

# Taxonomy Part 1

## Classification

# How do we classify organisms?

- **Kingdom** is the top level in categorizing
- There are **7** levels in total:

Kingdom



Phylum



Class



Order



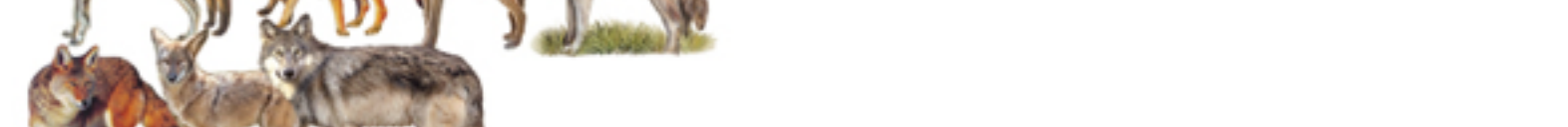
Family



Genus



Species



K P C O F G S

**K**ing **P**hilip **C**ut **O**pen **F**ive **G**reen **S**nakes

# Examples of common animals:

	<b>Eg: housefly</b>	<b>Eg: human</b>
<b>Kingdom</b>	Animalia	Animalia
<b>Phylum</b>	arthropod	chordata
<b>Class</b>	insecta	mammalia
<b>Order</b>	diptera	primates
<b>Family</b>	muscidae	hominidae
<b>Genus</b>	<i>Musca</i>	<i>Homo</i>
<b>Species</b>	<i>domestica</i>	<i>sapiens</i>

# Binomial Nomenclature

- every living thing has its own name that includes **genus** & **species**

*examples:*

Name of the house fly:

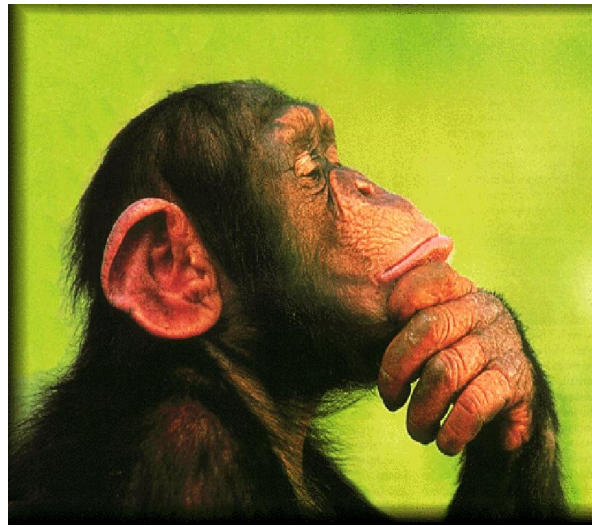
– *Musca domestica*

Name of a beaver:

– *Castor canadensis*

**These names tell us about the organism**

Which of the following are most closely related?



	<b>Rob Ford</b>	<b>Chimp</b>	<b>Baboon</b>
<b>Kingdom</b>	Animalia	Animalia	Animalia
<b>phylum</b>	chordata	chordata	chordata
<b>class</b>	mammalia	mammalia	mammalia
<b>order</b>	primates	primates	primates
<b>family</b>	hominidae	hominidae	Cercopithecidae
<b>genus</b>	<i>Homo</i>	<i>Pan</i>	<i>Apio</i>
<b>species</b>	<i>sapiens</i>	<i>Troglodytes</i>	<i>anubis</i>



# How do we identify all species?

- Using a dichotomous key....



1. Teeth visible .....go to 2  
     .....Teeth not visible .....go to 4
2. Has a wide, toothy smile .....Smilus toothyus  
     ....Is not smiling .....go to 3
3. Visibly crying .....Smilus dramaticus  
     .... Frowning .....Smilus upsettus
4. Eyes are symmetrical .... go to 5  
     ....Eyes not symmetrical .....go to 8
5. Eyes shaped like hearts ..... Smilus valentinus  
     ....Eyes are shaped as ovals .....go to 6
6. Smiling, happy face ..... Smilus traditionalis  
     .....Not happy, frowning or other .....go to 7
7. Mouth curved down, frowning .... Smilus saddus  
     .... Mouth is a small circle .....Smilus suprisus
8. Has a pirate eye patch .....Smilus piratus  
     ....Does not have eye patch ..... go to 9
9. One eye is much larger than the other eye ..... Smilus mutatus  
     ...One eye is winking .....Smilus winkus



Be ready to make your own  
Dichotomous Key