

## CLASSIFICATION OF ORGANISMS

### 16. Linnaeus' Latin Lingo

**Objective:** students will understand the use of scientific names by using Latin and Greek words to decipher species names of whales.

**Level: 4-7**

**Background:** Every different type of plant and animal has a unique scientific name. The purpose of a scientific name is to ensure that scientists all over the world are talking about the same organism. Although common names may seem easier to remember, they can lead to confusion because there is often more than one common name for the same species. The scientific name consists of genus and species, used together like a person's first and last name. For example, the scientific name of the Sei Whale is *Balaenoptera borealis*; the genus name is *Balaenoptera* and the species name is *borealis*. The scientific name is also referred to as the Latin name, because most of the word origins are derived from Latin. These names may sound complicated, but the translations often make sense, describing a characteristic of the organism, such as colour, shape or behaviour. Others are named after a person, either the first to describe the species or in honour of someone. The Latin name for the Humpback Whale is *Megaptera novaengliae*, which means "Big-winged New Englander"; the name refers to the whale's great flippers and the waters off the New England coast where the whale was hunted. The Swedish scientist Carl von Linn (better known by the Latinized name, Carlus Linnaeus) invented this method of naming organisms, which is referred to as binomial nomenclature.

**Materials:** names of whales, key of root words, pencils

**Procedure:**

### Root Words

*acutus* - sharp or pointed

*albus* - white

*australis* - southern

*balaena* - whale

*borealis* - northern

*coeruleus* - sky blue

*cephale* - head

*crassus* - thick

*crucis* - cross

*dens* - tooth

*delphis* - dolphin

*eu* - right, true

*gero* - bear, carry

*glacialis* - icy

*globus* - globe, ball

*grampus* - type of whale

*griseus* - grey

*lagenos* - bottle, flask

*lisso* - smooth

*macros* - long, large

*melanus* - black

*obliquus* - slanting

*obscurus* - dark

*orca* - a kind of whale

*ops* - face

*physeter* - blower

*pseudos* - false

*pteron* - wing or fin

*rostris* - beak, snout

*rhyngchos* - beak, snout

*stenos* - narrow

*truncare* - cut off

*tursio* - dolphin

1) Have students decode the following species, using the root words above.

example: *Tursiops truncatus* (Bottlenose Dolphin) = dolphin with a cut-off face

*Grampus griseus* (Risso's Dolphin)  
*Lissodelphin borealis* (Northern Right-Whale Dolphin)  
*Balaena glacialis* (Northern Right Whale)  
*Balaenoptera borealis* (Sei Whale)  
*Globicephala macrorhynchus* (Short-finned Pilot Whale)  
*Stenella coeruleoalba* (Striped Dolphin)  
*Pseudorca crassidens* (False Killer Whale)  
*Physeter catodon* (Sperm Whale)  
*Lagenorhynchus obliquidens* (Pacific White-sided Dolphin)  
*Delphinus delphis* (Saddle-backed Dolphin)  
*Balaenoptera acutorostrata* (Minke Whale)  
*Lagenorhynchus albirostris* (White-beaked Dolphin)  
*Globicephala melaena* (Long-finned Pilot Whale)  
*Lagenorhynchus obscurus* (Dusky Dolphin)  
*Balaena australis* (Southern Right Whale)  
*Lagenorhynchus actus* (Atlantic White-sided Dolphin)  
*Lagenorhynchus cruciger* (Hourglass Dolphin)  
*Lagenorhynchus australis* (Peale's Dolphin)

2) Use the root words listed above to create a name for an imaginary species of dolphin, and draw a picture of it. Or name the whales that were created in the Cetacean Creations activity.