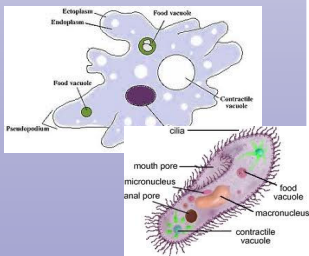


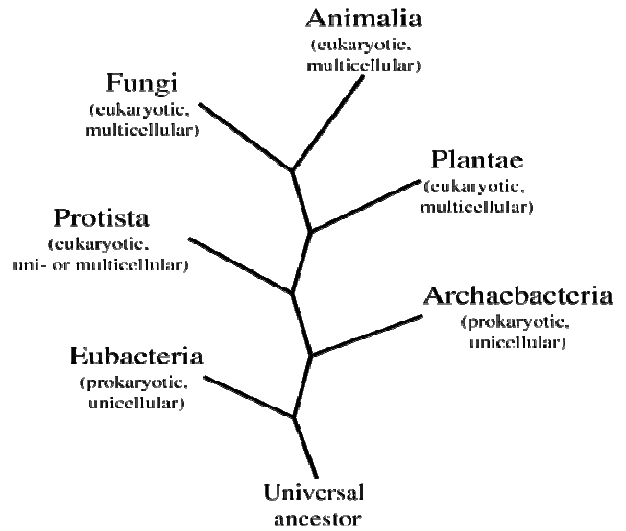
@ NEW SMYRNA BEACH HIGH SCHOOL

Accept our connectedness to events. It is not unknown forces that cause our problems. We are the cause and the cure. We create our own reality and we can change it.



Standard III

The Classification of Life



2011-2012

New Smyrna Beach High School

"Working together with parents, school personnel and community members, New Smyrna Beach High School students will graduate with the knowledge, skills and values to be positive contributors to society."



UNIT :
TOPIC: Classification of Living Things



Possible Test Questions/	Notes:/ASSOCIATED TERMS
1. What is taxonomy?	•
2. What is a taxon?	
3. Why was Linnaeus system	•
of classification so helpful?	
4. What is binomial	•
nomenclature?	
5. Explain what the genus	•
and the species names	
describe.	•
6. Why do biologists use	
scientific names?	•
7. Why are using common	•
names a problem?	
8. What are the 7 levels of	•
Linnaeus' classification	•
System?	•
	•
	•
	•
	•

Linnaeus' Traditional Classification of Organisms

Directions: The table below shows the complete classification of several species of animals. Use the table to answer the questions that follow.

Classification Taxa (Categories)	House Cat	Red Fox	Dog	Wolf	Gopher	Fly
Kingdom	Animalia	Animalia	Animalia	Animalia	Animalia	Animalia
Phylum	Chordata	Chordata	Chordata	Chordata	Chordata	Arthropoda
Class	Mammalia	Mammalia	Mammalia	Mammalia	Mammalia	Insecta
Order	Carnivora	Carnivora	Carnivora	Carnivora	Rodentia	Diptera
Family	Felidae	Canidae	Canidae	Canidae	Geomysidae	Muscidae
Genus	<i>Felis</i>	<i>Vulpes</i>	<i>Canis</i>	<i>Canis</i>	<i>Thomomys</i>	<i>Musca</i>
Species	<i>domesticus</i>	<i>fulva</i>	<i>familiaris</i>	<i>lupus</i>	<i>botatae</i>	<i>domestica</i>

1. If you had to classify the animal named *Vulpes Velox*, what kind of animal would be? How do you know? _____

2. From the table, which two animals are most closely related? _____
3. At what level does the relationship between gophers and house cats diverge (separate)? _____
4. How does the table indicate that a dog is more closely related to a red fox than a house cat? _____

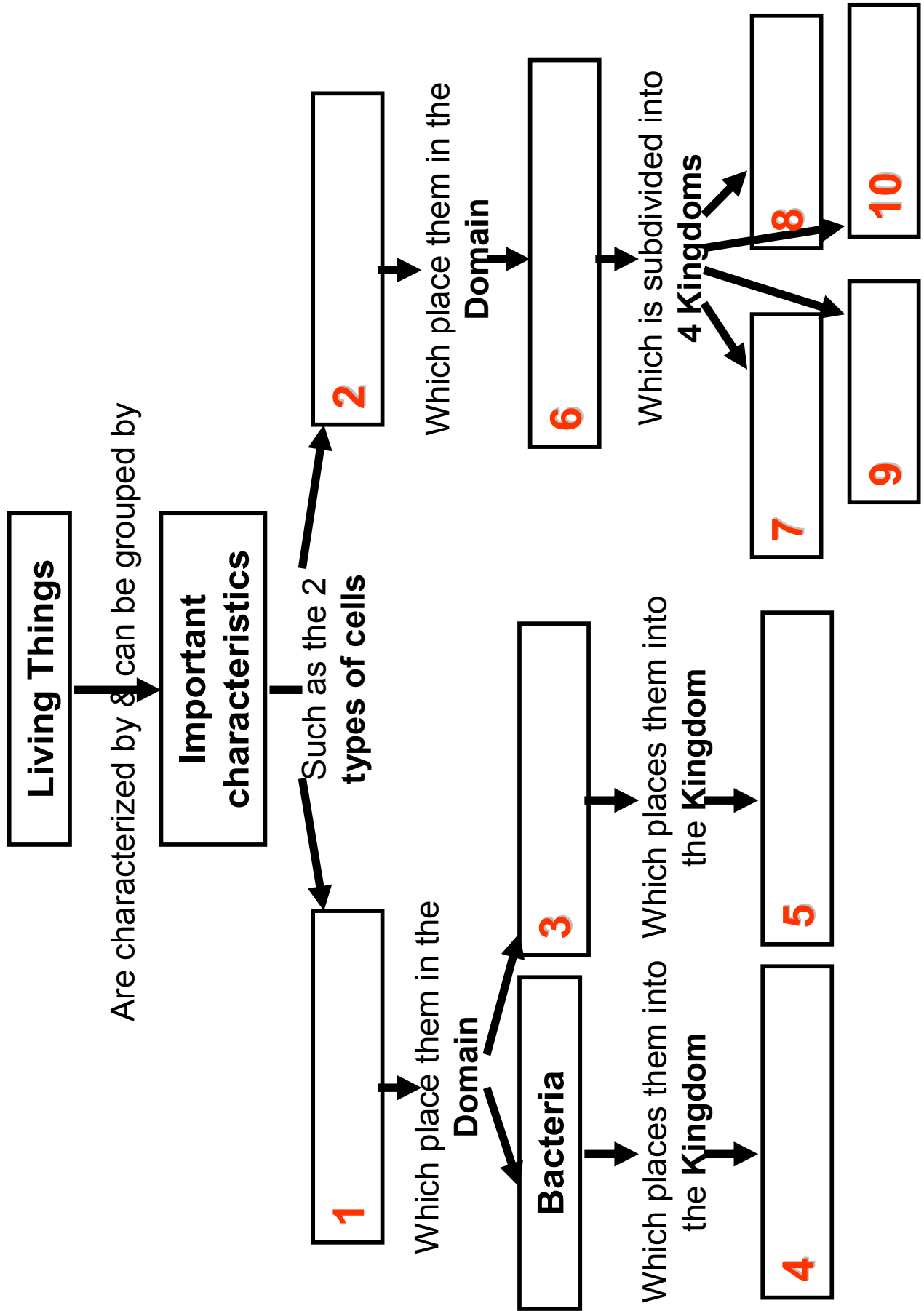
5. What Domain do these organisms belong to? _____



UNIT :
TOPIC: Classification of Living Things



Possible Test Questions/	Notes:/ASSOCIATED TERMS
9. What are the limitations to Linnaean classification system?	•
10. A more updated system of classification involves Phylogeny, which means:	•
11. Phylogeny can be shown using branching tree diagrams—the most common method is called Cladistics:	•
	•
12. Draw the Cladogram That is on page 525 in your Text AND complete the Quick Lab associated with It:	
13. MAKE SURE you read Pages 526—527 so you UNDERSTAND how to read a CLADOGRAM!	



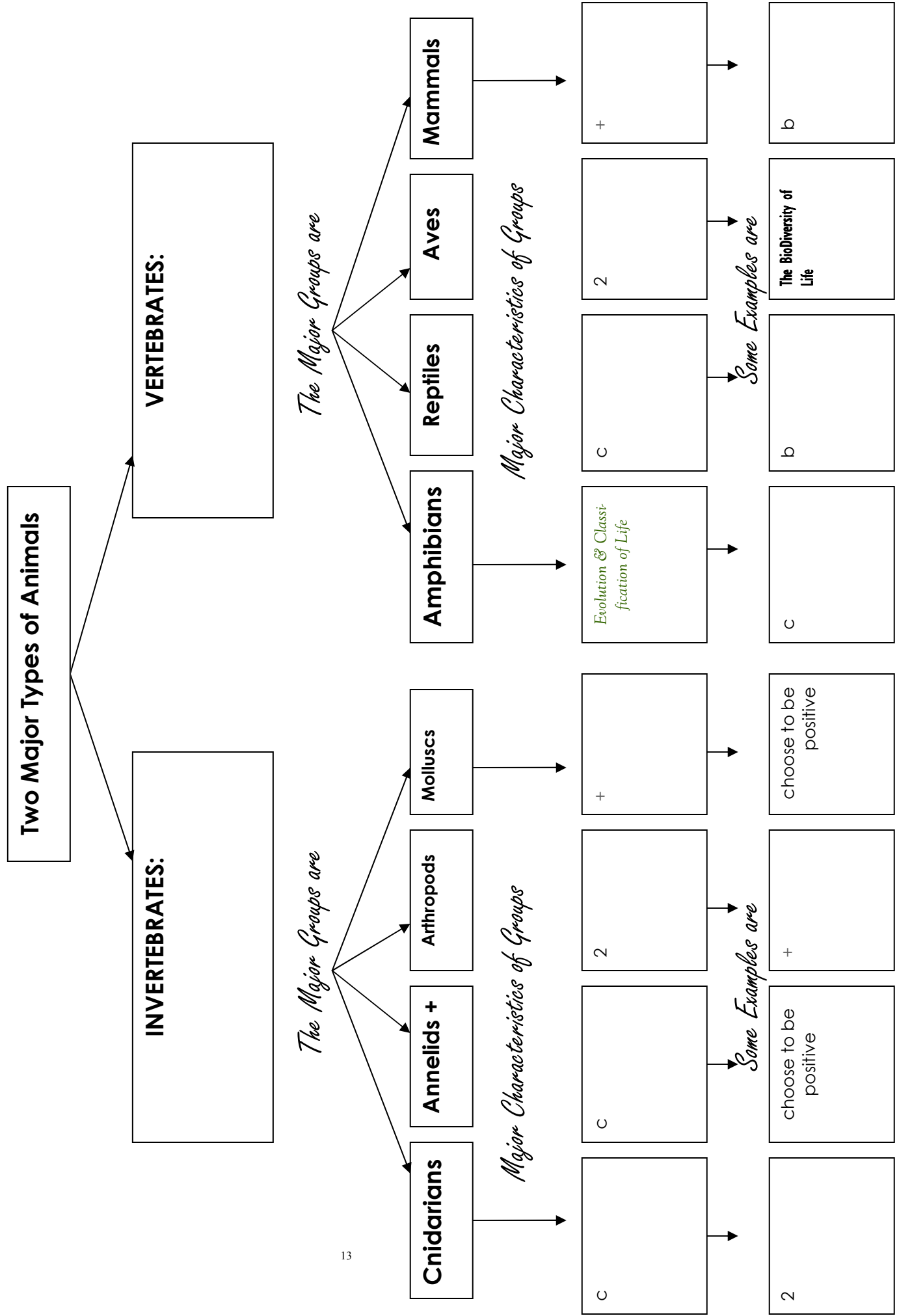
Distinguishing Characteristics of the Three Domains of Life

DOMAIN	Prokaryotic OR Eukaryotic	Uni-Cellular OR Multi-Cellular	Live where	Distinguishing Characteristics; Examples
Bacteria				
Archaea				
Eukarya				

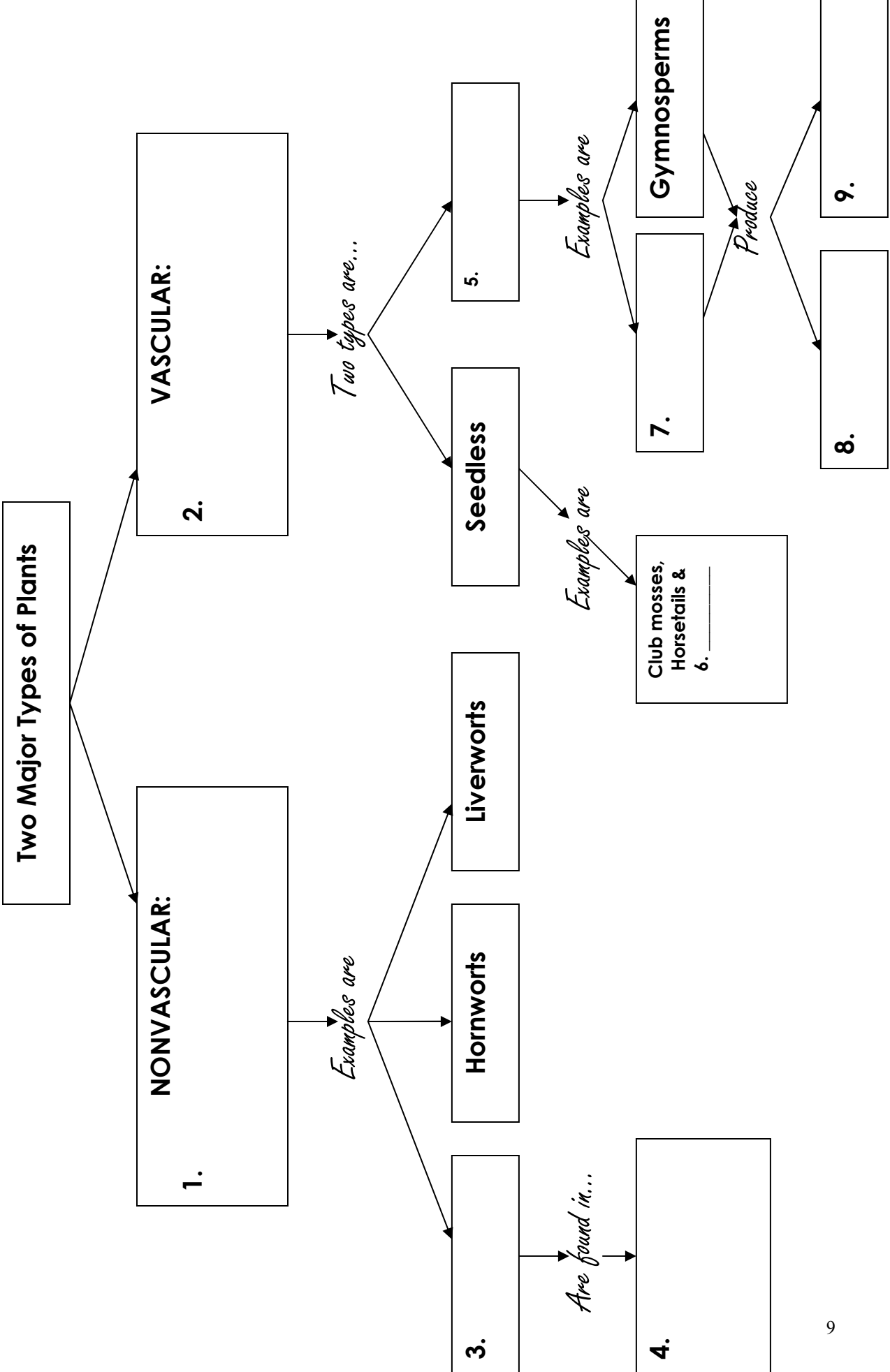
Distinguishing Characteristics of the Six Kingdoms of Life

KINGDOM	Prokaryotic OR Eukaryotic	Uni-Cellular OR Multi-Cellular	AUTOtrophic OR Heterotro- phic	How they are HELPFUL, if they are	How they are BEN- EFICIAL, if they are	Distinguish- ing Charac- teristics
Archaeobacteria						
Eubacteria						
Protista						
Fungi						
Plantae						
Animalia						

Animal Classification Concept Map



Plant Classification Concept Map



More on Plants!

STRUCTURE	FUNCTION or Description	HOW IT COMPARES TO HUMAN BODY SYSTEMS (not all rows will have a comparison)
1. ROOTS		
A) Taproots		
B) Fibrous roots		
C) Meristematic Tissue		
2. STEMS		
A) Herbaceous		
B) Woody		
C) Xylem		= Circulatory System
D) Phloem		= Circulatory & Digestive Systems
3. LEAVES		
B) Photosynthesis		
C) Stomate/Stomata (& Guard Cells)		
D) Transpiration		= sweating
E) Cellular Respiration		
4. FLOWERS		
A) Fruits		
B) Cones		
C) Pollen		
D) Seeds		
5. TISSUES		
A) Dermal		
B) Ground		
C) Vascular		