

# Root words

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Here is a kid-tested fun way to teach ROOT WORDS (of Latin and Greek origins) in conjunction with your study of MARINE BIOLOGY. Familiarity with some of the common Latin and Greek "building blocks" of our English words, and knowledge of the way these roots are used, provides a powerful tool for vocabulary building. Recognition of familiar roots in new words offers the thrill of discovery and promotes a feeling of confidence. As one of my students put it, "It's a great way to impress your parents!"

## Method:

You will meet up with dozens of words in the study of marine biology which have Greek or Latin roots. There are non-scientific terms (marine biology, radial symmetry) and technical terms (echinoderm, dendraaster excentricus).

Approach a new word like a puzzle: "Wow! Here's a seastar called Solaster. Let's see if we can figure out its meaning. What words do you know that start with sol? (hints if necessary: solar, solarium, solstice) What do they all have to do with? Right! Sun! And aster? (asteroid, astronaut, astronomy) Star! So here we have Sol + aster = sun star! Why do you suppose this seastar is called a sunstar?"

Keep a list in the room of the roots you learn, and the words that can be built with them. Let kids add to it. If the kids ask about the origin of a word you don't know, look it up together. Does disaster have anything to do with star? Wow! Disaster literally means against the stars - out of luck, bad news!

Going one step beyond: This is a great challenge for all!

After the kids have a few roots under their belt, encourage them to create and draw machines or animals that can be named by putting the root words together.

## Some examples:



**Echinooctocycle** (a spiny eight-wheeled vehicle)



**Pachydermousbipod** (a thick-skinned two-footed animal)



and they created a **pachyvalvologist** (a scientist who studies thick shells).

Older kids come up with telebeneaquaporters (a machine for carrying pure water far away) and polycephalic unipods (many-headed one-footed creatures).

To get you started, here are a few roots to experiment with:

| <u>Root</u>        | <u>Meaning</u> | <u>Examples</u>  |
|--------------------|----------------|--|
| sub                | under          | submarine, subterranean  |
| uni, bi, tri, quad | 1, 2, 3, 4     | univalve, United States; bivalve, bicycle; triceratops, tripod; quadruplets, quadrilateral, quadrant |
| echino             | spiny          | echinoderm, echidna  |
| derm               | skin           | dermatologist, pachyderm   |
| bio                | life           | biologist, biography   |
| graphy             | writing        | geography, telegraph   |
| -ology             | study of       | biology, psychology  |
| pod, ped           | foot           | tripod, podiatrist, gastropod  |
| gastro             | stomach        | gastronomic, gastric   |
| aqua               | water          | aquarium, aquatic  |
| in                 | not, none      | invertebrate, inefficient  |
| valve              | shell          | univalve, bivalve  |
| aster              | star           | asteroid, disaster, solaster   |
| sol                | sun            | solarium, solstice, solar  |
| ject               | throw          | eject, project, object   |
| port               | carry          | portable, report, import   |

Have fun, and may our vocabularies continue to increase!