

Animal Adaptations Notes

Characteristics of Animals

- Animals are in Kingdom _____
 - a. _____
 - b. eukaryotic _____
 - c. cells lack _____.
- _____ do not have a backbone. Ex. _____
- _____ do have a backbone. Ex. _____
- Animals survive by doing the following essential functions:
 - a.
 - b.
 - c.
 - d.
 - e.
 - f.

Trends in Animal Evolution

- COMPLEX animals tend to have many trends.
- Body Symmetry
 - a. _____ -- All parts are equal no matter where you draw a line
 - b. _____ -- 2 equal sides
- _____ -- the concentration of sense organs & nerve cells at the front end of the body (ex: _____)

Invertebrate Form & Function

- Invertebrates have 1 of 3 main kinds of skeletal systems:
 - _____ --
 - _____ --
 - _____ --

- Most invertebrates reproduce _____ during at least part of their life cycle
- Depending on _____, however, many invertebrates may also reproduce _____

Controlling Body Temperature

- _____: The control of _____ is important for vertebrates.
 - Particularly in habitats where _____ with time of day and with _____. Ex:
- _____ - the body temperature is determined by the temperature of the _____.
 - the animals pick _____ from, or _____ to, their environment.
 - Examples: _____
- _____ - an animal whose _____ controlled from within
 - They can generate & retain heat _____
 - Examples: _____

Vertebrate/Chordate Form & Function

*Examples of chordates: _____

*Most chordates are vertebrates. There are 2 exceptions: _____ & _____.

Chordate Forms & Functions:

- Respiration:
 - As a general rule, _____ chordates (tunicates, fishes, & _____ larvae) use _____ for respiration.
 - _____ vertebrates (adult amphibians, reptiles, birds, & _____) use _____.
 - _____.
- Response:
 - Non-vertebrate chordates have a _____ nervous system.
 - Vertebrates have a more complex _____.
- Structure/Movement:
 - The _____ & _____ systems support a vertebrate's body & make it possible to control movement

➤ Reproduction:

- Almost all chordates reproduce _____.

Elements of Behavior (Chapter 27.1 & 27.2)

➤ What is behavior?

- Ex:

➤ A _____ is any kind of signal that carries info & can be detected.

➤ A _____ is a single, specific reaction to a stimulus.

- Example:

➤ Behavioral responses to stimuli may be _____.

- Detecting and responding to stimuli is key to an _____.

➤ _____ tell an animal what is occurring in its _____.

- Types: _____ and _____

➤ _____ give an animal information about its surroundings.

- Types: _____, _____, _____

➤ When an _____ to a stimulus, _____ (including sense organs, nervous system, & muscles), interact to produce the _____

Innate Behavior

➤ What is innate behavior?

➤ Innate behaviors appear in _____ form the _____ time they are performed, even though the animal may not have had any previous experience with the _____.

- Example:

Learned Behavior

- _____ behavior develops _____.
- They are sometimes called _____ behaviors.
-

	The 4 Major Types of Learning Behaviors	Examples
1.	_____ - when an animal decreases or stops its response to a _____ that neither rewards nor harms the _____	
2.	_____ - when an animal makes a mental connection between a _____ & some kind of _____	
3.	_____ - when an animal _____ in a certain way through _____, in order to receive a _____ <ul style="list-style-type: none"> • _____ & _____ reinforcement 	
4	_____ - (reasoning) - occurs when an animal applies something it has _____ to a new _____ without a _____	

Imprinting

- _____ - involves both innate & learned behavior
- Young animals have an innate urge to follow the _____, but are _____ what that object will look like

Patterns of Behavior

Behavioral Cycles

- Many animals respond to periodic changes in the _____ or _____ of behavior
- _____ - the periodic _____ from _____ to another & then _____.
- What are circadian rhythms?

- Example:
- Why do animals hibernate?

Social Behavior:

- Often members of a society are _____ to one another.
- Share a large proportion of each other's _____.
- Helping relatives _____ chances genes will be passed along to _____.
- Animal societies enhance the _____ success of individual members.

Courtship:

- Courtship behavior is part of an overall _____ strategy that helps animals identify healthy _____,
 - To pass along genes, they need to reproduce sexually.
- Individuals send out stimuli (like sounds, visual displays, or chemicals) to attract a mate.
 - Examples: _____

Competition & Aggression

- What is a territory?

- When 2 or more animals try to claim _____, such as a _____, _____ occurs.
- During competition, animals may also show _____
- _____ - _____ behavior that one animal uses to gain _____ over another

Communication

- The passing of _____ from one _____ to another
- Animals may use _____, _____, _____, or _____ to communicate with one another
- _____: a system of communication that combines sounds, symbols, or gestures according to _____ order & meaning (grammar & syntax)
 - The most _____ form of communication is