

# Create Your Own Dichotomous Key



Congratulations!!! You are part of a collaborative scientific team that has just discovered numerous new species in the Meniffee Valley. You must now decide how you are going to classify and name your organisms! You will need to create your own dichotomous key.

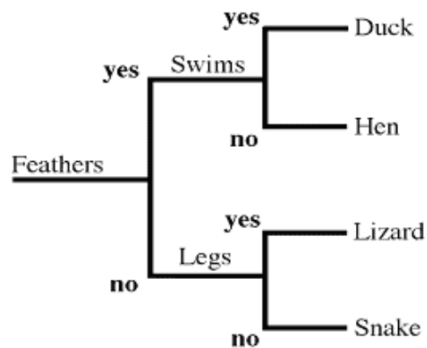
1. Closely examine the new species. What characteristics do you think will be important in classifying these critters? (Example: Number of eyes)
2. Replace the critters' number with a Latin name. Many Latin words are found on the next page. Write the Latin names below the picture of the critter.
3. Use characteristics of your choice to create your own dichotomous key. Remember: dichotomous keys always provide two options at each branch!  
**See the helpful hints below!**

4.	1	2	3	4
Neatness/ Effort Organization	Unable to read key. Very unorganized and sloppy.	Can read the key but is organized in a confusing manner, may have several dead ends or missing steps.	Key is neat but is missing 1 component that makes utilization hard for the reader	Key is very neat and can be utilized appropriately and easily.
Followed Directions	Missing 4 or more items that was required to identify using the developed key.	Missing 2-3 items that was required to identify	Missing 1 item that was required to identify	Listed objects and identified the correct number of items
Content	Key was not developed using <b>physical</b> appearances of items.	All but 2-3 items were described and identified according to <b>physical</b> appearance	All items but 1 were described and identified according to <b>physical</b> appearance	All items were described and identified according to <b>physical</b> appearance
Mechanics	Many grammatical, spelling, punctuation errors	A few grammatical, spelling, punctuation errors	Almost no grammatical, spelling, punctuation errors	No grammatical, spelling, or punctuation errors
Understanding/Accuracy	Product shows very little understanding of the concepts needed to create and use a dichotomous key	Product shows some understanding of the concepts needed to create and use a dichotomous key	Product shows understanding of the concepts needed to create and use a dichotomous key	Product shows exemplary level of understanding the concepts needed to create and use a dichotomous key

Total is out of 20 total points (Last 4 points for creative Latin names)

### Helpful Hints:

1. While you are constructing your key, you must be as specific as possible so that the user does not become confused. If the two choices are not precise, a user can easily choose the wrong one, and may get the wrong classification or have to start over.
2. Have several people use the key to see if their answers match with yours. If they do not, analyze the key with them and compare your choices to see where they got confused. You may need to re-word your choices.
3. One characteristic must be defined and used to decide which items are placed in which group. For example: a group of big cats could be divided into those with long tails and those with short tails. **The groups created must be opposites of each other.**
4. After two groups (A and B) have been created, divide the first group (A) into two more groups based again on one criterion (C and D). For example, if group A were the short tailed cats, group C might be short tailed cats with a plain colored coat. Group D would then be short tailed cats with a patterned coat. The best way to create a dichotomous key is to see it! Create a diagram first (see below)



EXAMPLE of how your key should look! Use the lab for completed examples!

1a		
1b		

2a		
2b		

3a		
3b		

4a		
4b		

5a		
5b		

6a		
6b		

7a		
7b		

8a		
8b		

9a		
9b		

10a		
10b		

## COLORS

black	nigr-
blue	cerule -
brown	brunne -
gray	glace -
purple	purport -
red	rubi -
white	albi -
yellow	flav -
orange	auranti -

## SHAPE

wide	lati -
round	circuli -
coiled	spirali -
curled	crisp -
cylindrical	cyлинд -
narrow	angusti -
pointed	accuminat -
split	dicho -
square	quadrat -
straight	recti -
thick	crassi -
triangular	delt -
wavy	undulat -

## TEXTURE

bare	nudi -
bearded	barbat -
hairy	hirsut -
rough	scabr -
smooth	glabr -

## MISCELLANEOUS

beautiful	bell -
color	chromato -

## NUMBERS

one	mono - uni -
two	bi -
three	tri -
four	quadri -

## TYPES OF ANIMALS

animal
bird
fish
insect
reptile
snake
worm

## ANIMAL STRUCTURES

ankle
arm
back
belly
brain
bristle
cheek
chest
claw
digit
ear
eye
eyelash
eyelid
face
foot
forehead
hair
hand
head
horn
knee
leg
lip
mouth
neck
nose
scale
skull
tail
tooth
wing