



ARCTIC OCEAN  
SCIENTIFIC ADVENTURES

## EDUCATIONAL PACKAGE

NO.04

Arctic Marine  
ecosystems

### FOOD CHAIN

1) What is the difference between a food web and the food chain?

superpredators - food web  
- food chain - succession -  
nutrition - - lower level -  
autotroph - prey - phyto-  
plankton - last - food  
chains - predator - ecosys-  
tem

A **food chain** is a **succession** of living organisms each of which eats **lower-level** organisms in order to gain energy. The first link in a chain is always an **autotroph**. In seas and oceans, **Phytoplankton** assume this role. Humans are often the last link in the chain: they are **superpredators**.

A **food web** is a set of interconnected **food chains** that make up an **ecosystem** through which energy and biomass flow.

This term refers to anything that is related to the **nutrition** of a living tissue or organ. For example, a trophic relationship is the link between the **predator** and its **prey** in an ecosystem.



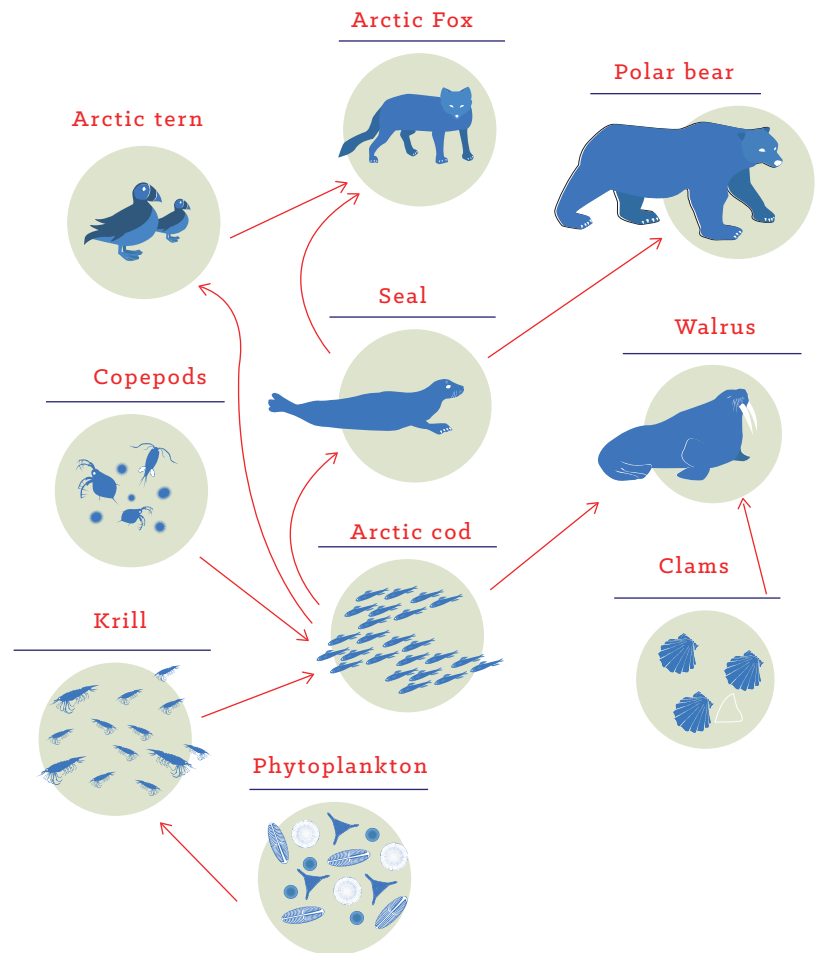
## ARCTIC ECOSYSTEM

2) Recreate a portion of the Arctic food web:

a) Write the names of the animals in the right place:

Polar bear - krill -  
copepods - arctic  
fox - clams- arctic  
cod - seal - arctic tern  
phytoplankton

b) Draw the arrows  
linking the elements of  
the Arctic food web



## MULTIPLE CHOICE

3) Which of the following  
sequences represents a  
food chain? Circle the  
correct response.

A) SEAL ————— WALRUS ————— SEA LION

B) COPEPODS  KRILL  
 ARCTIC COD  
 WHALE

C) SMALL FISH ————— SEAL ————— POLAR BEAR