

COMPARATIVE ANATOMY REVIEW

Multiple-choice Test

Identification of flower parts- diagram

Interpretation of graph & table - respiratory system

Interpretation of table - seed experiment

Plant tissues & organs- functions (corresponding to animal structures) *PPT + Ch. 31 chart p. 620*

Flower-Male vs. female reproductive structures *Ch. 33*

Purpose of parts (for example: what is sticky to trap pollen, where is pollen made, etc)

Pollination (fertilization)

What attracts pollinators

Fruit

Where it develops from

Purpose

Seed

Where it develops from

Purpose

Invertebrates vs. vertebrates chart (general functions of body systems) *PPT + Ch.34*

Symmetry- radial, bilateral

Support- endoskeleton, exoskeleton

Digestion- individual cells, two-way vs. one-way

Respiration- tracheal tubes, gills, skin, lungs

Circulation- open system (gas exchange between body fluid in cavity & cells- not blood)

Excretion- kidney

Reproduction & development- internal/external fertilization, indirect/direct development

Eating- autotroph vs. heterotroph

Relationship between body systems (for example: digestive & circulatory; respiratory & circulatory, etc.)

COMPARATIVE ANATOMY REVIEW

1. Name the female reproductive structure in a flower.
2. Describe the structure & function of the three parts of a pistil.
3. Name the male reproductive structure in a flower.
4. Describe the two parts of a stamen.
5. What is the function of a plant's colorful petals?
6. Why is the stigma of a flower sticky?
7. What part of a flower becomes the seed (once fertilized)?
8. What is the purpose of a fruit?
9. Draw a picture of a flower and label the female, male & sterile parts.
10. How is the seed of a flowering plant like the embryo of an animal?
11. Name the three types of tissues found in plants.
12. What two types of tissue do animals have that plants do not have?
13. What is the function of vascular tissue in plants?
14. What is the function of ground tissue in plants?
15. What tissue surrounds the leaf, stem and root to provide protection?
16. Carbon dioxide is necessary for plant to photosynthesize. What organ in plants is involved with this process, and what specific structures in the organ are utilized for gas exchange?
17. Distinguish between radial & bilateral symmetry in animals.
18. Cephalization is only found in animals with bilateral symmetry. What is cephalization and why is it an advantage?
19. What is the difference between an exoskeleton & an endoskeleton? Which is best adapted for life on land?
20. Some animals have a two-way digestive tract where the food and waste enter & leave the same opening (central chamber). Why is a one-way digestive tract more efficient?
21. What are the organs of the respiratory system in animals?
22. What is the purpose or function of the respiratory system?
23. What is the function of the circulatory system?
24. What is the difference between a closed circulatory and an open circulatory system?
25. What is the function of the digestive system?
26. There are four characteristics that all vertebrates (Phylum Chordata) have at some point in their life. These four traits are unique to all vertebrates in Phylum Chordata. What are they?
27. What is the function of a kidney in a vertebrate?
28. What is the advantage of indirect development of the young in animals like insects?
29. Differentiate an autotroph from a heterotroph.