Dichotomous keys are based on characteristics and uses process of comparison and elimination to identify the species.
• Which shark fin fits the following description?

End of tail is blunt instead of pointy?
• Which shark fin fits the following description?
  – Tail not separated into a top and bottom fin. End of tail is blunt instead of pointy?
• Which shark fin fits the following description?
  – Tail not separated into a top and bottom fin. End of tail is blunt instead of pointy?
• Which two shark fins fit the following description?
• Which two shark fins fit the following description?
  – Upper part of tail extends far beyond the bottom. Tip of top tail fin curved.
• Which two shark fins fit the following description?
  – Upper part of tail extends far beyond the bottom. Tip of top tail fin curved.
• Which shark fin fits the following description?
  – Trunk before tail fin has small fin.
• Which shark fin fits the following description?
  – Trunk before tail fin has small fin.
• Use constant characteristics rather than ones that disappear or vary with the season or other environmental factor.
• Use constant characteristics rather than ones that disappear or vary with the season or other environmental factor.
• Use characteristics which can be directly observed.
• Use characteristics which can be directly observed.

Black and White color with orange around neck...
• Use characteristics which can be directly observed.

And they love each other...
• Use characteristics which can be directly observed.

And they love each other...
• Use characteristics which can be directly observed.

"They form mating pairs is a better description."

And they love each other...
• What is a big insect to you?
• What is a big insect to you?
• What is a big insect to you?
• Use quantitative (numbered) measurements with an amount or dimension rather than vague terms like…
• Use quantitative (numbered) measurements with an amount or dimension rather than vague terms like... "big" and "small."
• Use quantitative (numbered) measurements with an amount or dimension rather than vague terms like… "big" and "small."
• Use quantitative (numbered) measurements with an amount or dimension rather than vague terms like… "big" and "small."
• Rules to Follow When Using a Dichotomous Key

– Always read both choices, even if the first seems to be the logical.
– Understand the meaning of the terms involved in the key.
– When measurements are given, use a scale to measure the specimen. Do not guess at a measurement.
– Living things are always variable, so do not base your organism identification in the field on a single observation.
• Rules to Follow When Using a Dichotomous Key

  – Always read both choices, even if the first seems to be the logical.
• Rules to Follow When Using a Dichotomous Key

  – Always read both choices, even if the first seems to be the logical.

  – Understand the meaning of the terms involved in the key.
• Rules to Follow When Using a Dichotomous Key

– Always read both choices, even if the first seems to be the logical.

– Understand the meaning of the terms involved in the key.

– When measurements are given, use a scale to measure the specimen. Do not guess at a measurement.
• Rules to Follow When Using a Dichotomous Key
  – Always read both choices, even if the first seems to be the logical.
  – Understand the meaning of the terms involved in the key.
  – When measurements are given, use a scale to measure the specimen. Do not guess at a measurement.
  – Living things are always variable, so do not base your organism identification in the field on a single observation.
• **Wacky People activity**
  – Use a dichotomous key to find the names for various humanoids.
  – Assignment is to correctly identify each character with the correct name.
Activity! Wacky People Available Sheet

- Use a dichotomous key to find the names for various humanoids.
- Assignment is to correctly identify each character with the correct name.

Try this one together on the next slide
# Wacky People Dichotomous Key

1a Two feet
1b Some other number of feet

2a Does not look at all human
2b Looks a lot like a human

3a One leg
3b Three or four legs

4a Fly-like
4b Not fly-like

5a Seems to be a girl
5b Not a girl

6a Leg is curled, two feet
6b Leg is straight, one foot

7a Three legs
7b Four legs

8a Has webbed feet
8b Clawed feet

9a Curly hair, no toes
9b Wiggly looking mouth, three toes on feet

10a Very long nose, open mouth
10b Some other appearance

11a Has duck bill, two pinchers
11b No arms or pinchers

12a Has ears, tail, and beak
12b Four eyes on stalks

13a One eye, webbed feet
13b Four stalked eyes, four pinchers

14a Three-toed feet, nose like a flower
14b Spider-like, has spots

Y / N and then go where directed until you find the species name.

- Mosk Cara
- Rita Nita
- Ru-ela Brella
- Giggles
- Hex Oculate
- Lugio Wirum
- C. Nile
- Elle E. Funk
- Tri D. Duckt
- Grif Leon
- Eggur Ondy
- Cue Kide
- Quadrumenos
- Tunia petalos
- Patterned mulywumpus
<table>
<thead>
<tr>
<th>Key Number</th>
<th>Description</th>
<th>Characters</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a</td>
<td>Two feet</td>
<td></td>
</tr>
<tr>
<td>1b</td>
<td>Some other number of feet</td>
<td></td>
</tr>
<tr>
<td>2a</td>
<td>Does not look at all human</td>
<td></td>
</tr>
<tr>
<td>2b</td>
<td>Looks a lot like a human</td>
<td></td>
</tr>
<tr>
<td>3a</td>
<td>One leg</td>
<td></td>
</tr>
<tr>
<td>3b</td>
<td>Three or four legs</td>
<td></td>
</tr>
<tr>
<td>4a</td>
<td>Fly-like</td>
<td></td>
</tr>
<tr>
<td>4b</td>
<td>Not fly-like</td>
<td></td>
</tr>
<tr>
<td>5a</td>
<td>Seems to be a girl</td>
<td></td>
</tr>
<tr>
<td>5b</td>
<td>Not a girl</td>
<td></td>
</tr>
<tr>
<td>6a</td>
<td>Leg is curled, two feet</td>
<td></td>
</tr>
<tr>
<td>6b</td>
<td>Leg is straight, one foot</td>
<td></td>
</tr>
<tr>
<td>7a</td>
<td>Three legs</td>
<td></td>
</tr>
<tr>
<td>7b</td>
<td>Four legs</td>
<td></td>
</tr>
<tr>
<td>8a</td>
<td>Has webbed feet</td>
<td></td>
</tr>
<tr>
<td>8b</td>
<td>Clawed feet</td>
<td></td>
</tr>
<tr>
<td>9a</td>
<td>Curly hair, no toes</td>
<td></td>
</tr>
<tr>
<td>9b</td>
<td>Wiggly looking mouth, three toes on feet</td>
<td></td>
</tr>
<tr>
<td>10a</td>
<td>Very long nose, open mouth</td>
<td></td>
</tr>
<tr>
<td>10b</td>
<td>Some other appearance</td>
<td></td>
</tr>
<tr>
<td>11a</td>
<td>Has duck bill, two pinchers</td>
<td></td>
</tr>
<tr>
<td>11b</td>
<td>No arms or pinchers</td>
<td></td>
</tr>
<tr>
<td>12a</td>
<td>Has ears, tail, and beak</td>
<td></td>
</tr>
<tr>
<td>12b</td>
<td>Four eyes on stalks</td>
<td></td>
</tr>
<tr>
<td>13a</td>
<td>One eye, webbed feet</td>
<td></td>
</tr>
<tr>
<td>13b</td>
<td>Four stalked eyes, four pinchers</td>
<td></td>
</tr>
<tr>
<td>14a</td>
<td>Three-toed feet, nose like a flower</td>
<td></td>
</tr>
<tr>
<td>14b</td>
<td>Spider-like, has spots</td>
<td></td>
</tr>
</tbody>
</table>

**Characters:**
- Mosk Cara
- Rita Nita
- Ru-ela Brella
- Giggles
- Hex Oculate
- Lugio Wirum
- C. Nile
- Elle E. Funk
- Tri D. Duckt
- Grif Leon
- Eggar Ondy
- Cue Kide
- Quadrumenox
- Tunia petalos
- Patterned Mullywumpus
### Wacky People Dichotomous Key

<table>
<thead>
<tr>
<th>(1) Two feet</th>
<th>(3) Other number of feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>(2a) Does not look at all human</td>
<td>(2b) Looks a lot like a human</td>
</tr>
<tr>
<td>(3a) One leg</td>
<td>(3b) Three or four legs</td>
</tr>
<tr>
<td>(4a) Fly-like</td>
<td>(4b) Not fly-like</td>
</tr>
<tr>
<td>(5a) Seems to be a girl</td>
<td>(5b) Not a girl</td>
</tr>
<tr>
<td>(6a) Leg is curled, two feet</td>
<td>(6b) Leg is straight, one foot</td>
</tr>
<tr>
<td>(7a) Three legs</td>
<td>(7b) Four legs</td>
</tr>
<tr>
<td>(8a) Has webbed feet</td>
<td>(8b) Clawed feet</td>
</tr>
<tr>
<td>(9a) Curly hair, no toes</td>
<td>(9b) Wiggly looking mouth, three toes on feet</td>
</tr>
<tr>
<td>(10a) Very long nose, open mouth</td>
<td>(10b) Some other appearance</td>
</tr>
<tr>
<td>(11a) Has duck bill, two pinchers</td>
<td>(11b) No arms or pinchers</td>
</tr>
<tr>
<td>(12a) Has ears, tail, and beak</td>
<td>(12b) Four eyes on stalks</td>
</tr>
<tr>
<td>(13a) One eye, webbed feet</td>
<td>(13b) Four stalked eyes, four pinchers</td>
</tr>
<tr>
<td>(14a) Three toed feet, nose like a flower</td>
<td>(14b) Spider-like, has spots</td>
</tr>
</tbody>
</table>

---

**Patterned Mulywumpus**

**Lugio Wirum**

**Eggur Ondy**

**Elly**

**Wirum**

**Tri D. Duckt**

**Elle E. Funk**

**C. Nile**

**Tunia petalos**

**Rita Nita**

**Cue Kide**

**Grif Leon**

**Mosk Cara**

**Quadrumenox**

**Hex Oculate**

**Ru-ela Brella**

**Giggles**
• Activity! Guess Who
  – Create a series of questions to find the three members of the class that I have written on note cards.
  – Use yes / no questions based on characteristics.
**Fish key**

**Step 1**
A If fish shape is long and skinny... then go to Step 2  
B If fish shape is not long and skinny... then go to step 3

**Step 2**
A If the fish has pointed fins, it is a trumpet fish  
B If the fish has smooth fins, it is a spotted moray eel

**Step 3**
A If fish has both eyes on top of the head... then go to step 4  
B If fish has one eye on each side of the head... then go to step 5

**Step 4**
A If the fish has long whip-like tail, it is a spotted eagle ray  
B If the fish has short, blunt tail, it is a peacock flounder

**Step 5**
A If fish has spots... then go to step 6  
B If fish does not have spots... then go to step 7

**Step 6**
A If fish has chin “whiskers,” it is a spotted goat fish  
B If fish does not have chin “whiskers,” it is a band-tail puffer

**Step 7**
A If fish has stripes... then go to step 8  
B If fish does not have stripes, it is a glassy sweeper

**Step 8**
A If fish has a v-shaped tail, it is a squirrel fish  
B If fish has a blunt tail, it is a glass-eye snapper
Optional (Easier) Make your own dichotomous key.

Snig
Wiggles
Octopig
Elfy
Piggly
Rightback
• Activity Worksheet! Salamander (Order Caudata) Dichotomous Key.
  – Use a dichotomous key to identify salamanders
<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>a</td>
<td>Hind limbs absent</td>
<td>Siren</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>b</td>
<td>Hind limbs present</td>
<td></td>
<td>Go to 2</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>a</td>
<td>External gills present in adults</td>
<td>Mud puppy</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>b</td>
<td>External gills absent in adults</td>
<td></td>
<td>Go to 3</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>a</td>
<td>Large size (over 7 cm long)</td>
<td></td>
<td>Go to 4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b</td>
<td>Small size (under 7 cm long)</td>
<td></td>
<td>Go to 5</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>a</td>
<td>Body background black, large white spots irregular in shape and size completely covering body &amp; tail</td>
<td>Tiger salamander</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>b</td>
<td>Body background black, small, round, white spots in a row along each side from eye to tip of tail</td>
<td>Spotted salamander</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>a</td>
<td>Body background black with white spots</td>
<td></td>
<td>Go to 6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b</td>
<td>Body background light color with dark spots and or lines on body</td>
<td></td>
<td>Go to 7</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>a</td>
<td>Small white spots on a black background in a row along each side from head to tip of tail</td>
<td>Jefferson salamander</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>b</td>
<td>Small white spots on a scattered throughout a black background from head to tip of tail</td>
<td>Slimy salamander</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>a</td>
<td>Large irregular black spots on a light background extending from head to tip of tail</td>
<td>Marbled salamander</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>b</td>
<td>No large irregular black spots on a light background</td>
<td></td>
<td>Go to 8</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>a</td>
<td>Round spots scattered along back and sides of body, tail flattened like a tadpole</td>
<td>Newt</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>b</td>
<td>Without round spots and tail not flattened like a tadpole</td>
<td></td>
<td>Go to 9</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>a</td>
<td>Two dark lines bordering a broad, light mid-dorsal stripe with a narrow median dark line extending from the head onto the tail</td>
<td>Two-lined salamander</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>b</td>
<td>Without two dark lines running the length of the body</td>
<td></td>
<td>Go to 10</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>a</td>
<td>A light stripe running the length of the body and bordered by dark pigment extending downward on the sides</td>
<td>Red-backed salamander</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>b</td>
<td>A light stripe extending the length of the body, a marked constriction at the base of the tail</td>
<td>Four-toed salamander</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
• Classification uses...
- Homology: Similarities between organisms

<table>
<thead>
<tr>
<th>Whale</th>
<th>Frog</th>
<th>Horse</th>
<th>Lion</th>
<th>Human</th>
<th>Bat</th>
<th>Bird</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whale</td>
<td>Frog</td>
<td>Horse</td>
<td>Lion</td>
<td>Human</td>
<td>Bat</td>
<td>Bird</td>
</tr>
<tr>
<td>-------</td>
<td>------</td>
<td>-------</td>
<td>------</td>
<td>-------</td>
<td>-----</td>
<td>------</td>
</tr>
</tbody>
</table>
![Skeleton Diagram]
Whale  Frog  Horse  Lion  Human  Bat  Bird
• Embryology – the study of the homology between the embryos of different species.
An embryo is an unborn (or unhatched) multicellular eukaryote in its earliest stages of development.
• Embryonic homology
• Embryonic homology
- Embryonic homology

<table>
<thead>
<tr>
<th>Fish</th>
<th>Salamander</th>
<th>Tortoise</th>
<th>Chicken</th>
<th>Pig</th>
<th>Cow</th>
<th>Rabbit</th>
<th>Human</th>
</tr>
</thead>
</table>

![Embryonic homology diagram](attachment:image.png)
• Embryonic homology
• Embryonic homology
• Embryonic homology
• Embryonic homology
• Embryonic homology
• Embryonic homology
• Embryonic homology
• Embryonic homology
• Embryonic homology
• Embryonic homology
- Embryonic homology
• Embryonic homology
• Embryonic homology
• Embryonic homology
• Embryonic homology
• Embryonic homology
• Embryonic homology
• Embryonic homology
• Embryonic homology
• Embryonic homology
• Embryonic homology
Which of the following is a blastula (early embryo) of a sea urchin, starfish, frog, and human?
Which of the following is a blastula (early embryo) of a sea urchin, starfish, frog, and human?
Which of the following is a blastula (early embryo) of a sea urchin, starfish, frog, and human?
Which of the following is a blastula (early embryo) of a sea urchin, starfish, frog, and human?
Which of the following is a blastula (early embryo) of a sea urchin, starfish, frog, and human?
Which of the following is a blastula (early embryo) of a sea urchin, starfish, frog, and human?
Which of the following is a blastula (early embryo) of a sea urchin, starfish, frog, and human.

A

B

C

D
Which of the following is a blastula (early embryo) of a sea urchin, starfish, frog, and human?
Which of the following is a blastula (early embryo) of a sea urchin, starfish, frog, and human:
Which of the embryos below is a human, chicken, fish, and cat?
• Which of the embryos below is a human, chicken, fish, and cat?
• Which of the embryos below is a human, chicken, fish, and cat?
Which of the embryos below is a human, chicken, **fish**, and cat?

A

B

C **Fish**

D

Copyright © 2010 Ryan P. Murphy
Which of the embryos below is a human, chicken, fish, and cat?
Which of the embryos below is a human, chicken, fish, and cat?
Which of the embryos below is a human, chicken, fish, and cat?
• Which of the embryos below is a human, chicken, fish, and cat?
DNA: Similar genes aid in classification
• DNA provides insight into how similar and how different organisms are.
• DNA provides insight into how similar and how different organisms are. This allows taxonomist to classify organisms more accurately.
• DNA provides insight into how similar and how different organisms are. This allows taxonomists to classify organisms more accurately.
• Humans and Chimpanzee share 94% of the same genes.
• Humans and Chimpanzee share 94% of the same genes.
• Humans and Chimpanzee share 94% of the same genes.
• Humans and Chimpanzee share 94% of the same genes.
  – We can get a blood transfusion from a chimp.
Red Pandas
• Red Pandas and Giant Pandas
• Red Pandas and Giant Pandas both eat bamboo.
• Red Pandas and Giant Pandas both eat bamboo.
  – Giant Pandas are more closely related to…
• Red Pandas and Giant Pandas both eat bamboo.
  – Giant Pandas are more closely related to…
  – Red Pandas more closely related to…
• Red Pandas and Giant Pandas both eat bamboo.

– Giant Pandas are more closely related to...
– Red Pandas more closely related to...
• Red Pandas and Giant Pandas both eat bamboo.
  – Giant Pandas are more closely related to…
  – Red Pandas more closely related to…
• Red Pandas and Giant Pandas both eat bamboo.
  – Giant Pandas are more closely related to...
  – Red Pandas more closely related to...
• Red Pandas and Giant Pandas both eat bamboo.
  – Giant Pandas are more closely related to...
  – Red Pandas more closely related to...
- Red Pandas and Giant Pandas both eat bamboo.
  - Giant Pandas are more closely related to...
  - Red Pandas more closely related to...
The 8 Taxonomic ranks. All living things have 8 names. From broad to narrow,

- 1) *Domain*
- 2) *Kingdom*
- 3) *Phylum*
- 4) *Class*
- 5) *Order*
- 6) *Family*
- 7) *Genus*
- 8) *Species*
• Remember “Dear King Phillip Came Over For Good Spaghetti”
• Domain - Dear
• Kingdom - King
• Phylum - Phillip
• Class - Came
• Family - For
• Genus - Good
• Species – Spaghetti
• Do you remember the order?
  – 1)
  – 2)
  – 3)
  – 4)
  – 5)
  – 6)
  – 7)
  – 8)
• Answer!
  – 1) Domain -  Dear
  – 2)
  – 3)
  – 4)
  – 5)
  – 6)
  – 7)
  – 8)
• Answer!
  – 1) Domain - Dear
  – 2) Kingdom - King
  – 3)
  – 4)
  – 5)
  – 6)
  – 7)
  – 8)
• Answer!
  – 1) Domain - Dear
  – 2) Kingdom - King
  – 3) Phylum - Phillip
  – 4)
  – 5)
  – 6)
  – 7)
  – 8)
• Answer!
  - 1) Domain - Dear
  - 2) Kingdom - King
  - 3) Phylum - Phillip
  - 4) Class - Came
  - 5)
  - 6)
  - 7)
  - 8)
• **Answer!**

  - 1) **Domain** - Dear
  - 2) **Kingdom** - King
  - 3) **Phylum** - Phillip
  - 4) **Class** - Came
  - 5) **Order** - Over
  - 6)
  - 7)
  - 8)
• **Answer!**

1) Domain - Dear
2) Kingdom - King
3) Phylum - Phillip
4) Class - Came
5) Order - Over
6) Family - For
7) 
8)
• Answer!

– 1) Domain - Dear
– 2) Kingdom - King
– 3) Phylum - Phillip
– 4) Class - Came
– 5) Order - Over
– 6) Family - For
– 7) Genus - Good
– 8)
• Answer!

- 1) Domain - Dear
- 2) Kingdom - King
- 3) Phylum - Phillip
- 4) Class - Came
- 5) Order - Over
- 6) Family - For
- 7) Genus - Good
- 8) Species - Spaghetti
Answer:

1) Domain - Deads
2) Kingdom - Kin
3) Phylum - Phillip
4) Class - Came
5) Order - Over
6) Family - For
7) Genus - Good
8) Species - Spaghetti
<table>
<thead>
<tr>
<th>Grizzly bear</th>
<th>Black bear</th>
<th>Giant panda</th>
<th>Red fox</th>
<th>Abert squirrel</th>
<th>Coral snake</th>
<th>Sea star</th>
</tr>
</thead>
</table>

**KINGDOM Animalia**

**PHYLUM Chordata**
Grizzly bear  Black bear  Giant panda  Red fox  Abert squirrel  Coral snake  Sea star

**KINGDOM** Animalia

**PHYLUM** Chordata

**CLASS** Mammalia
<table>
<thead>
<tr>
<th>Animal</th>
<th>Kingdom</th>
<th>Phylum</th>
<th>Class</th>
<th>Order</th>
<th>Family</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grizzly bear</td>
<td>Animalia</td>
<td>Chordata</td>
<td>Mammalia</td>
<td>Carnivora</td>
<td>Ursidae</td>
</tr>
<tr>
<td>Black bear</td>
<td></td>
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<td>Giant panda</td>
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<td>Red fox</td>
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<td>Abert squirrel</td>
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<tr>
<td>Coral snake</td>
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<tr>
<td>Sea star</td>
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</tbody>
</table>
Which of the following organisms below are not of the Kingdom Animalia?
• Answer – Which are not of Phylum Chordata?
• Answer – Which are not in the Class Mammalia?
• Answer – Which are not in the Order Rodentia?
Answer – Which are not in the Family Sciuridae?
• Answer – Which are not in the Genus Sciurus?
Answer – Which are not in the species vulgaris?
• Answer – Sciurus vulgaris
• Taxonomic Name:

- Domain: Eukarya
- Kingdom: Animalia
- Phylum: Mammalia
- Class: Chordata
- Order: Rodentia
- Family: Sciuridae
- Genus: Sciurus
- Species: vulgaris
• Taxonomic Name:
  • Domain - Eukarya
• Taxonomic Name:
• Domain - Eukarya
• Taxonomic Name:
  • Domain - Eukarya
• Taxonomic Name:
• Domain - Eukarya
• Kingdom - Animalia
• Taxanomic Name:
  • Domain - Eukarya
  • Kingdom - Animalia
• Taxonomic Name:
• Domain - Eukarya
• Kingdom - Animalia
• Taxonomic Name:
  • Domain  - Eukarya
  • Kingdom  - Animalia
  • Phylum  – Chordata
• Taxonomic Name:
  • Domain - Eukarya
  • Kingdom - Animalia
  • Phylum – Chordata
• Taxonomic Name:
• Domain - Eukarya
• Kingdom - Animalia
• Phylum – Chordata
• **Taxonomic Name:**
  • Domain - *Eukarya*
  • Kingdom - *Animalia*
  • Phylum – *Chordata*
  • Class – *Mammalia*
• Taxonomic Name:
• Domain - Eukarya
• Kingdom - Animalia
• Phylum – Chordata
• Class – Mammalia
• Taxonomic Name:
• Domain - Eukarya
• Kingdom - Animalia
• Phylum – Chordata
• Class – Mammalia
• Taxonomic Name:
• Domain - Eukarya
• Kingdom - Animalia
• Phylum – Chordata
• Class – Mammalia
• Order – Rodentia
• Taxonomic Name:
• Domain - Eukarya
• Kingdom - Animalia
• Phylum – Chordata
• Class – Mammalia
• Order – Rodentia
• Taxonomic Name:
  • Domain - Eukarya
  • Kingdom - Animalia
  • Phylum – Chordata
  • Class – Mammalia
  • Order – Rodentia
• Taxonomic Name:
• Domain - Eukarya
• Kingdom - Animalia
• Phylum – Chordata
• Class – Mammalia
• Order – Rodentia
• Family – Sciuridae
Taxonomic Name:
- Domain - Eukarya
- Kingdom - Animalia
- Phylum – Chordata
- Class – Mammalia
- Order – Rodentia
- Family – Sciuridae
• Taxonomic Name:
• Domain - Eukarya
• Kingdom - Animalia
• Phylum – Chordata
• Class – Mammalia
• Order – Rodentia
• Family – Sciuridae
• Taxanomic Name:
  • Domain - Eukarya
  • Kingdom - Animalia
  • Phylum – Chordata
  • Class – Mammalia
  • Order – Rodentia
  • Family – Sciuridae
  • Genus – Sciurus
• Taxonomic Name:
  • Domain  - Eukarya
  • Kingdom  - Animalia
  • Phylum   – Chordata
  • Class    – Mammalia
  • Order    – Rodentia
  • Family   – Sciuridae
  • Genus    – Sciurus
• Taxonomic Name:
  • Domain - Eukarya
  • Kingdom - Animalia
  • Phylum – Chordata
  • Class – Mammalia
  • Order – Rodentia
  • Family – Sciuridae
  • Genus – Sciurus
• Taxonomic Name:
• Domain - Eukarya
• Kingdom - Animalia
• Phylum – Chordata
• Class – Mammalia
• Order – Rodentia
• Family – Sciuridae
• Genus – Sciurus
• Species - vulgaris
• Taxonomic Name:
• **Domain** - Eukarya
• **Kingdom** - Animalia
• **Phylum** – Chordata
• **Class** – Mammalia
• **Order** – Rodentia
• **Family** – Sciuridae
• **Genus** – Sciurus
• **Species** - vulgaris