

## DICHOTOMOUS KEY ACTIVITY

A dichotomous key is a tool that allows the user to determine the identity of unknown items in the world. This type of key consists of a series of choices that leads the user to the correct name of an unknown item. “Dichotomous” means “divided into two parts.” Therefore, dichotomous keys always give two choices in each step.

### Problem:

What are the identities and scientific names of the candies in your “bag of treats?”

### Procedure:

1. Look at the candies in your plastic baggie. Do not eat them until you are told to do so by your teacher.
2. Using your group “Candy Key”, write the letters of the candies you have in your baggie in the data table on page 6.
3. Write down the common name for each candy in your data table.
4. Using the dichotomous key on page 6, follow each step to determine the Latin names and identities of your candies. Make sure you read each pair of choices beginning at 1A/1B and then the “Go To” section which will tell you what numbered step to go to next that applies to your candy. When you get to the step that gives the genus and species of your candy (scientific/Latin name) stop. Be sure to write down in order the numbered steps that you followed that led you to your answer. Record these steps in order in the “Pathway” section of your data chart. For example:

DATA CHART				
	CANDY LETTER	PATHWAY	LATIN NAME	COMMON NAME
1	L	1A, 2B,3A,	Lifus savus	Lifesaver

5. Have your teacher check your pathway. Redo if necessary.

## CANDY KEY

<b>FAMILY: CANDIUS</b>	<b>GO TO</b>
<b>1A. CANDY IS CHEWY/NOT HARD.....</b>	<b>2</b>
<b>1B. CANDY IS HARD.....</b>	<b>7</b>
<b>2A. CANDY IS WRAPPED.....</b>	<b>3</b>
<b>2B. CANDY IS NOT WRAPPED.....</b>	<b>Ursa gummus</b>
<b>3A. CANDY IS ROUNDED.....</b>	<b>4</b>
<b>3B. CANDY IS NOT ROUNDED.....</b>	<b>5</b>
<b>4A. WRAPPER IS ALL WHITE.....</b>	<b>Saltus taffinia</b>
<b>4B. WRAPPER IS NOT WHITE.....</b>	<b>5</b>
<b>5A. WRAPPER IS BROWN AND WHITE.....</b>	<b>Tutus rollus</b>
<b>5B. WRAPPER IS NOT BROWN AND WHITE.....</b>	<b>6</b>
<b>6A. WRAPPER IS SILVER.....</b>	<b>Chocolatus cyssan</b>
<b>6B. WRAPPER VARIES IN COLOR.....</b>	<b>Steorra explodus</b>
<b>7A. CANDY IS SPHERICAL(ball shaped).....</b>	<b>8</b>
<b>7B. CANDY IS NOT SPHERICAL.....</b>	<b>9</b>
<b>8A. CANDY IS WRAPPED.....</b>	<b>11</b>
<b>8B. CANDY IS UNWRAPPED.....</b>	<b>Mandibulus crackus</b>
<b>9A. WRAPPER IS TRANSPARENT(see through).....</b>	<b>10</b>
<b>9B. WRAPPER TELLS THE FLAVOR.....</b>	<b>Joyous rancheria</b>
<b>10A. WRAPPER IS CLEAR.....</b>	<b>Mintus stripus</b>
<b>10B. WRAPPER IS YELLOW.....</b>	<b>Ranunculus scotchus</b>
<b>11A. CANDY IS ON A STICK.....</b>	<b>Moronus moronus</b>
<b>11B. CANDY IS NOT ON A STICK.....</b>	<b>Sperus combustus</b>

NAME: \_\_\_\_\_

DATA CHART				
	CANDY LETTER/ PICTURE	PATHWAY	LATIN NAME	COMMON NAME
1				
2				
3				
4				
5				

### **Candy Supplies:**

(label with letters or do not label and have students draw a picture instead)

Starburst candy

Hershey's Kiss candy

Dum Dum sucker

Jolly Rancher Candy

Butterscotch Disc candy

Striped Mint candy

Atomic Fire Ball Candy

Tootsie Roll candy

Gummy Bear candy (unwrapped)

Jaw Breaker (unwrapped)

Salt Water Taffy candy

### **Answer Key:**

Starburst candy = **Steorra explodus** (1A, 2A, 3B, 5B, 6B)

Hershey's Kiss candy = **Chocolatus cyssan** (1B, 2A, 3B, 5A, 6A)

Dum Dum sucker = **Moronus moronus** (1B, 7A, 8A, 11B)

Jolly Rancher Candy = **Joyous Rancheria** (1B, 7B, 8A, 9B)

Butterscotch Disc candy = **Ranunculus scotchus** (1B, 7B, 8A, 9A, 10B)

Striped Mint candy = **Mintus stripus** (1B, 7B, 8A, 9A, 10A)

Atomic Fire Ball Candy = **Sperus combustus** (1B, 7A, 8A, 11B)

Tootsie Roll candy = **Tutus rollus** (1A, 2A, 3B, 5A)

Gummy Bear candy = **Ursa gummus** (1A, 2B)

Jaw Breaker = **Mandibulus crackus** (1B, 7A, 8B)

Salt Water Taffy candy = **Saltus taffinia** (1A, 2A, 3A, 4A)