

# Zoology Challenge

**Materials:** Pencil, animal cards, key, clipboard (optional)

## Vocabulary:

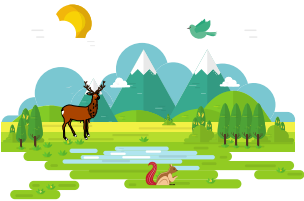
- **Biologist:** a scientist that studies living things, such as plants, animals, or bacteria.
- **Zoologist:** a biologist that specializes in the study of animals.
- **Paleontologist:** a scientist who studies past life forms using fossils.



Zoologists research animals in their natural environments, such as forests, oceans and deserts. When they study an animal, their task is to determine if it is a known animal or a newly discovered species. To figure this out, zoologists use a **dichotomous key** which compares animals physical characteristics. By following the key and comparing things like wings, antenna, or scales, a zoologist is able to tell animals apart, or determine if they have discovered a new species.

## The Challenge

You are a zoologist studying animals in a newly discovered environment. When you find an animal, use the dichotomous key to identify if the animal is a known species, or new to science!



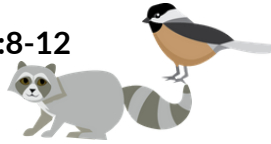
## Directions:

Cut out the animal cards and have someone else (maybe your parents or sibling) hide them around your house or yard. When you find an animal, start at Question 1 on the dichotomous key and decide which statement best describes the animal - then go to the next question until you have no more questions left and have arrived at a name for the animal. Once you have identified an animal, write its name on the back of the card. When you have found all 12 cards, check the answer key to see if you correctly named the animals.

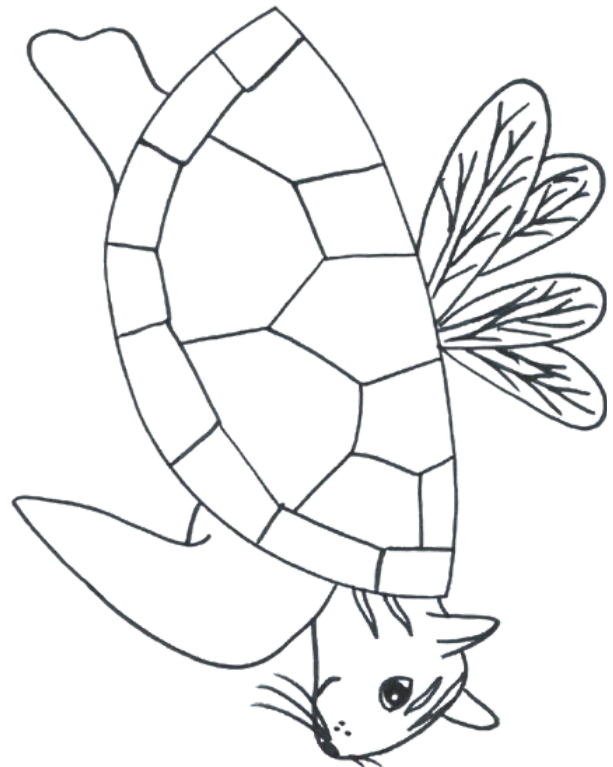
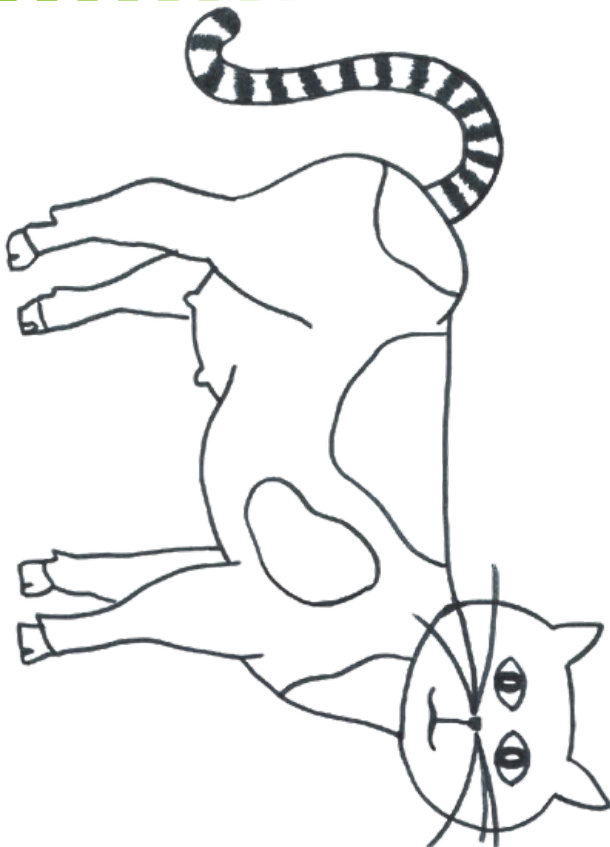


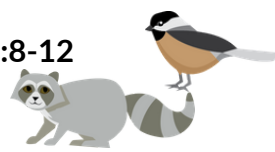
What happens if you find an animal that is not on the key?  
Congratulations! You have discovered a new species  
and you get to name it.



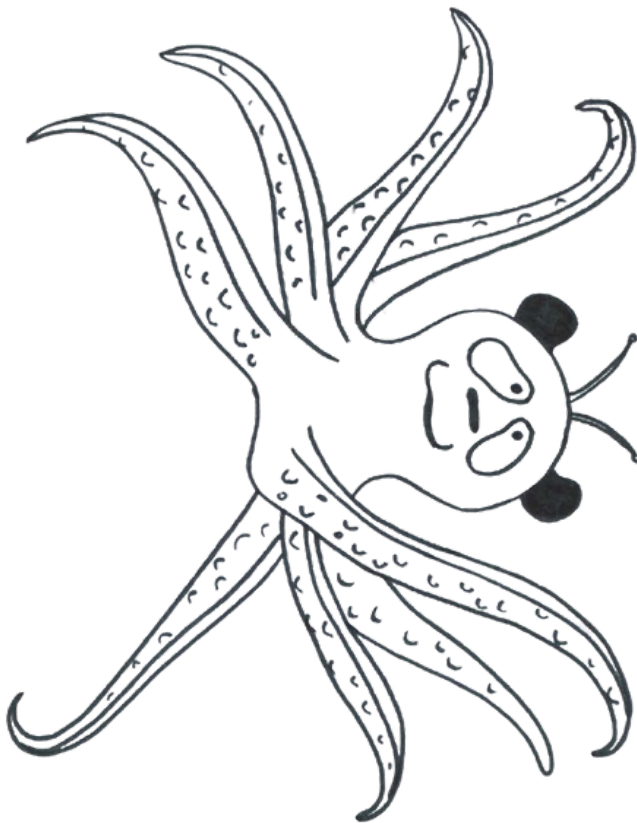
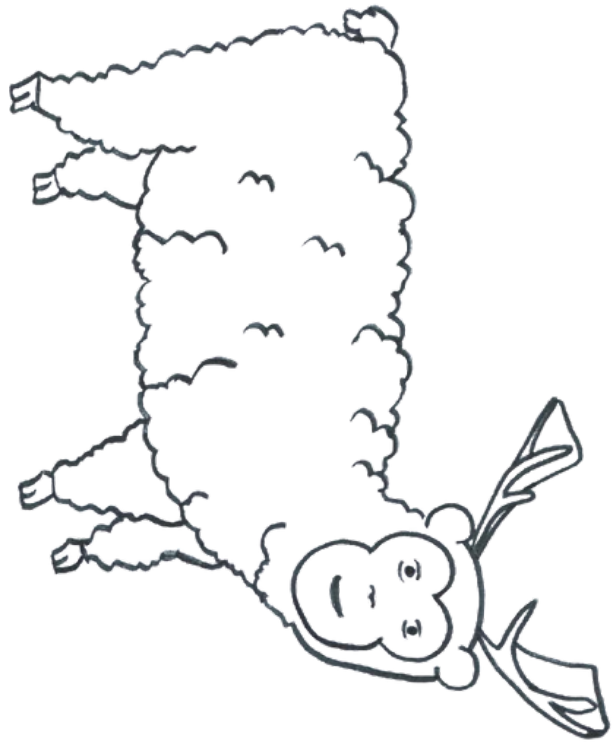
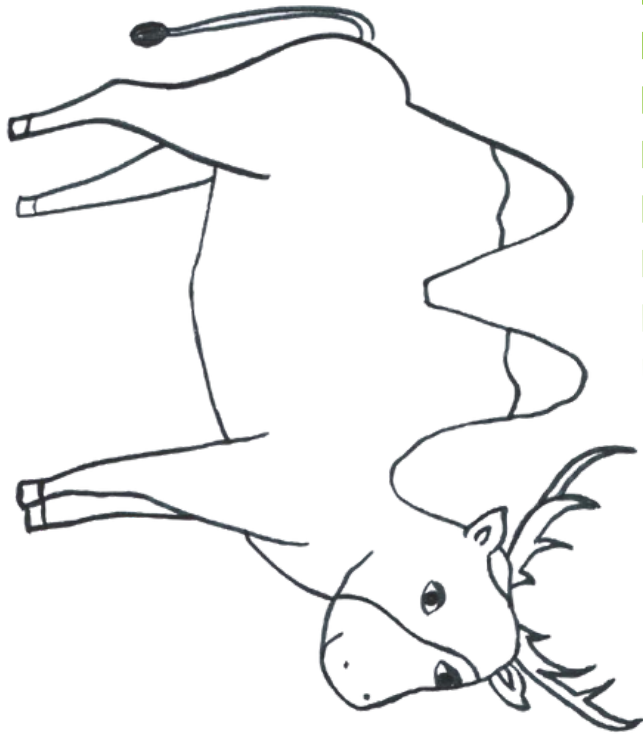


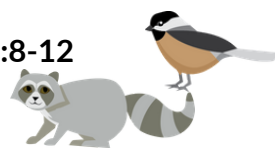
Animal Cards - Cut out and Hide!



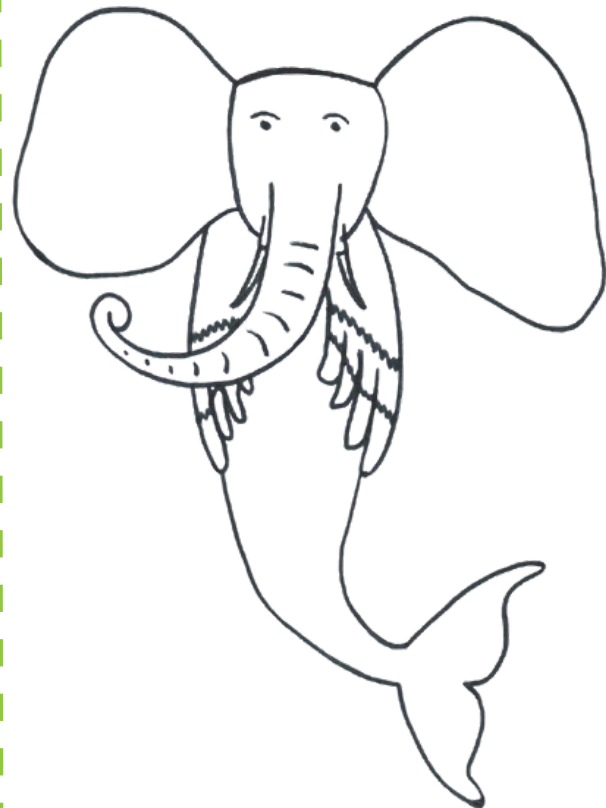
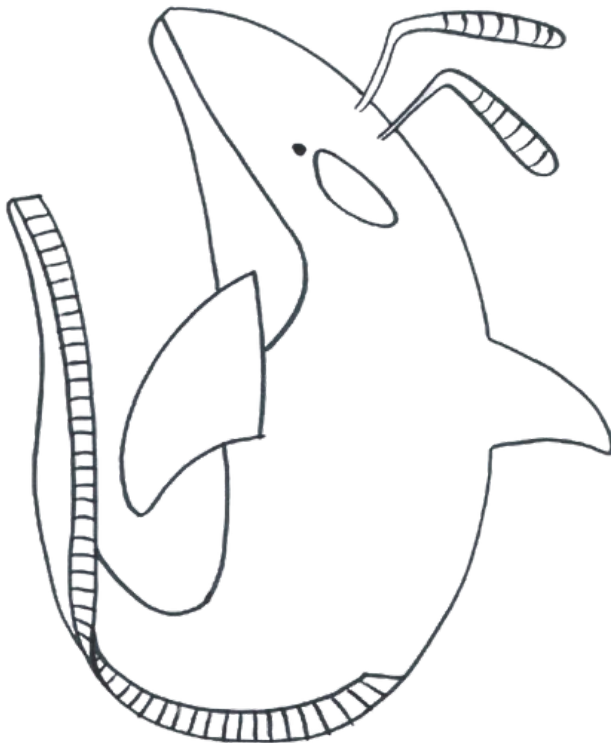
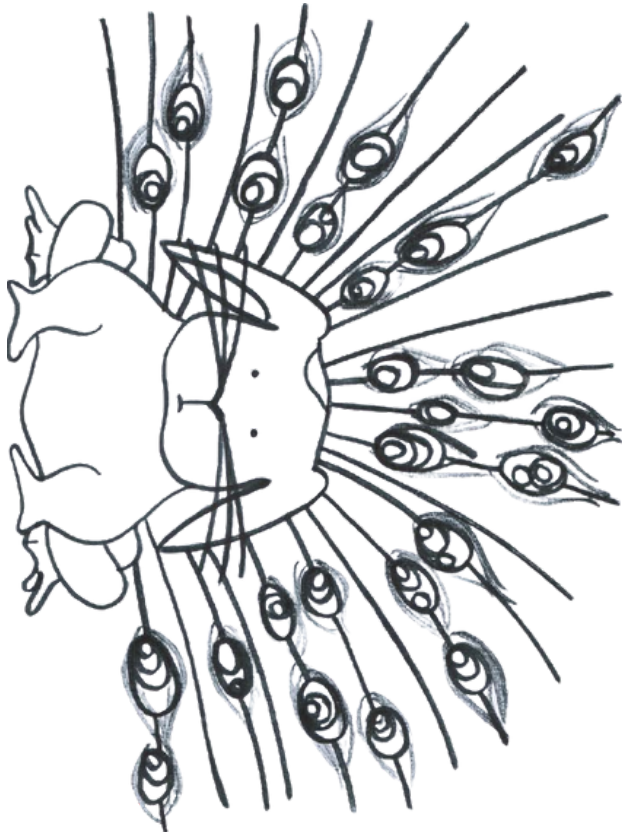


Animal Cards - Cut out and Hide!





Animal Cards - Cut out and Hide!





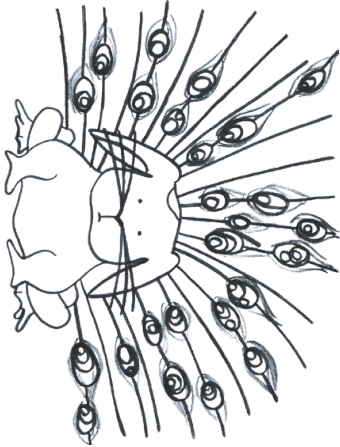
# Dichotomous Key

Start at Q1 and follow the statements and questions until you find the animal's name

- Q.1 The animal walks on land → Go to Q.2  
The animal swims in water → Go to Q.3
- Q.2 The animal has stripes → Go to Q.4  
The animal has no stripes → Go to Q.6
- Q.3 The animal has wings → Go to Q. 5  
The animal has no wings → Go to Q.7
- Q.4 The animal has a beak → You have found a **Tigpicken!**  
The animal has wings → You have found a **Bumblezerafferabbit!**
- Q.5 The animal has tusks → You have found a **Parodolphant!**  
The animal has whiskers → You have found a **Dragonurmunk!**
- Q.6 The animal has antlers → Go to Q.9  
The animal has no antlers → Go to Q.8
- Q.7 The animal has antennae → Go to Q.10  
The animal has no antennae → Go to Q.11
- Q.8 The animal has a long tail → You have found a **Catemurow!**  
The animal has droopy ears → You have found a **Peafrabbit!**
- Q.9 The animal is wooly → You have found a **Moosheeponkey!**  
The animal has humps → You have found a **Cowmeleer!**
- Q.10 The animal has fins → You have found an **Antmorca!**  
The animal has tentacles → You have found a **Pandeeoctopus!**
- Q.11 The animal has whiskers → You have found a **Shargger!**  
The animal has a striped tail → You have found a **New Species!!!**



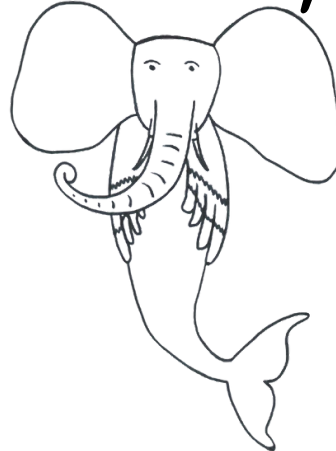
# Answer Key



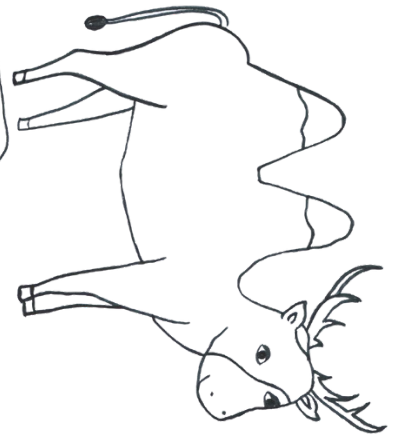
Peafrabbit



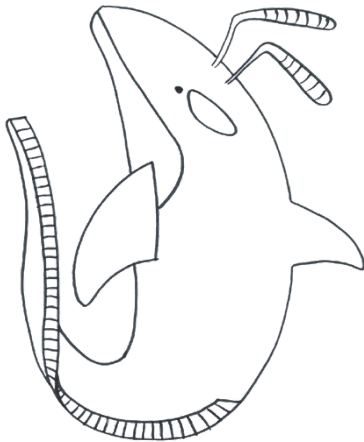
Bumblezerafferabbit



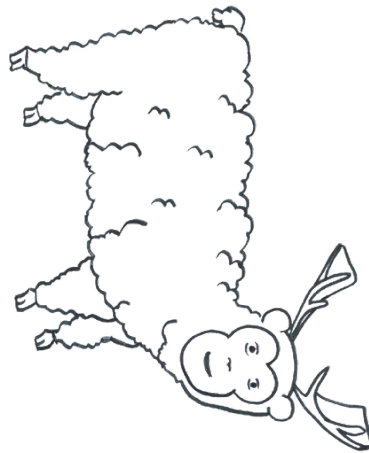
Parodolphant



Cowmeleer



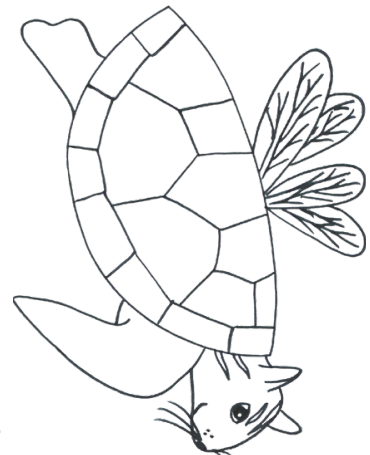
Antmorca



Mooseheeponkey



Catemurow



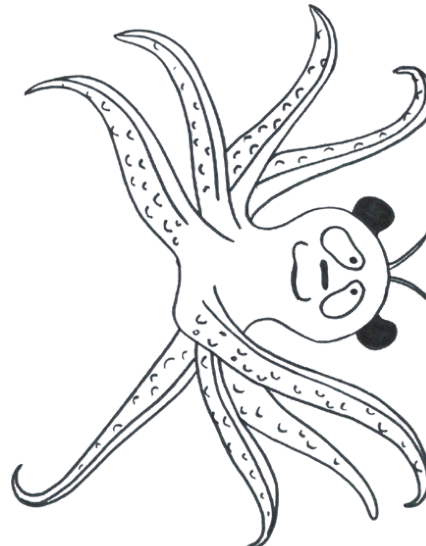
Dragonturmunk



New animal



Shargger



Pandeeoctopus



Tigpicken