

Dichotomous Keys Using Smiley Faces

Instructions: Use the key below to identify the species name of each of the smileys below.

1. Teeth visiblego to 2
....Teeth not visiblego to 4
2. Has a wide, toothy smileSmilus toothyus
....Is not smilinggo to 3
3. Visibly cryingSmilus dramaticus
.... FrowningSmilus upsettus
4. Eyes are symmetrical go to 5
....Eyes not symmetricalgo to 8
5. Eyes shaped like hearts Smilus valentinus
....Eyes are shaped as ovalsgo to 6
6. Smiling, happy face Smilus traditionalis
....Not happy, frowning or othergo to 7
7. Mouth curved down, frowning Smilus saddus
.... Mouth is a small circleSmilus suprisus
8. Has a pirate eye patchSmilus piratus
....Does not have eye patch go to 9
9. One eye is much larger than the other eye Smilus mutatus
One eye is winkingSmilus winkus



Extension:

A. The names of the smilies give you another bit of information about their taxonomy. Each of these smilies belongs to the same genus. What is their genus? _____

B. Names are often given to an organism by the person who discovers it, though they follow certain conventions, often they are named after the person, or where the organism was found, or given a name that describes the creature. Which convention was used in naming these smilies?



C. Suppose you discovered the new smiley pictured to the right. What name would you give it? _____

DICHOTOMOUS KEY ON NORNS

Norns belong to the **genus Norno** and can be divided into eight species that are generally located in specific regions of the world. Use the dichotomous key to identify the norns below. Write their complete scientific name (genus + species) in the blank.



1. Has pointed ears go to 3
....Has rounded earsgo to 2
2. Has no tail Kentuckyus
....Has tail Dakotus
3. Ears point upward go to 5
....Ears point downwardgo to 4
4. Engages in waving behavior Dallus
....Has hairy tufts on earsCalifornius
5. Engages in waving behavior WalaWala
....Does not engage in waving behavior.....go to 6
6. Has hair on head Beverlus
....Has no hair on head (may have ear tufts)go to 7
7. Has a tail Yorkio
....Has no tail, aggressive Rajus



A _____



B _____



C _____



D _____



E _____

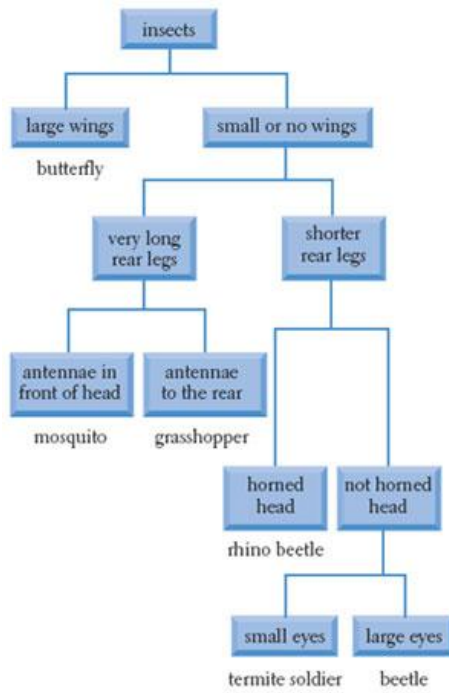


F _____



Answer the following questions:

- Using the dichotomous key, classify an organism that has small or no wings, shorter rear legs, not a horned head and small eyes

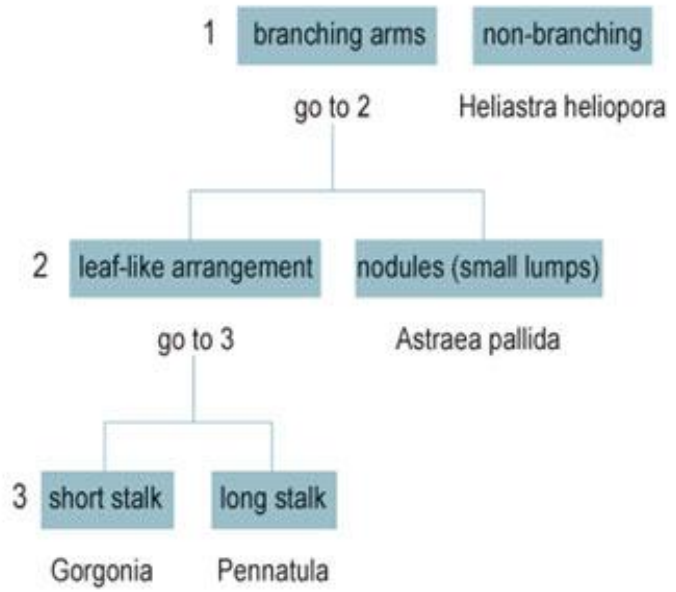
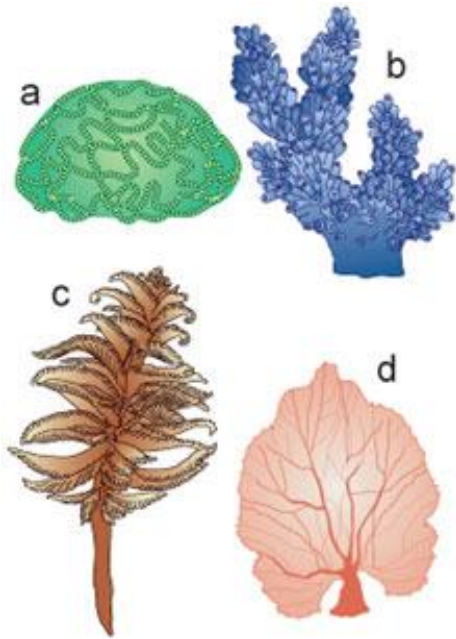


- termite soldier
 - grasshopper
 - mosquito
 - butterfly
- Using the circular key, classify an animal with 6 legs, 4 heads, 8 eyes and no mouth



- Xero
- Cara
- Feep
- Zeep

3. Using the dichotomous key, identify the name of the cnidarian labelled C.



- A) *Heliastrea heliopora*
- B) *Gorgonia*
- C) *Astraea pallida*
- D) *Pennatula*