

## More Oceans and Biodiversity Questions

### Oceans and Weather

1. Which of the following are examples of how oceans impact weather?
    1. Uneven heating of the eastern and western Pacific lead to changes in wind patterns causing El Nino.
    2. Cold air moves from western Ontario, causing warm air to rise rapidly and form thunderstorms.
    3. The Gulf Stream brings warmer temperatures to northern Europe.
    4. Warm moist air above Lake Huron meets cold air in the morning , leading to thick fog.
- (A) 1,2,3                      (B) 1,2,4                      (C) 1,3,4                      (D) 2,3,4                      (E) 1,3

### Oceans and Carbon Cycle

2. What acid is formed when carbon dioxide from the atmosphere is dissolved in the oceans?  
**H<sub>2</sub>CO<sub>3</sub>**
3. What other process involving rocks places carbonates in the ocean?  
**erosion**
4. What do diatoms (a type of algae) and some larger organisms **do** with carbonates?  
**They use in their skeletons and shells, respectively.**
5. Over millions of years, what happens to lipids and other carbon- containing compounds of dead ocean organisms?  
**They become oil and natural gas.**
6. How is the carbon from shells returned to the atmosphere?  
**Through volcanic action, the carbon is returned in the form of carbon dioxide.**

### Ocean and Temperature

7. List the three factors that affect ocean temperatures:  
**Depth, season, latitude**

### Ocean Current Questions

8. On *the surface* of oceans, what's mainly responsible for currents? One word answer **\_\_wind\_\_**
9. *Below the surface* of oceans what's mainly responsible for currents? **\_\_salt\_\_** and **\_\_temperature\_\_** differences(thermohaline), which both lead to **density** differences and mixing .

### Biodiversity and Disturbances

10. "The interactions between all these individuals, species and ecosystems make up a complex web. If one part of the web doesn't function well or drops out, all the other parts are affected."

Does the above description of interdependence of species make preservation of biodiversity important?

Yes. When there is greater biodiversity, the disappearance of one species will not affect the rest as much.

11. There are at least 5 threats to biodiversity. Each of them is described. For each threat, try to scramble the letters to come up with a single term or phrase to describe the disturbance.

1. This is the main cause of the loss of biodiversity worldwide. Deforestation, agricultural activities or infrastructure works such as the construction of motorways, residential areas and industrial areas put the survival of many species on the line and are fatal to biodiversity.

*ibaatth usitedtronc*

*habitat destruction*

2. Man affects biodiversity both by supplying the natural environment with too many nutrients and toxic substances .

*Olilutpon*

*pollution*

3. Known examples are overfishing, excessive logging or depletion of farmlands.

*voerues fo esources*

*overuse of resources*

4. Most species are not capable of adjusting their way of life in time to the speed with which temperatures and patterns of precipitation change.

*acimlte nechag*

*climate change*

5. When exotic species are introduced to a different environment, one that lacks the natural enemies of the invaders, they can pose a threat to the indigenous biodiversity.

*Nivsivae espcise*

*Invasive species*