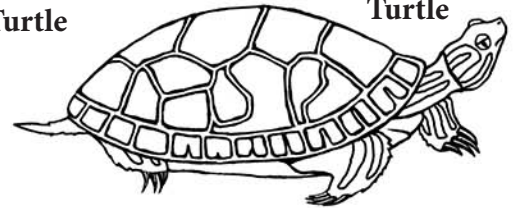


Box  
Turtle



Sea Turtle

Painted  
Turtle



Chameleon

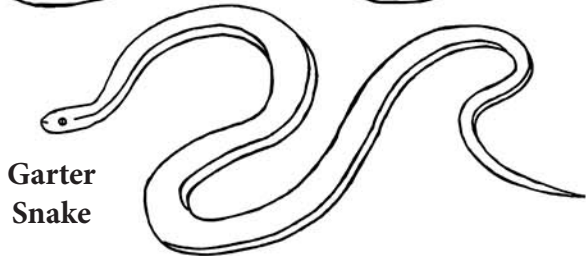
Rattlesnake



Lizards,  
Snakes



Five-lined Skink

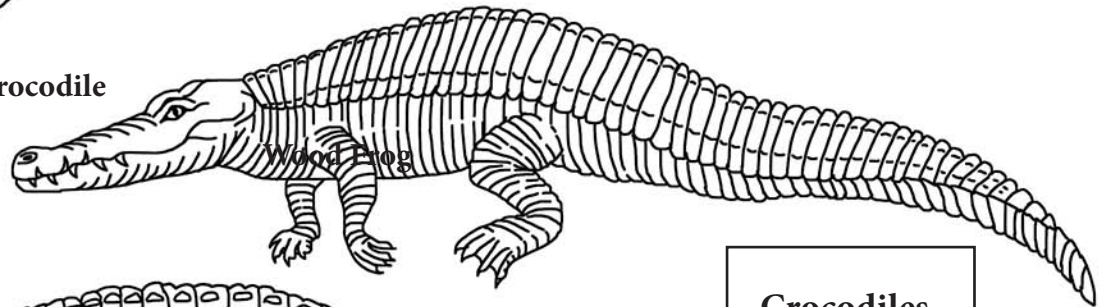


Garter  
Snake

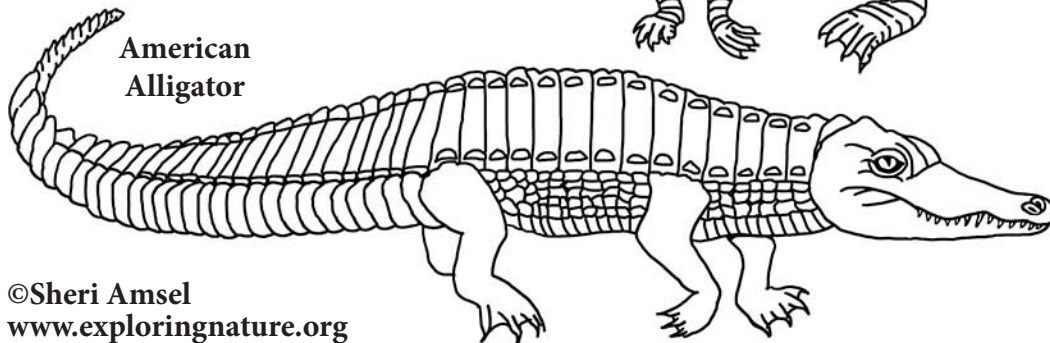


Milk Snake

Crocodile



Wood Frog



American  
Alligator

Crocodiles,  
Caimans,  
Alligators

# Reptiles Short Answer Quiz

1. Most reptiles lay \_\_\_\_\_, but some give birth to live young.
2. Reptiles lay their eggs on dry \_\_\_\_\_.
3. Reptile eggs have a \_\_\_\_\_ shell.
4. This protect them from \_\_\_\_\_.
5. Reptiles may dig a hole in loose \_\_\_\_\_ in which to lay their eggs.
6. Reptiles can take care of themselves soon after \_\_\_\_\_.
7. Reptiles are covered in tough, dry skin and protective \_\_\_\_\_  
or **plates**.
8. Reptiles are \_\_\_\_\_ blooded.
9. Reptiles in cold places, spend the winter \_\_\_\_\_.
10. In a very hot climate, reptiles may hibernate during the hottest time as well. This is called \_\_\_\_\_.
11. Some reptiles have a \_\_\_\_\_ bite.
12. Other reptiles, when threatened, pull inside a protective \_\_\_\_\_.
13. Reptiles are broken down into smaller groups. One group has crocodiles, caimans and \_\_\_\_\_.
14. Another group of reptiles has \_\_\_\_\_,  
sliders and tortoises.
15. A third group of reptiles has lizards and \_\_\_\_\_.

## Vocabulary Bank:

alligators	hatching	shell
cold	land	sleeping
drying out	leathery	snakes
eggs	sand	turtles
estivation	scales	venomous

# Reptiles Short Answer Quiz KEY

1. Most reptiles lay **EGGS**, but some give birth to live young.
2. Reptiles lay their eggs on **LAND**.
3. Reptile eggs have a **LEATHERY** shell.
4. This protect them from **DRYING OUT**.
5. Reptiles may dig a hole in loose **SAND** in which to lay their eggs.
6. Reptiles can take care of themselves soon after **HATCHING**.
7. Reptiles are covered in tough, dry skin and protective **SCALES** or **plates**.
8. Reptiles are **COLD** blooded.
9. Reptiles in cold places, spend the winter **SLEEPING**.
10. In a very hot climate, reptiles may hibernate during the hottest time as well. This is called **ESTIVATION**.
11. Some reptiles have a **VENOMOUS** bite.
12. Other reptiles, when threatened, pull inside a protective **SHELL**.
13. Reptiles are broken down into smaller groups. One group has crocodiles, caimans and **ALLIGATORS**.
14. Another group of reptiles has **TURTLES**, sliders and tortoises.
15. A third group of reptiles has lizards and **SNAKES**.

## Vocabulary Bank:

alligators	hatching	shell
cold	land	sleeping
drying out	leathery	snakes
eggs	sand	turtles
estivation	scales	venomous

# Reptiles Matching Traits

Add the letters **T, A, R** for **Turtle, Alligator** or **Rattlesnake** to each trait that they have.

• Lay eggs on land \_\_\_\_\_

• Lays leathery shells \_\_\_\_\_

• Covered in scales \_\_\_\_\_

• Have a protective shell \_\_\_\_\_

• Cold blooded \_\_\_\_\_

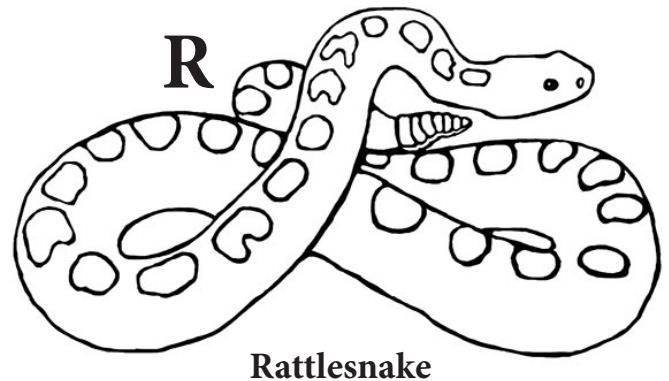
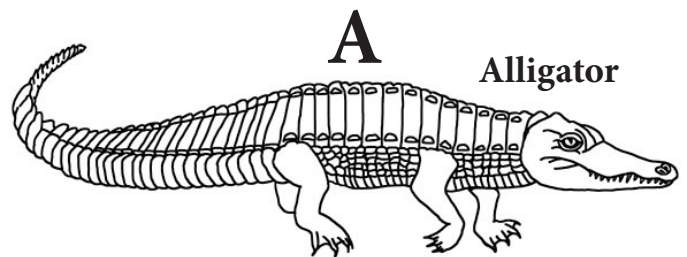
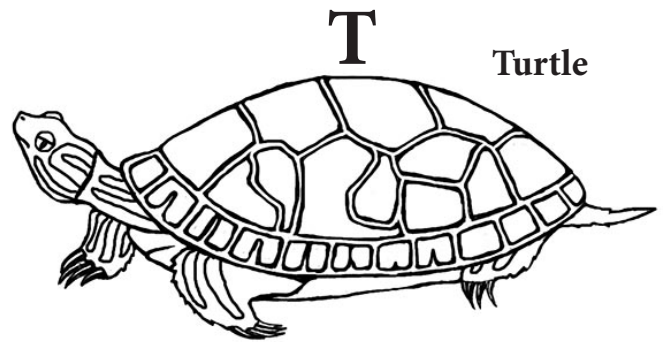
• Have a venomous bite \_\_\_\_\_

• Only live in warm places \_\_\_\_\_

• In group with crocodiles \_\_\_\_\_

• In group with tortoises \_\_\_\_\_

• In group with lizards \_\_\_\_\_





# Reptiles Matching Traits KEY

Add the letters **T, A, R** for **Turtle, Alligator** or **Rattlesnake** to each trait that they have.

• Lay eggs on land     **T, A, R**    

• Lays leathery shells     **T, A, R**    

• Covered in scales     **A, R**    

• Have a protective shell     **T**    

• Cold blooded     **T, A, R**    

• Have a venomous bite     **R**    

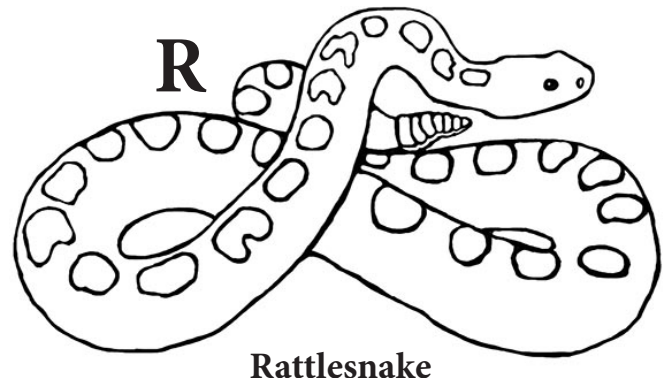
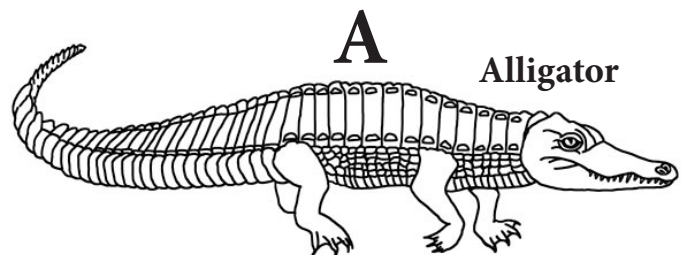
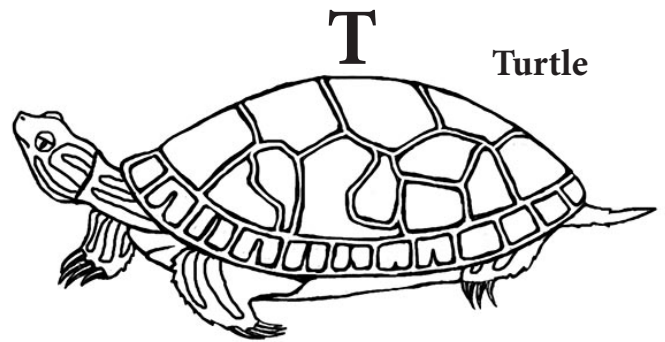
• Only live in warm places     **A**    

• In group with crocodiles     **A**    

• In group with tortoises     **T**    

• In group with lizards     **R**    

• Sleeps through the winter in cold places     **T, R**    



# Reptile Word Search

N D G O M G U E W E G N Y E K  
O E K R Y E C N L I T V L K O  
E T L F A F B T L Z O T N N M  
L H N I A V R A N J R V N I O  
E J F H D U M G O U T A J K D  
M D I K T O L K T P O K S S O  
A S H A N I C G R E I V O B D  
H P E S Z E N O G W S U O A R  
C S T A G I T W R R E P I V A  
L E R F P U A N A C O N D A G  
R D A P R O T A G I L L A K O  
L P A I N T E D T U R T L E N  
Z N W T B O A T E M T N V Y I  
S Z B M I T Y L U P Z Y T O V  
M A G L X J N D R V D I D N A

ALLIGATOR

ANACONDA

BOA

CHAMELEON

CROCODILE

GECKO

GILA MONSTER

KOMODO DRAGON

LIZARD

PAINTED TURTLE

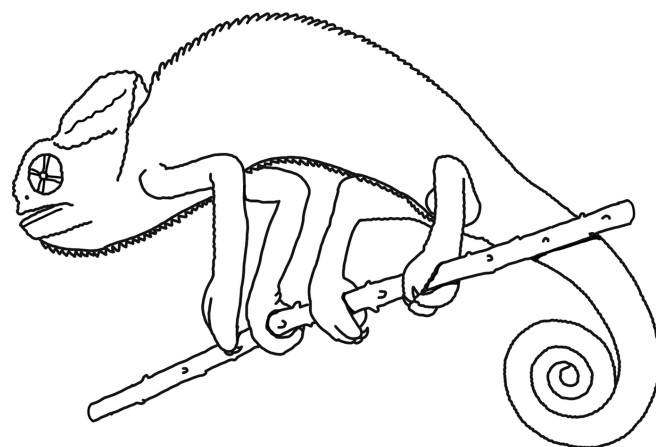
SEA TURTLE

SKINK

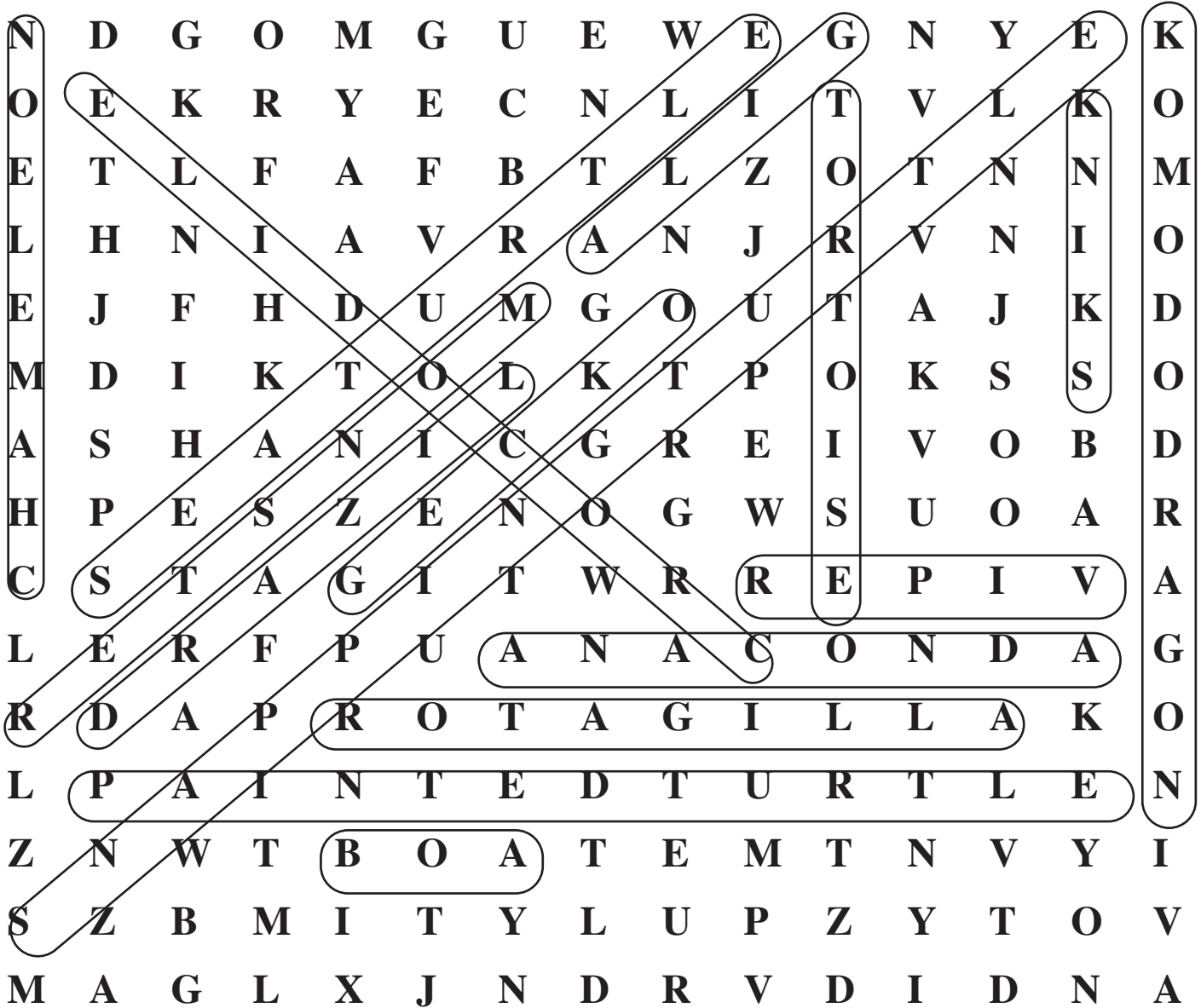
SNAPPING TURTLE

TORTOISE

VIPER



# Reptile Word Search



ALLIGATOR

ANACONDA

BOA

CHAMELEON

CROCODILE

GECKO

GILA MONSTER

KOMODO DRAGON

LIZARD

PAINTED TURTLE

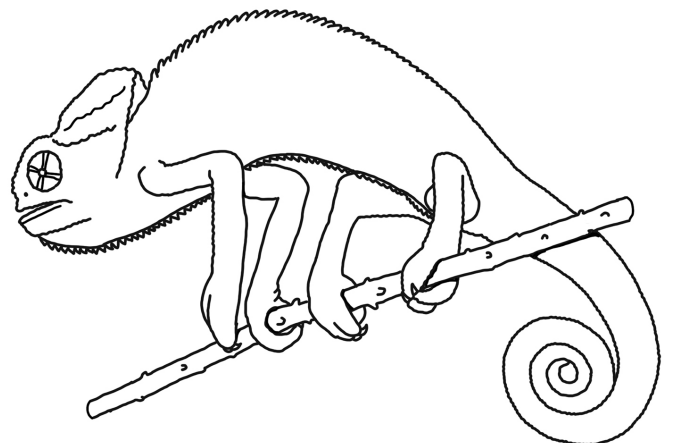
SEA TURTLE

SKINK

SNAPPING TURTLE

TORTOISE

VIPER



# Reptiles – Multiple Choice Test

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Name: \_\_\_\_\_ Class: \_\_\_\_\_

1	<p>Which of the following animals is <u>NOT</u> a reptile?</p> <p><b>A</b> snake <b>B</b> frog <b>C</b> lizard <b>D</b> alligator <b>E</b> turtle</p>
2	<p>Reptiles lay their eggs:</p> <p><b>A</b> in the water. <b>B</b> in the mud underwater. <b>C</b> on land. <b>D</b> in a tree.</p>
3	<p>Reptiles are:</p> <p><b>A</b> warm blooded. <b>B</b> cold blooded. <b>C</b> hot blooded. <b>D</b> all of the above.</p>
4	<p>Unlike mammals, reptiles can _____ very soon after hatching.</p> <p><b>A</b> eat on their own <b>B</b> fly on their own <b>C</b> lay eggs <b>D</b> grow fur</p>

5	<p>How do reptiles warm themselves up?</p> <p><b>A</b> run around until they're warm. <b>B</b> lie still in the sun. <b>C</b> put on a sweater. <b>D</b> all of the above.</p>
6	<p>In the winter months, in colder climates, reptiles will:</p> <p><b>A</b> migrate south <b>B</b> go into topor <b>C</b> go into estivation <b>D</b> grow fur</p>
7	<p>In a very hot climate, reptiles may _____ during the hottest time.</p> <p><b>A</b> migrate south <b>B</b> go into topor <b>C</b> go into estivation <b>D</b> grow fur</p>
8	<p>Unlike mammals, reptile teeth are usually _____.</p> <p><b>A</b> the same shape and size throughout their mouth. <b>B</b> all different sizes throughout their mouth. <b>C</b> missing <b>D</b> sharp</p>



# Reptiles – Multiple Choice Test KEY

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Name: \_\_\_\_\_ Date: \_\_\_\_\_ Class: \_\_\_\_\_

1 Which of the following animals is NOT a reptile?

- A snake
- B frog
- C lizard
- D alligator
- E turtle

2 Reptiles lay their eggs:

- A in the water.
- B in the mud underwater.
- C on land.
- D in a tree.

3 Reptiles are:

- A warm blooded.
- B cold blooded.
- C hot blooded.
- D all of the above.

4 Unlike mammals, reptiles can \_\_\_\_\_ very soon after hatching.

- A eat on their own
- B fly on their own
- C lay eggs
- D grow fur

5 How do reptiles warm themselves up?

- A run around until they're warm.
- B lie still in the sun.
- C put on a sweater.
- D all of the above.

6 In the winter months, in colder climates, reptiles will:

- A migrate south
- B go into topor
- C go into estivation
- D grow fur

7 In a very hot climate, reptiles may \_\_\_\_\_ during the hottest time.

- A migrate south
- B go into topor
- C go into estivation
- D grow fur

8 Unlike mammals, reptile teeth are usually \_\_\_\_\_.

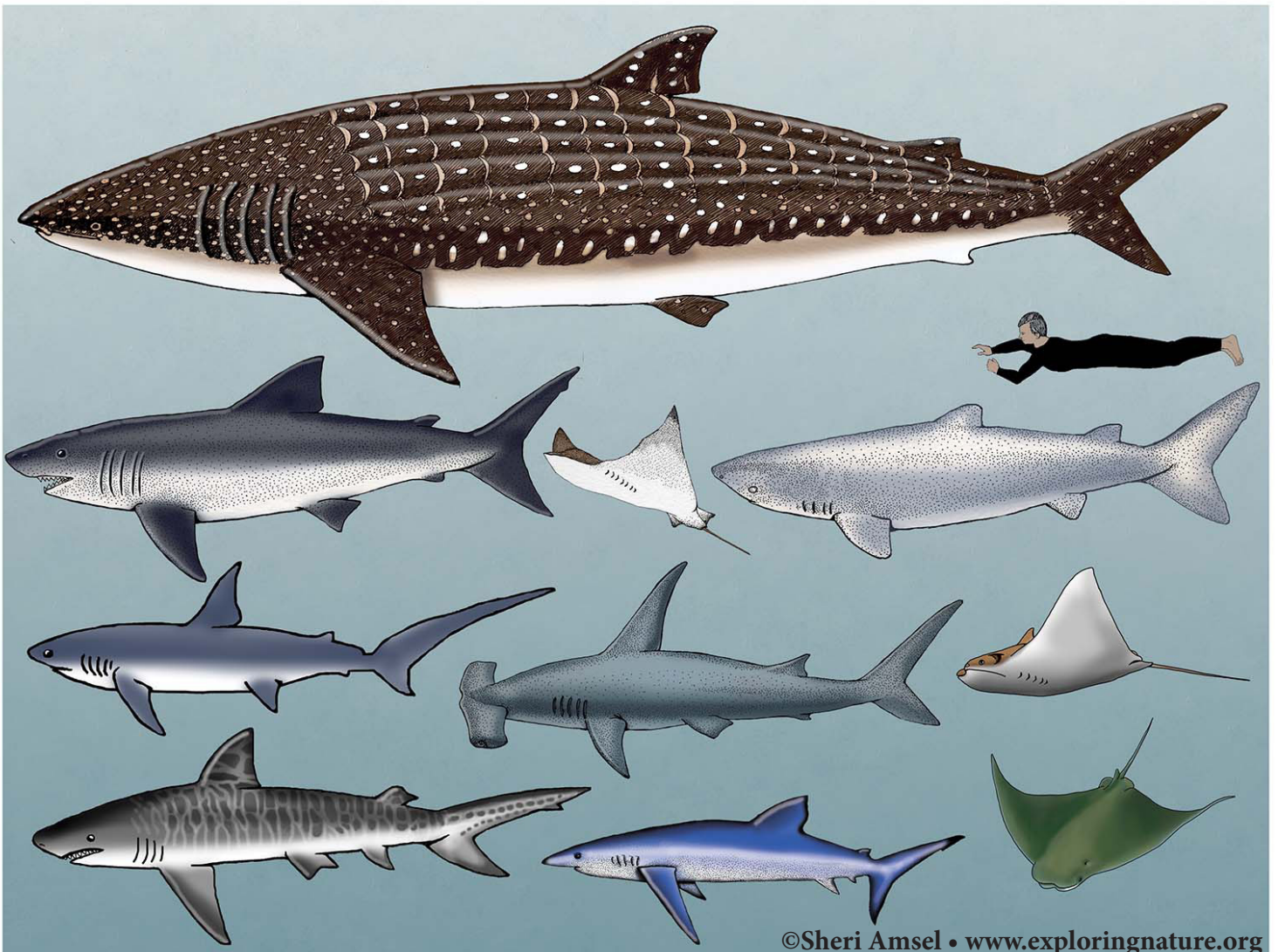
- A the same shape and size throughout their mouth.
- B all different sizes throughout their mouth.
- C missing
- D sharp

# Sharks, Rays, and Skates

Sharks, rays, and skates are in one animal group or **Class** called **Cartilaginous Fishes (Chondrichthyes)**. They have several **body traits** in common:

- 1) They are **cold-blooded** vertebrates (they have a backbone).
- 2) Their **skeleton is made of cartilage** instead of bone. Cartilage is softer than bone (in humans, cartilage makes up the bendable part of the outer ear and tip of the nose).
- 3) They **breathe through gills**.
- 4) Their **teeth are very hard**. When they lose teeth biting into tough prey, they replace them within days. Many chondrichthyes, including sharks, make new teeth their whole lives as they need them.
- 5) They have **two pairs of fins**. One pair is in the front (pectoral fins) and one pair is in back.
- 6) Sharks are also famous for their **large dorsal fin** seen above the water as they swim along the surface. Rays do not have the dorsal fin, but have wide “wings” that they flap to swim.

Chondrichthyes have remained almost unchanged since the time of the dinosaurs.



# Sharks, Rays and Skates

Sharks, Rays and, Skates are in one group (or Class) of animals.  
They share some traits.

They breathe through gills.

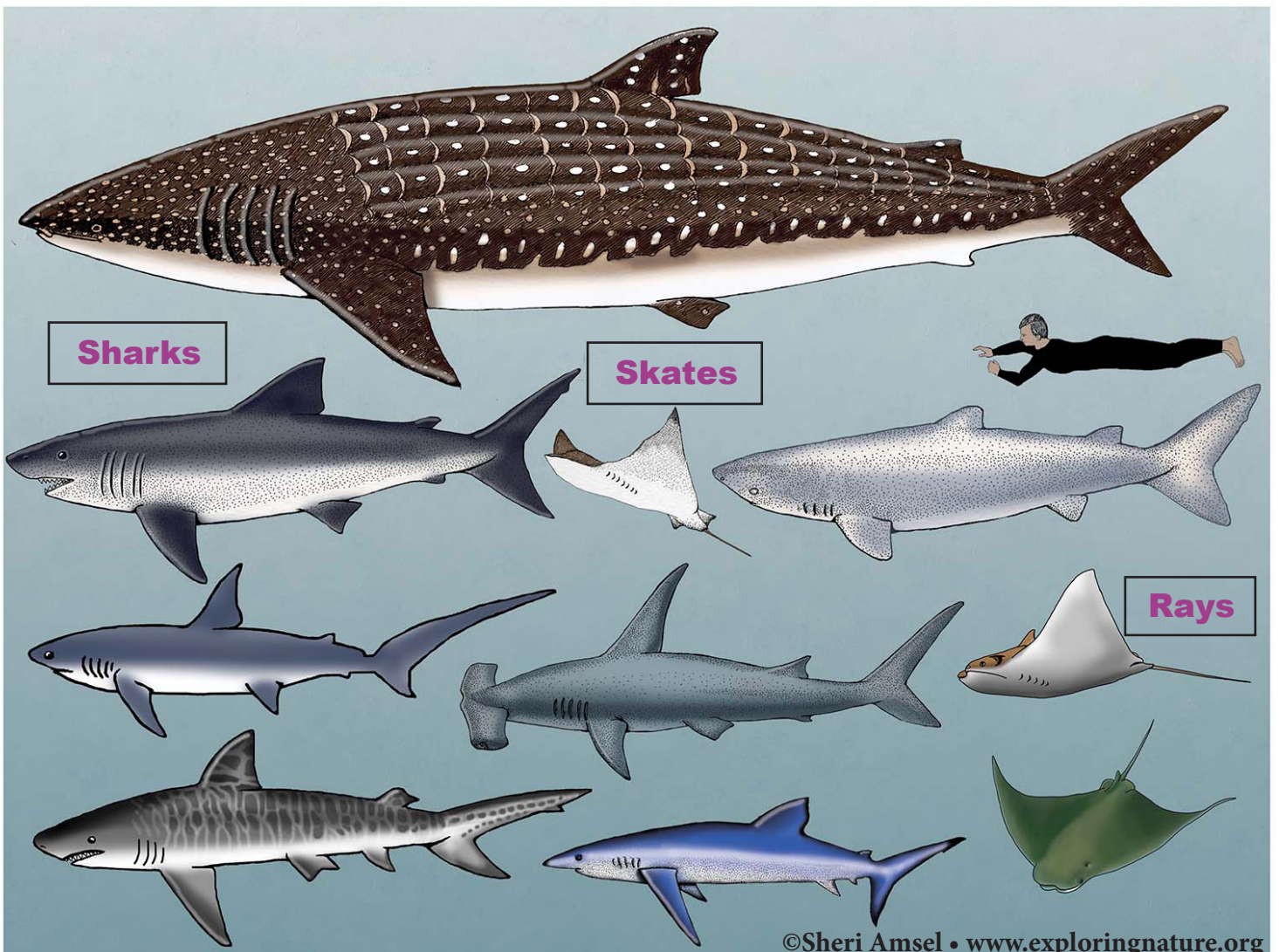
Sharks have a large dorsal fin.  
Rays have “wings” they flap to swim.

Their skeleton is made of cartilage instead of bone.

Their teeth are very hard and are replaced in days.

They are cold blooded.

They have two pairs of fins.





# Sharks, Rays and Skates

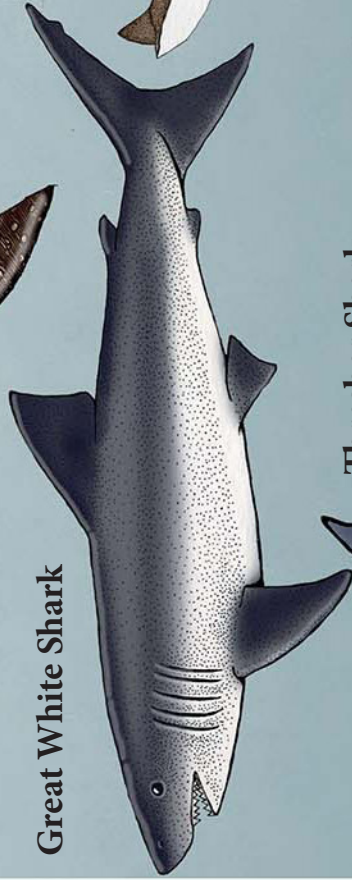
Cartilaginous Fishes



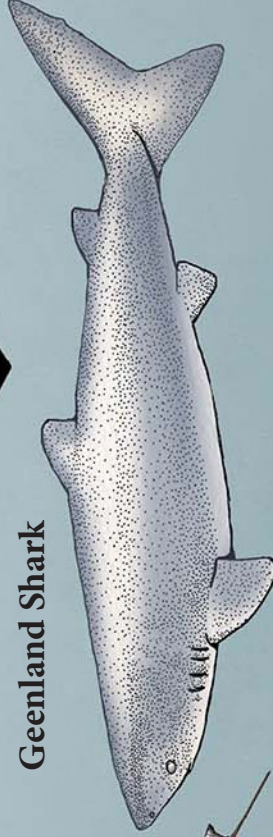
Whale Shark



Great White Shark



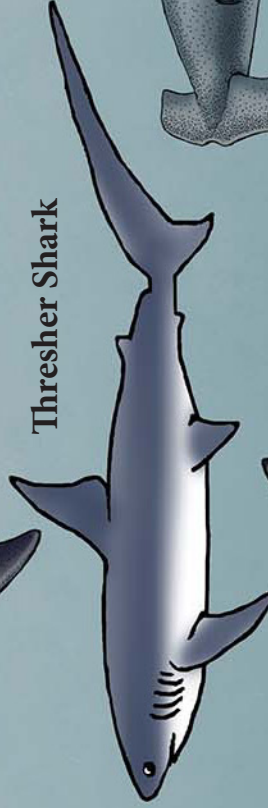
Greenland Shark



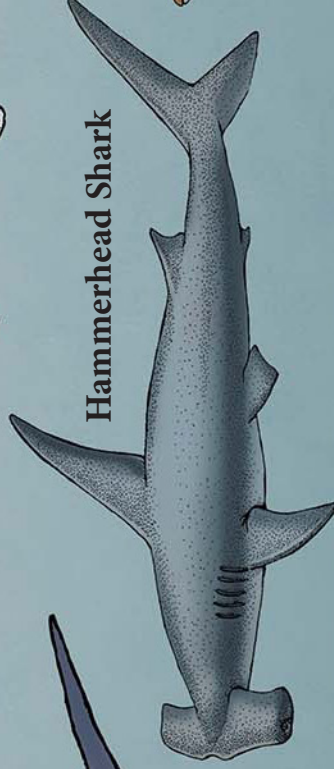
Skates



Thresher Shark



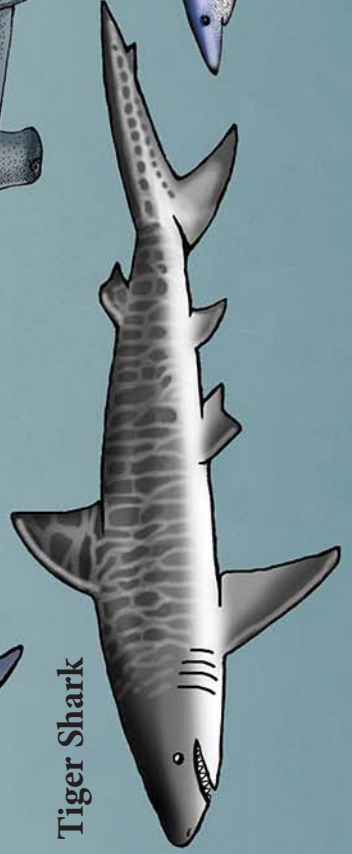
Hammerhead Shark



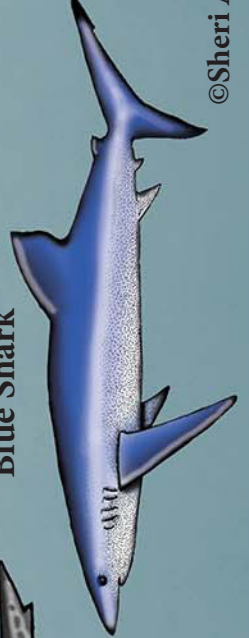
Stingrays



Tiger Shark



Blue Shark





# Sharks and Rays

U D F B Q B H L X I Q K F G M V V E K Y  
K O F E X O Y W F P B Z R W B V R R A A  
Y R K M B R W M O B B W Q A M I A X I R  
G W A Y L L V S P V H X N Y H H T B I G  
T V Q H P F Y G F F P J Q W S S W A N N  
K R A H S E T I H W T A E R G K D Y V I  
Z I M O C D M W G U N Y E Q V R S N N T  
R R T T B H A M V Q O H X V B A H V A S  
W M K I N E A E Y U S W N Q G H T L K S  
H Q G C G H S C H E Q U R T W S M F F Q  
R L I A J E W W R R R Q K M H D U J T A  
P A V V L D R H Y S E L X X A N D J X T  
D X V S S L T S E U G M B X L A M M Q I  
L E O P A R D S H A R K M X E L M G Z O  
S F O W Y W H L V A M L Q A S N U E Y P  
R H N M L A D Y O N R H J W H E Z V I K  
K Y B Z R K V A Z J N K M W A E B Q V F  
B N P K R A H S E U L B Y B R R I B S I  
D C P W B A E K Y Z O U I K K G Z S G V  
L N U W Q H O L G K O M H C F L W I U K

BLUE SHARK

GREAT WHITE SHARK

GREENLAND SHARK

HAMMER HEADSHARK

LEOPARD SHARK

NURSE SHARK

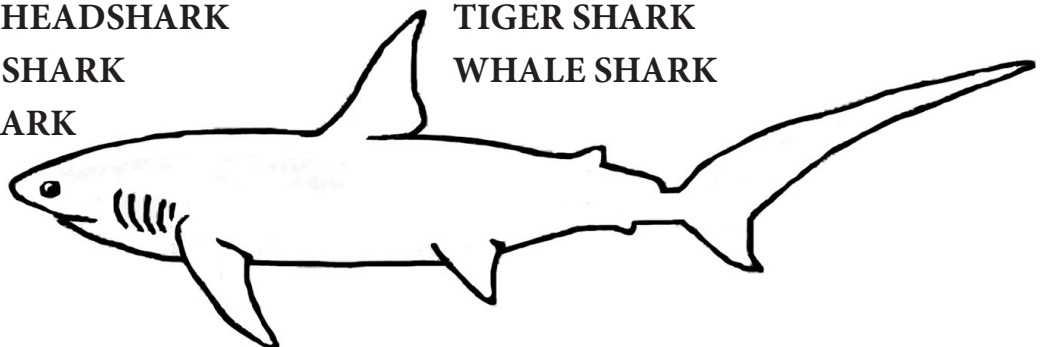
SAND SHARK

STING RAY

THRESHER SHARK

TIGER SHARK

WHALE SHARK



# Sharks and Rays KEY

U D F B Q B H L X I Q K F G M V V E K Y  
 K O F E X O Y W F P B Z R W B V R R A A  
 Y R K M B R W M O B B W Q A M I A X I R  
 G W A Y L L V S P V H X N Y H H T B I G  
 T V Q H P F Y G F F P J Q W S S W A N N  
 K R A H S E T I H W T A E R G K D Y V I  
 Z I M O C D M W G U N Y E Q V R S N N T  
 R R T T B H A M V Q O H X V B A H V A S  
 W M K I N E A E Y U S W N Q G H T L K S  
 H Q G C G H S C H E Q U R T W S M F F Q  
 R L I A J E W W R R R Q K M H D U J T A  
 P A V V L D R H Y S E L X X A N D J X T  
 D X V S S L T S E U G M B X L A M M Q I  
 L E O P A R D S H A R K M X E L M G Z O  
 S F O W Y W H L V A M L Q A S N U E Y P  
 R H N M L A D Y O N R H J W H E Z V I K  
 K Y B Z R K V A Z J N K M W A E B Q V F  
 B N P K R A H S E U L B Y B R R I B S I  
 D C P W B A E K Y Z O U I K K G Z S G V  
 L N U W Q H O L G K O M H C F L W I U K

BLUE SHARK

GREAT WHITE SHARK

GREENLAND SHARK

HAMMERHEAD SHARK

LEOPARD SHARK

NURSE SHARK

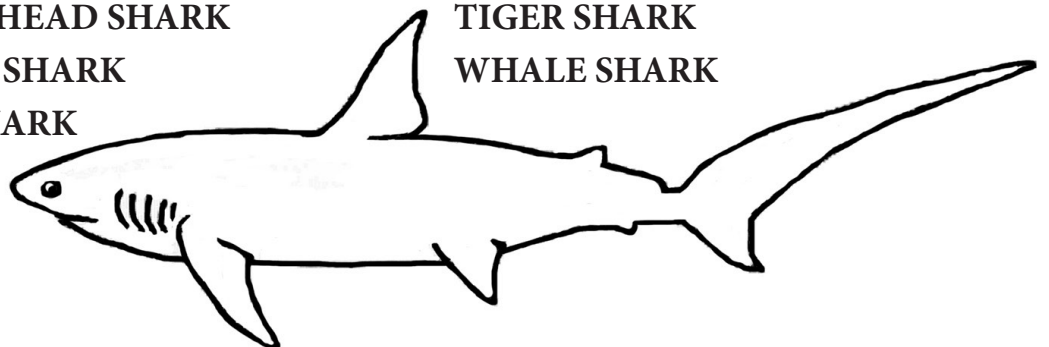
SAND SHARK

STING RAY

THRESHER SHARK

TIGER SHARK

WHALE SHARK

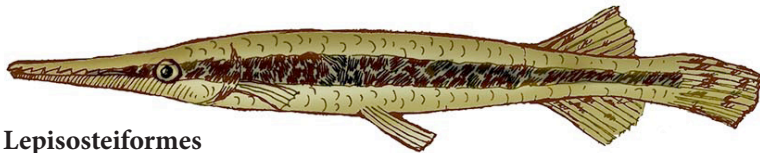


# Fish

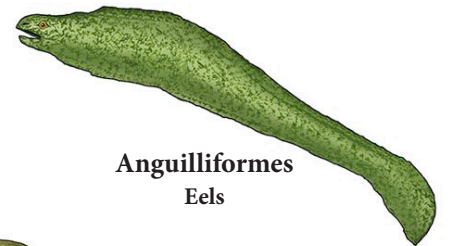
Fish are in one group or **Class** of animals called **Bony Fishes (Osteichthyes)**. They have several **body traits** in common:

- 1) They are **cold-blooded** vertebrates (they have a backbone).
- 2) They **breathe through gills**.
- 3) They are covered with **tough, protective scales**.
- 4) They have **pairs of fins** for swimming.
- 5) Most are **flattened from side to side**.
- 6) They have an organ called a **swim bladder** that helps keep them afloat.
- 7) There are 12 groups (**Orders**) of Bony Fish:

- Amiiformes - Bowfin Fish
- Anguilliformes - Eels
- Batrachoidiformes - Toadfish
- Clupeiformes - Sardines and Anchovies
- Elopiformes - Tarpons and Ladyfish
- Gasterosteiformes - Seahorses and Pipefish
- Lepisosteiformes - Gar
- Lophiiformes - Anglerfish (deep ocean fish)
- Perciformes - largest order that includes most ocean fish (both dorsal and anal fins)
- Scorpaeniformes - Lionfish and Scorpionfish
- Siluriformes - Catfish and Bullheads
- Tetraodontiformes - Pufferfish and Box fish

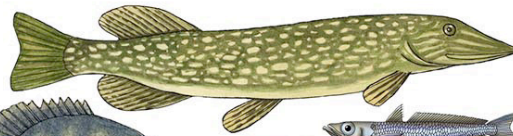


Lepisosteiformes  
Gar

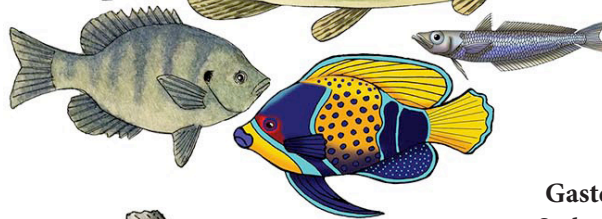
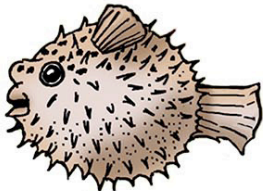


Anguilliformes  
Eels

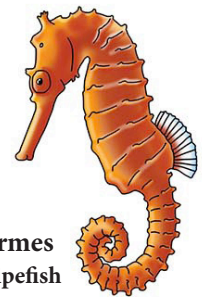
Perciformes  
Largest order that includes most ocean fish.



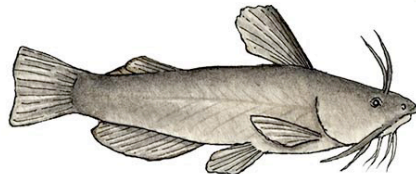
Tetraodontiformes Pufferfish  
and Box fish



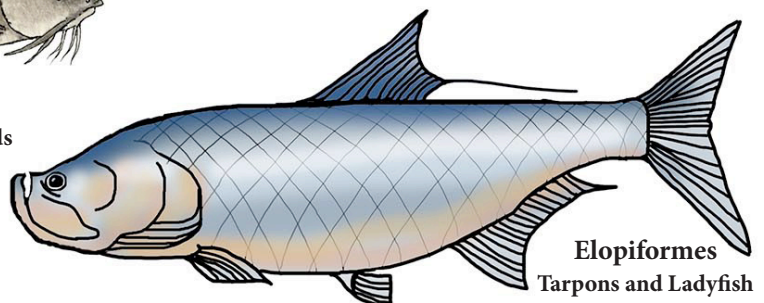
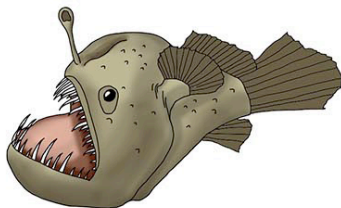
Gasterosteiformes  
Seahorses and Pipefish



Lophiiformes  
Anglerfish



Siluriformes  
Catfish and Bullheads



Elopiformes  
Tarpons and Ladyfish

# Fish

Fish are in one group or **Class** of animals called **Bony Fishes (Osteichthyes)**. There are 12 groups (**Orders**) of Bony Fish. They have several **body traits** in common:

They breathe through gills.

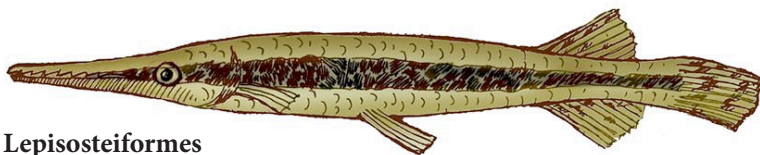
They have an organ called a swim bladder that helps keep them afloat.

They are covered with tough, protective scales.

They have pairs of fins for swimming.

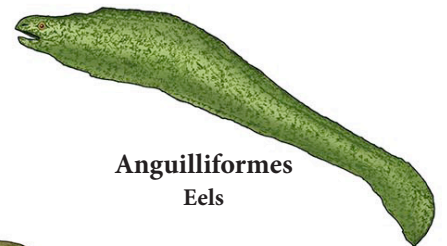
They are cold blooded.

Most are flattened from side to side.



Lepisosteiformes

Gar

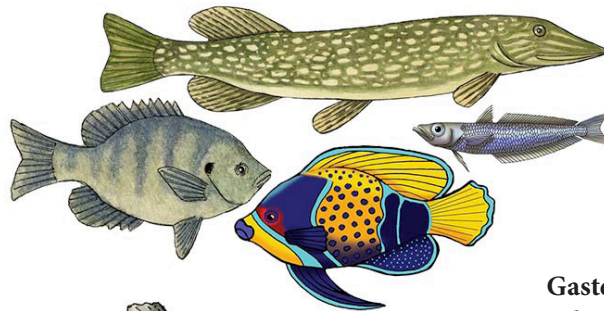
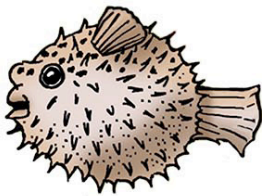


Anguilliformes

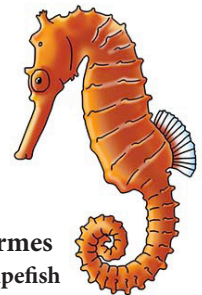
Eels

Perciformes  
Largest order that includes most ocean fish.

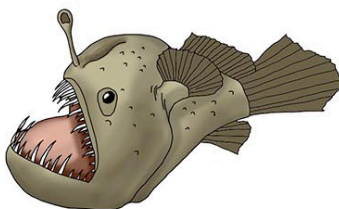
Tetraodontiformes Pufferfish  
and Box fish



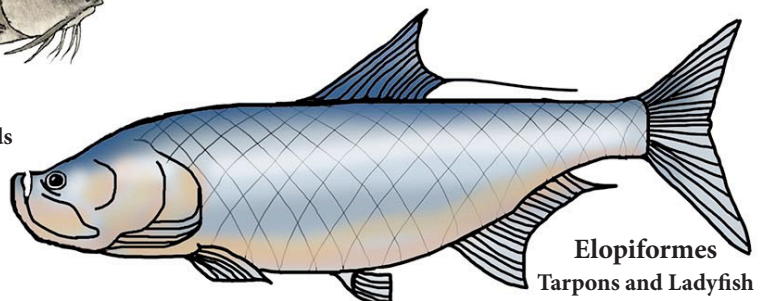
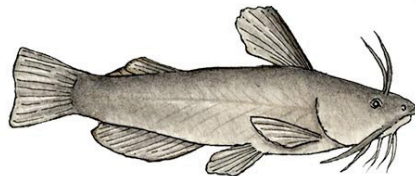
Gasterosteiformes  
Seahorses and Pipefish



Lophiiformes  
Anglerfish



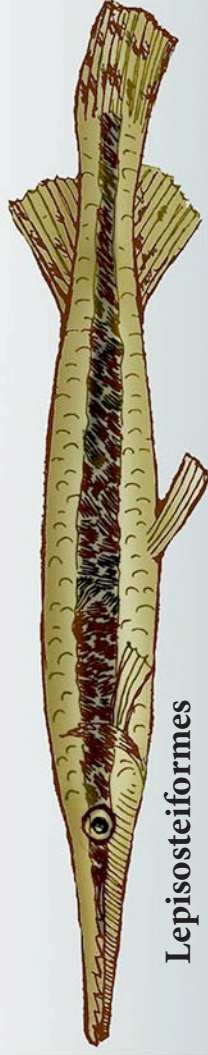
Siluriformes  
Catfish and Bullheads



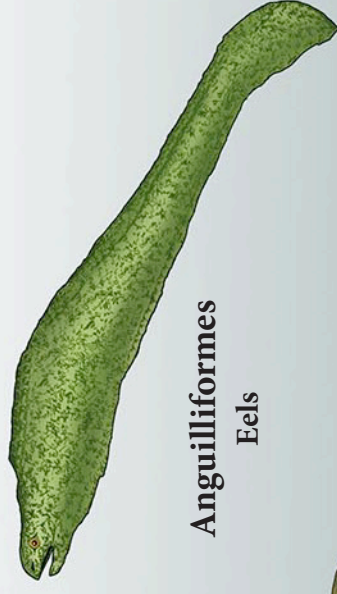
Elopiformes  
Tarpons and Ladyfish



# Orders of Bony Fish (Class Osteichthyes)



**Lepisosteiformes**  
Gar



**Anguilliformes**  
Eels



**Perciformes**

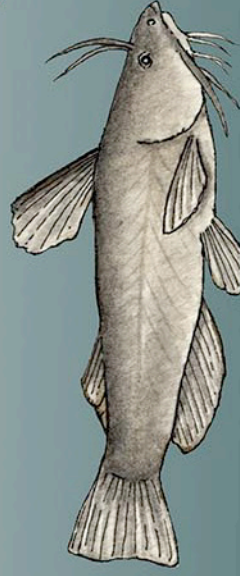
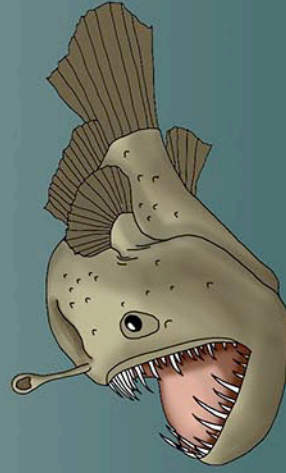
Largest order that includes most ocean fish.

**Tetraodontiformes Pufferfish  
and Box fish**

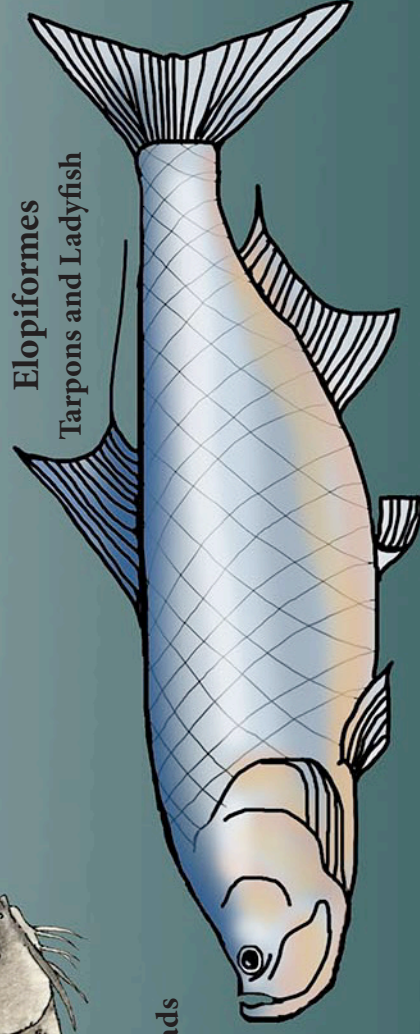


**Gasterosteiformes**  
Seahorses and Pipefish

**Lophiiformes**  
Anglerfish



**Siluriformes**  
Catfish and Bullheads



**Elopiformes**  
Tarpons and Ladyfish