Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_\_

What’s in a Name???

Understanding Scientific Names

**Part 1: Shape Island—Adventures in Naming**

You are a biologist looking for new animal species. You sailed for days across the ocean and finally found Shape Island hundreds of miles south of Hawaii. This island has some very unusual organisms. You have spent more than a year collecting specimens and classifying them according to Linnaeus’s system. All the specimens have names except for these last few. Use the glossary of Greek and Latin terms below to help you name them.

|  |  |
| --- | --- |
| Greek and Latin Terms | Meaning |
| mono | one |
| peri- | all around |
| -plast | body |
| -pod | foot |
| quad- | four |
| stoma | mouth |
| uro- | tail |

|  |  |
| --- | --- |
| Greek and Latin Terms | Meaning |
| anklos | angle |
| antennae | sensory organ |
| tri- | three |
| bi- | two |
| cyclo- | circle |
| macro- | large |
| micro- | small |

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 6. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

7. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 8. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

9. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 10. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Draw these creatures just from knowing their scientific names:

1. Quadanklosplast periantennae 2. Cycloplast monopod

3. Trianklos microstoma 4. microcycloplast biantennae

5. If you gave one of the species a common name such as “round-face-no-nose” would any other scientist know exactly which of the newly discovered species you were referring to? **Explain your answer.**

6. Give two reasons why it is important that every organism have a scientific name.

1-

2-

7. Why is it helpful that the first part of any scientific name is the genus name? How could it be useful here?

**Part 2: Name That Animal**

Scientific names, consisting of the animal's genus and species, are usually formed from descriptive

Latin or Greek words. If you understand the root words, you can probably guess what the animal looks like. Use the info sheet to find out what the name means and then match up the animal’s common name.

|  |  |  |
| --- | --- | --- |
| Scientific Name | What it means | Common Name |
| **Bufo** **marinus** |  |  |
| Cyclops **di**dactylus |  |  |
| Rhinoceros uni**cornis** |  |  |
| Ictalurus platy**cephalus** |  |  |
| Phyllo**dactyl**us lanei |  |  |
| Cnemidophorus sex**lineatus** |  |  |
| **Echin**aster **echino**phorus |  |  |
| Ophio**derma** brevi**spinum** |  |  |
| Ailuro**poda** **melano**leuca |  |  |
| **Denta**lium **elephant**inum |  |  |
| **Electro**phorus electricus |  |  |
| Dasypus novem**cinctus** |  |  |
| Hippo**campus** erectus |  |  |
| Carollia brevi**cauda** |  |  |
| **Hyla** **avi**voca |  |  |

Summarize what you have learned about classification and scientific names today. How do they work? Why are they important?

**Interpreting Scientific Names**

Scientific names, consisting of the animal's genus and species, are usually formed from descriptive

Latin or Greek words. If you understand the root words, you can probably guess what the animal

looks like.

DESCRIPTION

alti - high

annuli - ringed

aqua - water

bates - climber

brevis - short

cinctus - girdle, encircle

coronatus - crowned

curvi - curved

dasy - shaggy

echino - spiny

erectus - upright

hydro - water

hyla - tree

hylo - tree

lati - broad

lepto - thin

lineatus - lined

macro - large

marinus - marine

mega - large

micro - small

nudi - naked

pachy - think

phyll - leaf

phoros- bringer

platy - wide, flat

porus - with holes

pseudo - false

punctata - dotted

scler - hard

sphere – globe

voca(l)- speak

volans - flying

NUMBERS

bi - two

di - two

diplo twice

hemi - half

mon single

mono - one

multi - many

novem - nine

octo - eight

pent - five

poly - many

quad - four

quin - five

semi - half

sept - seven

sex - six

tetra - four

tri - three

uni - one

COLORS

Chloro- green

coccineus - scarlet

cyano - blue

flavi - yellow

leuco - white

melano - black

rhodo - red

xanth – yellow

BODY PARTS

auri - ear

carpus - wrist

caudata - tail

cephalus - head

cornis - horn

dactyl - finger

dentata - toothed

derm - skin

morpha - body form

pede - leg

penni - feather

poda -foot

ptera - wing

pus - face

rhino – nose

spinum- spine

stoma - mouth

uros - tail

ANIMAL TERMS

Ailuro- cat

anceps - two headed

avi - bird

bufo - toad

campus - sea monster

canis - dog

felis - cat

hippo - horse

ichthyes - fish

ophio - snake, serpent

rana - frog

This activity modified from an activity developed by P. Ashton, International Expeditions, Inc.

