

# 10.3 The Effects of Ice on Water Systems



### Across

4. Geologists believe that the Earth is now in an \_\_\_\_\_ that started more than 11,000 years ago.
9. When glaciers begin getting smaller in size, they are said to be \_\_\_\_\_ or retreating.
11. The global \_\_\_\_\_ has undergone natural periods of cooling and warming since the Earth formed.
13. Human activities that put more \_\_\_\_\_ and other gases into the atmosphere are thought to be part of the reason for an overall rise in nighttime temperatures.
16. When the concentration of carbon dioxide and other gases builds up, heat that would normally be reflected back into space from the Earth is blocked from doing so. That heat gets trapped right above the Earth's surface. This is called the \_\_\_\_\_.
17. One overall warming trend is an increase in average nighttime \_\_\_\_\_.
18. For centuries explorers and others have tried to find a much shorter route through the northern Arctic, a route named the \_\_\_\_\_.
19. Colder periods during an ice age are referred to as \_\_\_\_\_.

### Down

1. When \_\_\_\_\_ builds up over time it creates glaciers.
2. Melting glaciers slowly add more \_\_\_\_\_ into the streams, rivers and lakes into which they empty.
3. A glacial period is an interval of time within an ice age that is marked by colder temperatures and \_\_\_\_\_ advances. One is shown in this background photograph.
5. Warmer temperatures mean that precipitation, even on mountaintops, is likely to fall as \_\_\_\_\_ instead of snow.
6. Melting glaciers reduce the \_\_\_\_\_ of the surrounding ocean water.
7. Throughout the Earth's history glaciers have gone through a normal \_\_\_\_\_ of advancing and retreating.
8. Changes in the size of glaciers and ice sheets influence local and global \_\_\_\_\_ systems.
10. Long-term periods of cooling are generally referred to as \_\_\_\_\_.
12. When long-term periods of cooling occur and the Earth's temperatures decline, \_\_\_\_\_ begins to accumulate at a more rapid rate than usual.
14. The \_\_\_\_\_ ice sheet is not shrinking, but rather, growing in recent years.
15. Scientists estimate that with nearly one third of our planet covered in thick ice during the last ice age, \_\_\_\_\_ levels on the Earth were more than 100 metres lower than they are now.