

# Dichotomous Key Attachment

## ATTACHMENT 1: OBSERVABLE CHARACTERISTICS

**Students generate a list of at least three observable characteristics  
(The list may be as long as you wish it to be.) for the following animals:**

Snake \_\_\_\_\_

Humming Bird \_\_\_\_\_

Bear \_\_\_\_\_

Elk \_\_\_\_\_

Manta Ray \_\_\_\_\_

Texas Long Horn \_\_\_\_\_

Frog \_\_\_\_\_

Sting Ray \_\_\_\_\_

Tortoise \_\_\_\_\_

## ATTACHMENT 2:

Students consolidate their lists, grouping animals by comparing and contrasting properties. (Expand to meet your needs.)

Breathes with lungs	Breathes with gills
Has fur or hair	Has feathers
Is warm blooded	Is cold blooded
Has long narrow beak	Has thick beak
Has horns	Does not have horns
Horns branch	Horns do not branch
Scaly skin	Smooth skin
Has front and back legs	Has no legs
Wing-like fins, horned appendage at front of animal	Wing-like fins, no horned appendage

**ATTACHMENT 3: SAMPLE**

**DICHOTOMOUS KEY**

Classification	If Yes go to	If No go to	What is it?
1. a) Is warm blooded	2	1b	
b) Is cold blooded		6	
2. a) has feathers	3	2b	
b) has hair or fur		4	
3. a) has long narrow beak		3b	Humming -bird
b) has a thick beak			Toucan
4. a) has horns	5	4b	
b) does not have horns			Bear
5. a) horns have branches		5b	Elk
b) horn do not branch			Texas Long - horn
6. a) breathes with gills	7	6b	
b) breathes with lungs	8		
7. a) has wing-like fin, horn-like appendage at front of animal		7b	Manta Ray
b) has wing-like fins, no horned appendage			Sting Ray
8. a) scaly skin	9	8b	
b) smooth skin			Frog
9. a) has front and hind legs		9b	Tortoise
b) has no legs			Snake

**ATTACHMENT 4: SAMPLE**

**Dichotomous Key**

Classification	If Yes go To	If No go To	What is it?
1. a) Leaves are broad and flat	3	1b	
b) Leaves are shaped like needles		2	
2. a) Needles are 9-18 inches long		2b	Long- leaf Pine
b) Needles are short grow in two rows on opposite side of twig			Florida Torreyia
3. a) Leaves are opposite	4	3b	
b) Leaves are alternate		5	
4. a) Leaves are palm -shaped		4b	Florida maple
b) 5 leaflets attached to top, 2 near the bottom			Mockernut Hickory
5. a) Leaves are simple	6	5b	
b) Leaves are compound		8	
6. a) Leaf margin deeply lobed and pointed		6b	Southern Red Oak
b) Leaf margin unlobed	7		
7. a) Leaves heart shaped, edge smooth. Tip is very pointed		7b	Catalpa
b) Leaves long /slender, edge finely toothed			Black Willow
8. a) Leaves opposite, usually 3-5 leaflets, coarsely toothed		8b	Box Elder
b) Leaves alternate, 8-23 leaflets, 3 inches long, toothed margin			Black Walnut

## ATTACHMENT 5

### Student Worksheet SAMPLE TEMPLATE

#### Student Activity : Dichotomous Key

- a. Students generate a list of at least three observable characteristics.
- b. Students consolidate their lists by grouping.
- c. Students build a Dichotomous Key.

Classification	If Yes go to	If No go to	What is It?
1a)			
b)			
2a)			
b)			
3a)			
b)			
4a)			
b)			
5a)			
b)			
6a)			
b)			
7a)			
b)			
8a)			
b)			

## ATTACHMENT 6

### Group Oral Presentation – Rubric

PRESENTATION RUBRIC	5 COMPLETELY 4 MOSTLY 3 HALFWAY 2 SOMEWHAT 1 A LITTLE 0 NONE
Student's names	
◆ Clearly heard by teacher	
◆ Thoroughly covers information	
1. Defines Dichotomous.	
2. Describes how a dichotomous key is used to identify "things".	
3. Gives rationale for group Dichotomous key.	
4. Describes what function diversity plays in preparing a dichotomous key.	
◆ Students understand how a dichotomous key is developed and the reason for its use.	
◆ All students in group participate in presentation.	
<b>Total divide by 40 = %</b>	

## ATTACHMENT 7

### Lab Rubric

1. Follows Directions	
2. Works cooperatively with partners	
3. Listens, reflects and respects views of others.	
4. All members of the group participate in lab activities.	
5. Fills out data sheet(s) completely and hands into teacher.	
<b>Total Points X 4 for = %</b>	

5 Complete and Accurate    4 Mostly Complete and Accurate 3 complete with Moderate Accuracy    2 Complete with little Accuracy 1 Very Little complete with Little Accuracy    0 not complete
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