Name___

Date

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ACTIVITY: Root Words and Biology

The study of biology requires an understanding of many technical terms. Sometimes you can find the meaning of an unfamiliar term by looking at its parts. In this activity you will analyze such parts to help you understand many of the terms you will encounter in biology.

Many words have prefixes and suffixes that provide clues to their meanings. The following table contains a list of prefixes and suffixes that are often part of biological terms. Look at the table and study it carefully.

| PREFIX | Meaning | SUFFIX | Meaning |
|--------------|------------------------------|------------|-------------------------------------|
| Hydro- | Related to water | -logy | Study of |
| Geno- | Race, offspring, sex | -phyll | Leaf |
| Bio- | Related to life | -plast | Organized living material |
| Proto- | First | -troph | Food, feeding |
| Chloro- | Green | -cellular | Having to do with cells |
| Zoo- | Related to animals | -phyte | Plant |
| Ex-, extra- | Out | -synthesis | To put together |
| In-, Intra- | Inside | -ation | Process |
| Micro- | Small | -scope | Instrument for viewing |
| Photo- | Light | -lysis | A releasing, loosening, or breaking |
| Uni- | One | -cretion | The process of separating |
| Multi- | Many | -gestion | To carry |
| Auto- | Self-operating | -meter | Instrument used to measure |
| Hom-, Homo- | Same | -stasis | A stationary condition |
| Hetero- | Different, other | -zygo | Joined |
| Telo- | An end, complete | -phase | Appearance |
| Meta- | A boundary, or turning point | -ectomy | Cut out |
| Pro-, proto- | Before, in front of | -pathy | Suffering, disease |
| Нуро- | Below | -tropism | Response |
| Hyper- | Above, more than | -cyte | Cell |
| Macro- | Large | -phage | Eat, eater |
| Eu- | Good, true | -karyo | Nucleus, nut |
| Osteo- | Bone | -spore | Seed |
| Glyco- | Sugar | -vasculo | Vessel (small) |

Use the meanings of the prefixes and suffixes in the table to form words that will match these definitions:

| WORD: | DEFINITION: | |
|--|---|--------------|
| 1) | the study of small forms of life (hi | int 3 words) |
| 2) | the study of animals | |
| 3) | instrument used to measure water/moisture content | |
| 4) | a plant that grows in water | |
| 5) | small leaf | |
| 6) | within a cell | |
| 7) | small seed | |
| 8) | a response to light | |
| 9) | disease of the bones | |
| 10) | made up of one cell | |
| Use the root words from the list to define t | he following terms: DEFINITION: | |
| <u>word</u> . | | |
| 1) prokomuotoj | | |
| 1) prokaryote: | | |
| 2) osteocyte: | | |
| 2) osteocyte: 3) macrophage: | | |
| 2) osteocyte: | | |
| 2) osteocyte: 3) macrophage: 4) microscope: 5) eukaryote | | |
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| 2) osteocyte: 3) macrophage: 4) microscope: 5) eukaryote 6) genealogy: 7) photosynthesis: | | |
| 2) osteocyte: 3) macrophage: 4) microscope: 5) eukaryote 6) genealogy: 7) photosynthesis: 8) autotroph: | | |
| 2) osteocyte: 3) macrophage: 4) microscope: 5) eukaryote 5) eukaryote 6) genealogy: 7) photosynthesis: 8) autotroph: 9) metaphase: | | |