

I. Vertebrates: Introduction

A. Classification

1. All belong to Phylum _____

B. Shared Characteristics

1. Have a _____ encases/protects the _____ (spine)

2. _____ sets of paired _____

3. _____ (blood in vessels) powered by a _____

4. Breathing apparatus: _____ or _____

C. The 5 Groups:

1. _____

2. _____

3. _____

4. _____

5. _____

II. Fish

A. Definition:

1. _____ (live in fresh or salt water)



2. Have _____, _____, and _____ (in general; exceptions exist)

3. _____ (cold-blooded)



B. Members:

1. Three basic types:

a. _____ (e.g. sharks, rays)



b. _____ (salmon, guppies, tuna, eels)

c. _____ (hagfishes, lampreys)

III. Amphibians

A. Definition:

1. Name: amphi = _____; bio = _____

2. Most live on _____ as _____, but _____ in _____, and are _____ as _____



3. _____ lack a _____: may _____ out

4. Have _____ as adults

5. Supplement breathing by respiration through _____

6. _____ (cold-blooded)

B. Members:

1. Two basic types:

a. _____



b. _____ and _____



and



IV. *Reptiles*

A. Definition:

1. Adapted for life _____ of _____ (on land)

2. _____ on skin (prevents water loss); doesn't _____, and must be _____

3. _____ for breathing

4. _____ covered with _____

5. _____ (cold-blooded)



B. Members:

1. Three basic types:

a. _____ & _____



b. _____

c. _____



V. *Birds*

A. Definition:

1. Body covered in _____

2. _____ modified into _____

3. Have _____

4. _____ covered with _____

5. _____ (warm-blooded)



B. Members:

1. _____ orders of class Aves!

2. Include: _____, _____, _____, _____, _____, _____, _____, etc.



VI. ***Mammals***

A. Definition:

1. _____
2. _____, _____ layer under skin, _____ glands in skin, all to _____

3. _____ produce _____ to feed young
4. Most _____ (young are born alive, not in egg)
5. Different kinds of _____ (match with food type)

B. Members:

1. Three basic types, based on _____ differences
2. Placental mammals:
 - a. Young develop _____ in _____
 - b. _____, _____, _____, _____, _____, etc.



3. Marsupial mammals:
 - a. Young begin in _____, but “_____” early in development
 - b. _____ up mother’s fur and into _____
 - c. Attach to _____; continue development
 - d. _____, _____, _____



4. Monotreme mammals:
 - a. Young hatched from _____
 - b. Fed _____ by mother
 - c. _____; _____

