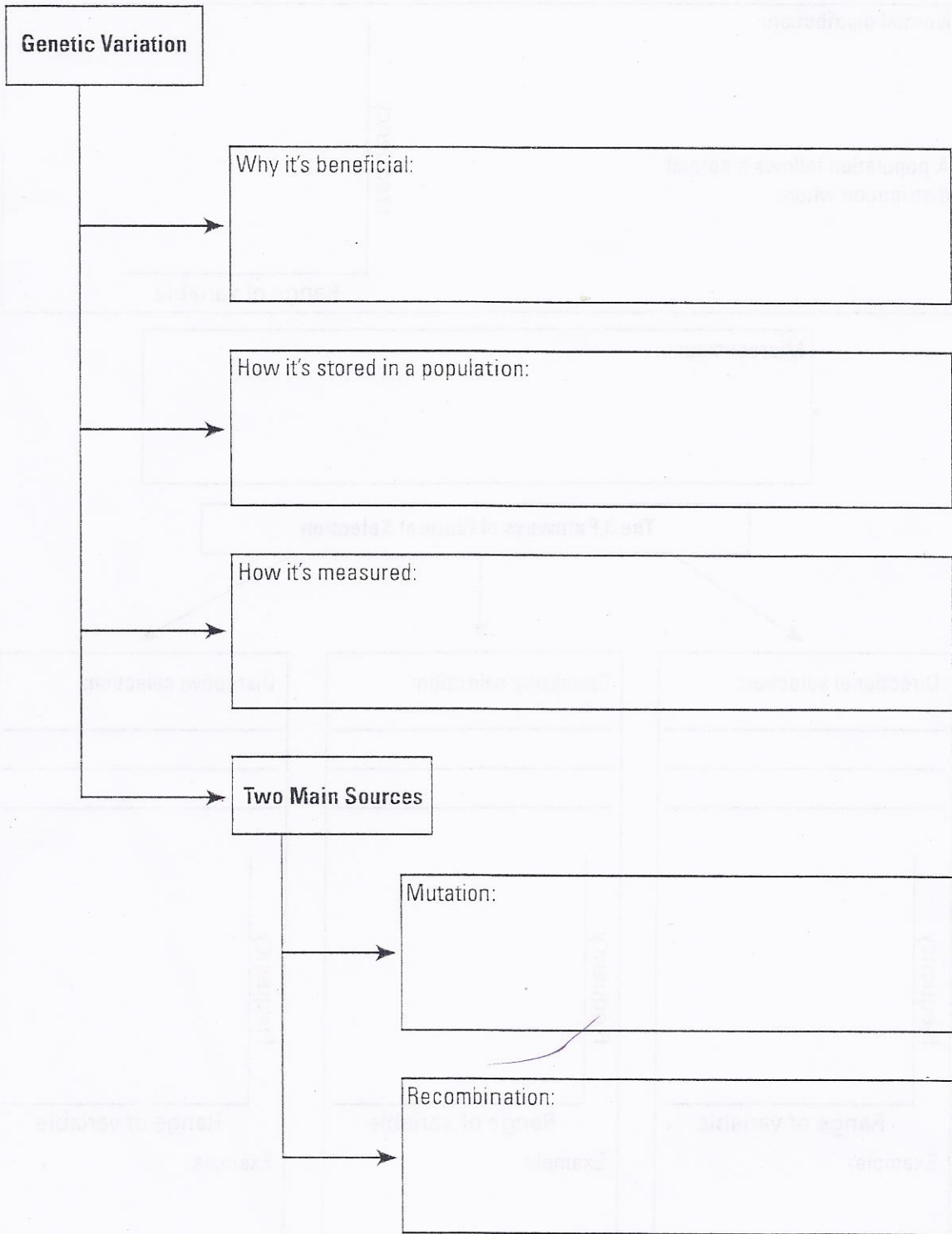


SECTION
11.1

GENETIC VARIATION WITHIN POPULATIONS
Power Notes

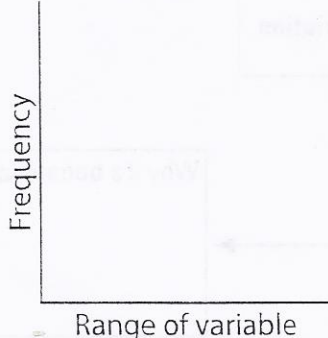


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SECTION 11.2 NATURAL SELECTION IN POPULATIONS
Power Notes

Normal distribution:

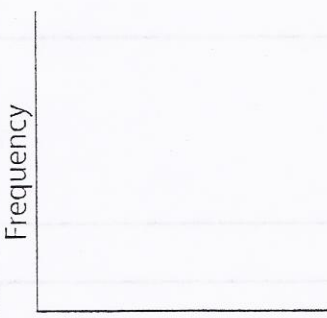
A population follows a normal distribution when:



Microevolution:


The 3 Pathways of Natural Selection

Directional selection:



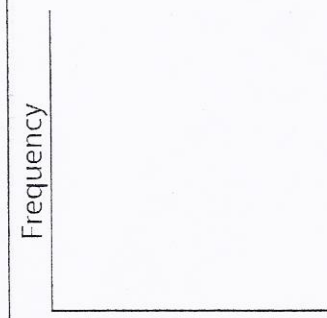
Example:

Stabilizing selection:



Example:

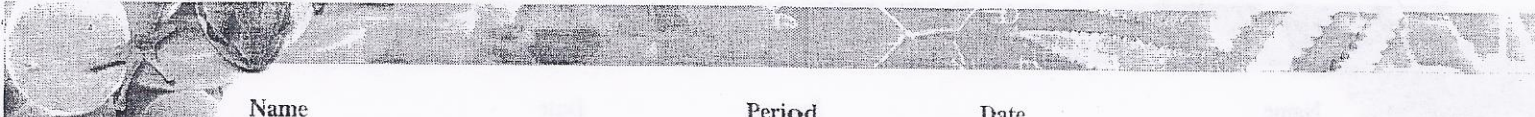
Disruptive selection:



Example:

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CHAPTER 11
The Evolution of Populations



Name _____

Period _____

Date _____

SECTION
11.3

OTHER MECHANISMS OF EVOLUTION
Power Notes

Gene Flow

Definition:

How it works:

Lots of gene flow
between populations

results in

Limited gene flow
between populations

results in

Genetic Drift

Definition:

How it works:

Key Terms

Bottleneck effect:

Founder effect:

Negative effects:

Sexual Selection

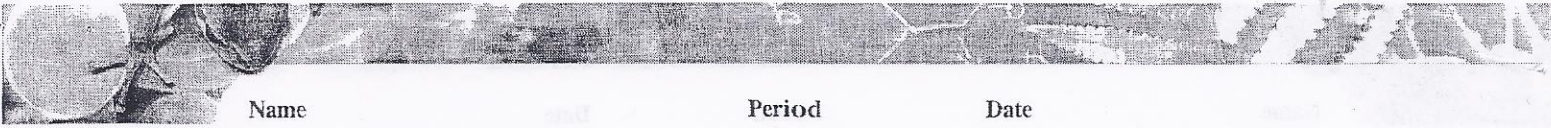
Definition:

How it works:

Types

Intrasexual:

Intersexual:



Name _____

Period _____

Date _____

SECTION
11.5

SPECIATION THROUGH ISOLATION
Power Notes

Reproductive isolation:

is the final stage of

can be caused by

Speciation:

1.

3.

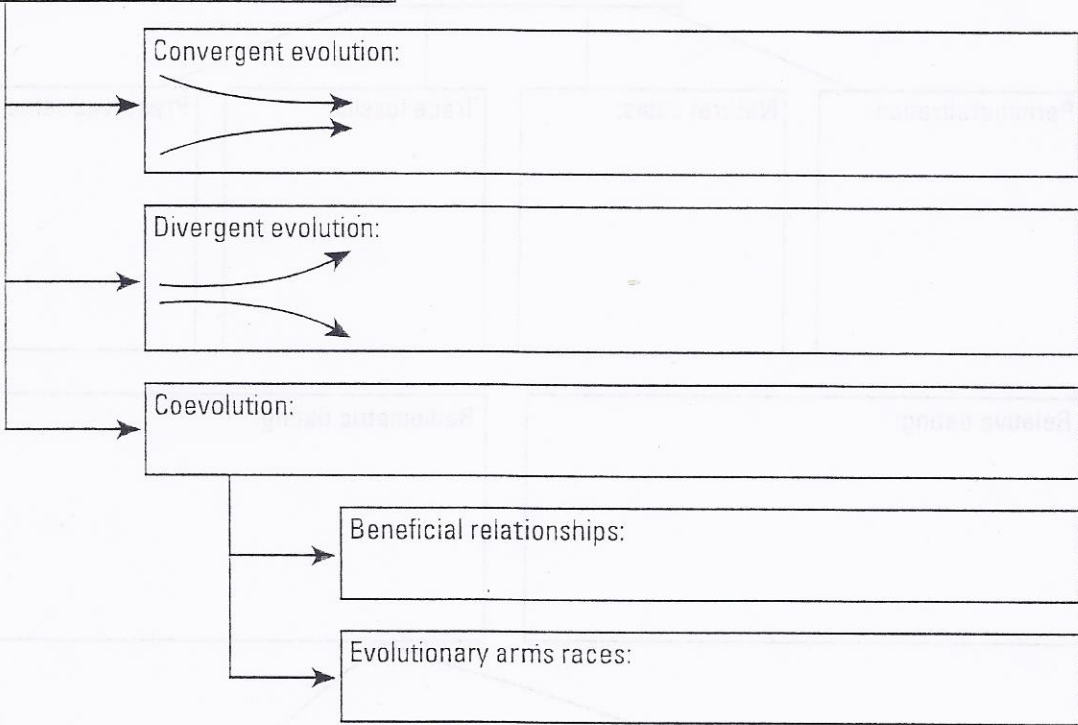
2.

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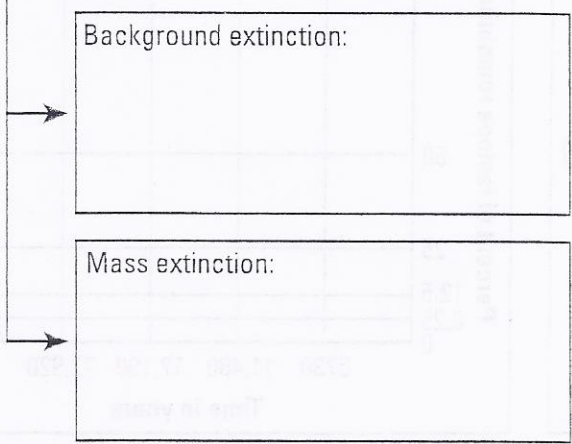
CHAPTER 11
The Evolution of Populations

SECTION 11.6 PATTERNS IN EVOLUTION
Power Notes

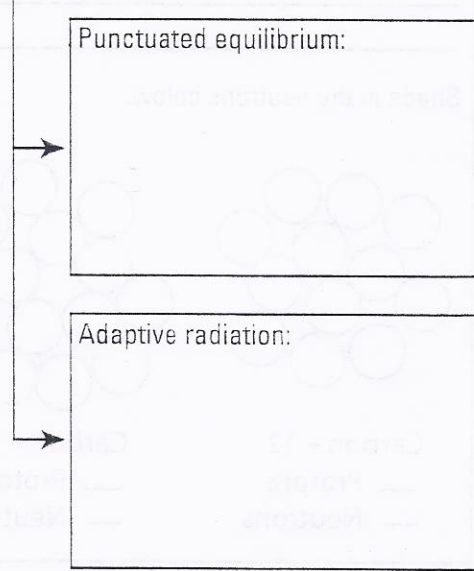
Patterns in Natural Selection



Extinction:



Patterns in Speciation



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SECTION
12.1

THE FOSSIL RECORD
Power Notes

Types of Fossils

Permineralization:

Natural casts:

Trace fossils:

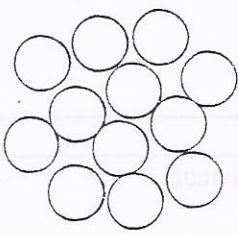
Preserved remains:

Relative dating:

Radiometric dating:

Isotopes: _____

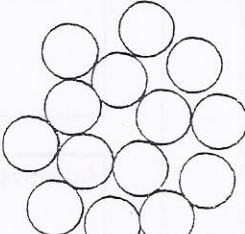
Shade in the neutrons below.



Carbon - 12

— Protons

— Neutrons

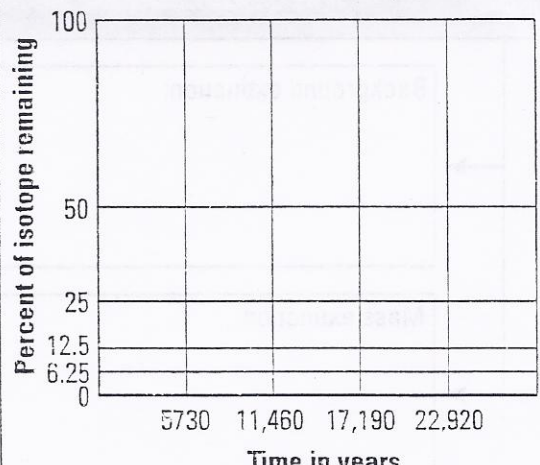


Carbon - 14

— Protons

— Neutrons

Half-life: _____



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CHAPTER 12
The History of Life

Name _____

Period _____

Date _____

SECTION
12.3

ORIGIN OF LIFE
Power Notes

Main Idea: The Origin of Life	Detail Notes:
<p>I. Organic molecule hypotheses</p> <p>_____</p> <p>_____</p> <p>_____</p>	<p>1. Miller-Urey experiment:</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>2. Meteorite hypothesis:</p> <p>_____</p> <p>_____</p>
<p>II. Early cell structure hypotheses</p> <p>_____</p> <p>_____</p> <p>_____</p>	<p>1. Iron-sulfide bubbles hypothesis:</p> <p>_____</p> <p>_____</p> <p>2. Lipid membrane hypothesis:</p> <p>_____</p> <p>_____</p>
<p>III. RNA as early genetic material</p> <p>_____</p> <p>_____</p>	<p>1. Ribozymes:</p> <p>_____</p> <p>_____</p>

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CHAPTER 12
The History of Life

Name _____

Period _____

Date _____

SECTION
12.4 | EARLY SINGLE-CELLED ORGANISMS
Power Notes

Cyanobacteria: _____

changed Earth by

1. _____

2. _____

Endosymbiosis: _____

1. _____

Sketch: _____

2. _____

Sketch: _____

3. _____

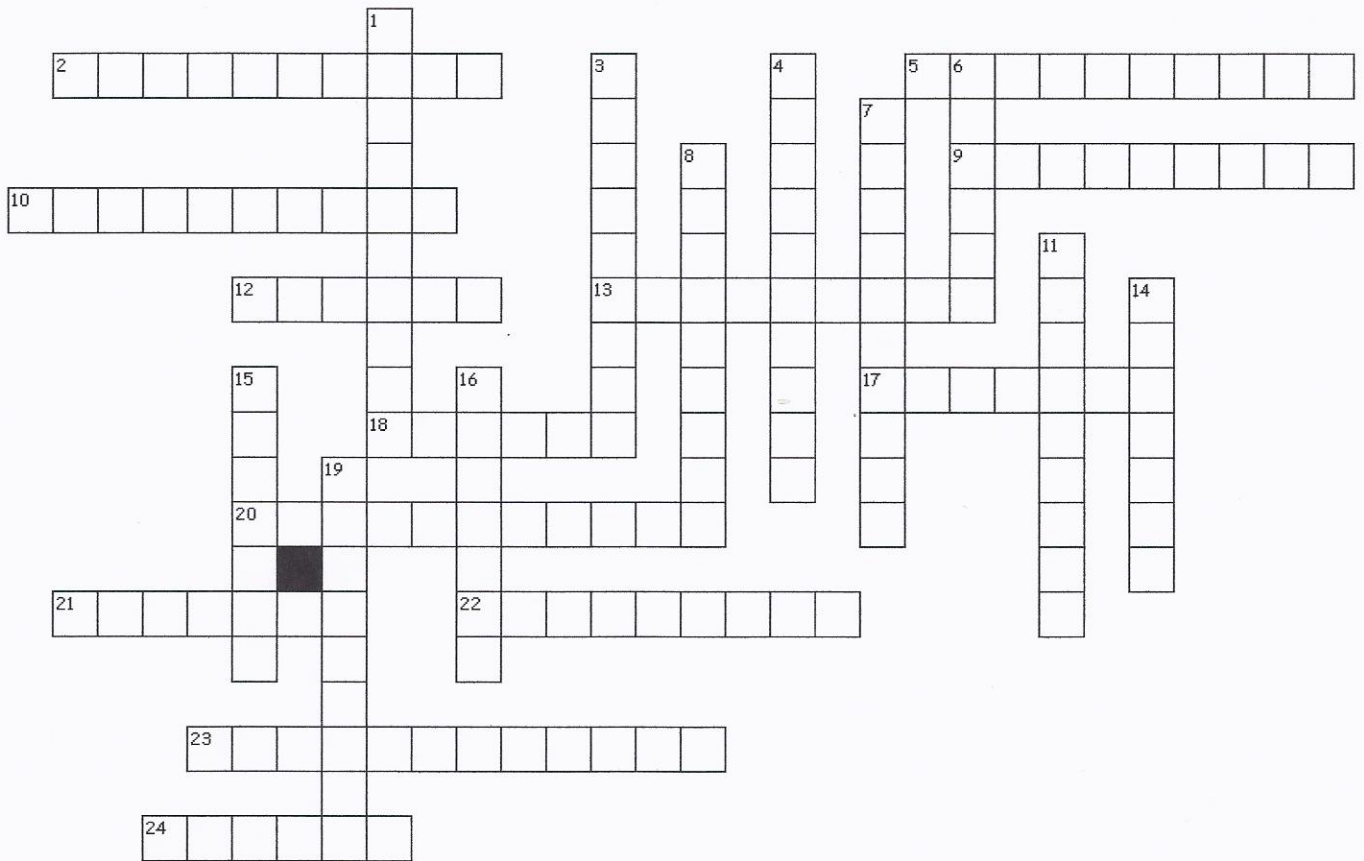
Sketch: _____

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CHAPTER 12
The History of Life

Name: _____

Evolution Crossword



Across

- 2. structures that are similar
- 5. a characteristic that helps an organism survive
- 9. when one species evolves into many; adaptive _____
- 10. pattern of evolution where a species is stable for a long time then rapidly changes; _____ equilibrium
- 12. the name of Darwin's book; the ____ of species
- 13. process by which evolution occurs; natural _____
- 17. had different shaped shells depending on the island they were from
- 18. well-supported testable explanation
- 20. when two species evolve together
- 21. natural selection is also known as the survival of the _____
- 22. islands that Darwin visited
- 23. principle that states that living species are descended from ancient ones; descent with _____
- 24. the name of the ship that darwin traveled on

Down

- 1. when two unrelated organisms look alike (sharks & dolphins)
- 3. refers to the variety of living things
- 4. when organisms disappear from the earth
- 6. proposed the theory of evolution by natural selection
- 7. formation of new species
- 8. change over time
- 11. required for new species to form
- 14. preserved remains of ancient organisms
- 15. had different shaped beaks depending on the island they were from
- 16. the study of the earth
- 19. structures that have no current function