

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

# ***DIVERSITY SCRAPBOOK***

## **GOAL:**

The purpose of this project is for students to create a scrapbook that highlights the similarities and differences of the three domains of life. Students will trace the evolutionary history of life on Earth as they learn about the major domains, kingdoms, phyla, divisions, classes, and genera of organisms.

## **SCRAPBOOK LAYOUT:**

The scrapbook must contain the following items:

- front cover
- introduction
- table of contents
- one page (front and back) for each organism
- conclusion
- back cover

Your scrapbook will be graded for both content and creativity. **All content and captions must be hand-written.** This project is to be completed in the style of a scrapbook; it should not look like an encyclopedia or research paper. Although **less is more**, please remember to include the level of detail and accuracy that reflects an assignment for a college-level class. This entire project should fit in a 1" binder.

## **INFORMATION TO INCLUDE:**

The following information must be included, but you can include more if you wish:

- physical attributes of the organism
- method of reproduction and/or life cycle \*
- evolutionary history of the organism (how, when, and from what) \*\*
- how the organism produces, acquires, and/or uses energy \*
- 3 or more fun facts about the organism
- the scientific names of 3 organisms classified in the taxon
- 3 or more pictures of the organism (with a label or caption for each picture)

\* You don't need to go crazy with details, but you must be more specific than simply stating things like "asexual reproduction", "does photosynthesis", "uses oxygen", etc.

\*\* Please note that evolutionary history does not refer to how organisms were discovered or how they are (or have been) classified.

## **LIST OF TOPICS FOR THE AP BIOLOGY DIVERSITY SCRAPBOOK:**

### **DOMAIN ARCHAEA** (3)

- Phylum Euryarchaeota, Class Methanococci
- Phylum Crenarchaeota, Class Thermoprotei
- Phylum Euryarchaeota, Class Halobacteria

### **DOMAIN BACTERIA** (9)

- Phylum Aquificae
- Phylum Cyanobacteria
- Phylum Spirochaetes
- Phylum Firmicutes ... Genus Staphylococcus
- Phylum Firmicutes ... Genus Clostridium
- Phylum Proteobacteria ... Genus Nitrosomas
- Phylum Proteobacteria ... Genus Salmonella
- Phylum Proteobacteria ... Genus Escherichia
- Phylum Actinobacteria ... Genus Streptomyces

### **“KINGDOM” PROTISTA** (8)

- Phylum Ciliophora
- Phylum Sporozoa
- Phylum Sarcodina
- Phylum Euglenophyta
- Phylum Rhodophyta
- Phylum Chlorophyta
- Phylum Dinoflagellata
- Phylum Myxomycophyta

### **KINGDOM FUNGI** (4)

- Phylum Chytridiomycota
- Phylum Zygomycota
- Phylum Basidiomycota
- Phylum Ascomycota

### **KINGDOM PLANTAE** (7)

- Division Bryophyta
- Division Hepaticophyta
- Division Anthocerotophyta
- Division Lycophyta
- Division Pterophyta
- Division Coniferophyta
- Division Anthophyta

### **KINGDOM ANIMALIA** (15)

- Phylum Porifera
- Phylum Cnidaria
- Phylum Mollusca
- Phylum Annelida
- Phylum Arthropoda
- Phylum Platyhelminthes
- Phylum Nematoda
- Phylum Echinodermata
- Phylum Chordata, Class Agnatha
- Phylum Chordata, Class Chondrichthyes
- Phylum Chordata, Class Osteichthyes
- Phylum Chordata, Class Amphibia
- Phylum Chordata, Class Reptilia
- Phylum Chordata, Class Aves
- Phylum Chordata, Class Mammalia

### **EXTRA CREDIT:**

Students are expected to complete all of the topics listed above. However, there are a few instances in which it may be difficult to find all of the necessary information. As such, three of the topics will be considered extra credit. The rubric reflects 42 topics instead of 46. Therefore, it is possible to earn a score higher than 100% on this project.

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

## ***DIVERSITY SCRAPBOOK RUBRIC***

TOPIC	Physical (2 pts)	Reproduction (2 pts)	Evolution (2 pts)	Energy (2 pts)	Facts (2 pts)	Examples (2 pts)	Pictures (3 pts)
A) Phylum Euryarchaeota, Class Methanococci							
Phylum Crenarchaeota, Class Thermoprotei							
Phylum Euryarchaeota, Class Halobacteria							
B) Phylum Aquificae							
Phylum Cyanobacteria							
Phylum Spirochaetes							
Phylum Firmicutes ... Genus Staphylococcus							
Phylum Firmicutes ... Genus Clostridium							
Phylum Proteobacteria ... Genus Nitrosomas							
Phylum Proteobacteria ... Genus Salmonella							
Phylum Proteobacteria ... Genus Escherichia							
Phylum Actinobacteria ... Genus Streptomyces							
P) Phylum Ciliophora							
Phylum Sporozoa							
Phylum Sarcodina							
Phylum Euglenophyta							
Phylum Rhodophyta							
Phylum Chlorophyta							
Phylum Dinoflagellata							
Phylum Myxomycophyta							
F) Phylum Chytridiomycota							
Phylum Zygomycota							
Phylum Basidiomycota							
Phylum Ascomycota							
P) Division Bryophyta							
Division Hepaticophyta							
Division Anthocerotophyta							
Division Lycopphyta							

TOPIC	Physical (2 pts)	Reproduction (2 pts)	Evolution (2 pts)	Energy (2 pts)	Facts (2 pts)	Examples (2 pts)	Pictures (3 pts)
Division Pterophyta							
Division Coniferophyta							
Division Anthophyta							
A) Phylum Porifera							
Phylum Cnidaria							
Phylum Mollusca							
Phylum Annelida							
Phylum Arthropoda							
Phylum Platyhelminthes							
Phylum Nematoda							
Phylum Echinodermata							
Phylum Chordata, Class Agnatha							
Phylum Chordata, Class Chondrichthyes							
Phylum Chordata, Class Osteichthyes							
Phylum Chordata, Class Amphibia							
Phylum Chordata, Class Reptilia							
Phylum Chordata, Class Aves							
Phylum Chordata, Class Mammalia							

TOTAL POINTS FOR CONTENT							
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Content	/ 630
Front Cover	/ 10
Introduction	/ 10
Table of Contents	/ 10
Conclusion	/ 10
Back Cover	/ 10
Creativity & Overall Appearance	/ 60

<p>FINAL GRADE AND COMMENTS:</p>          <p>_____ / 740 → _____ / 100 → _____</p>
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