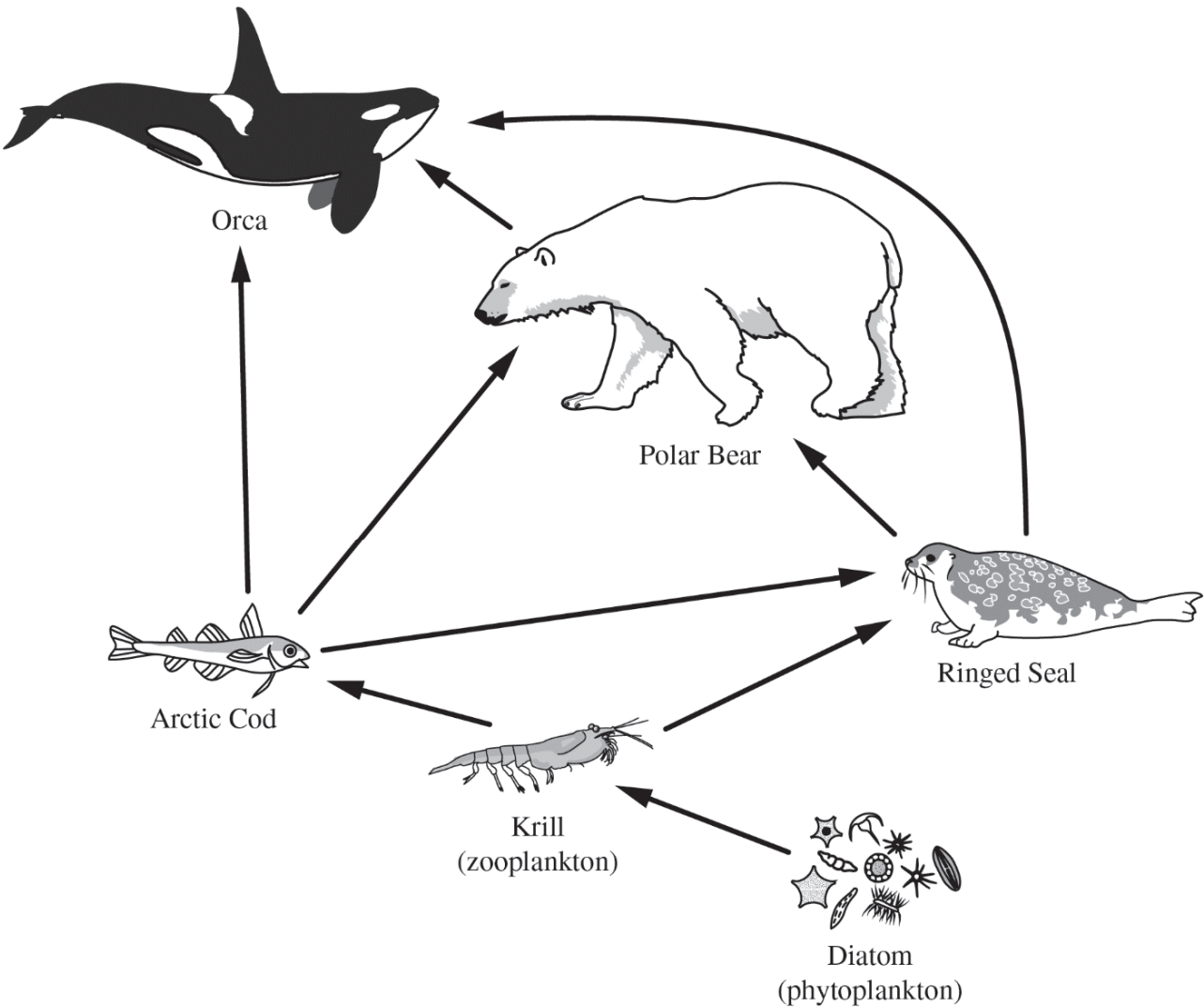


3. An Arctic food web includes the following organisms.



Note: Figures not drawn to scale.

(a) Refer to the food web above to complete the following table.

	Organism from Arctic food web
(i) Identify a primary producer	
(ii) Identify a primary consumer	
(iii) Identify a secondary consumer	

(b) Other than showing which organisms are consumed by other organisms, **describe** what is indicated by the direction of the arrows in the diagram.

As the amount of sea ice has decreased, larger expanses of the Arctic Ocean are now completely free of sea ice for several weeks each summer. Ringed seals, the preferred prey of polar bears, come to holes in the sea ice to breathe.

- (c) **Describe** how the change in sea ice habitat is affecting polar bears’ ability to hunt and feed.
- (d) **Explain** how melting sea ice leads to a feedback loop that increases Arctic warming.
- (e) Many species, including some whales and birds, will travel thousands of kilometers during annual migrations.
 - (i) **Provide** one reason a species may migrate a long distance.
 - (ii) The North Atlantic right whale migrates between subtropical and polar waters annually. Nearly 50 percent of right whale deaths are due to human activities. **Describe** one commercial activity, other than whaling, that may result in the death of right whales.
 - (iii) **Describe** one strategy that could reasonably be implemented to decrease right whale deaths caused by the commercial activity you described in part (ii).