The lithosphere and the hydrosphere

**ChaptEr 6**

**EST**

**Questions 1–36 and A–D**

Checkups and follow-ups

**12.** In the Canadian Arctic, houses are sinking into the ground, and runways are cracking. Explain your answer.

|  |
| --- |
|  |
|  |
|  |

**13.** Is there any vegetation in the Far North of Québec? Explain your answer.

|  |
| --- |
|  |
|  |
|  |

**14.** Vicky, who lives in the village of Kuujjuaq in northern Québec, wants to build a house on  
piles.

**a)** Given that the active layer in her region is 1.5 m thick, how long should the piles be? Explain your answer.

|  |
| --- |
|  |
|  |
|  |
|  |

**b)** Can Vicky be sure of the long-term stability of her house?

|  |
| --- |
|  |
|  |
|  |

**15.** Name three fuels that come directly from the lithosphere.

|  |
| --- |
|  |

**16.** Name the form of energy described in each statement.

**a)** It is produced by atomic fission.

|  |
| --- |
|  |

**b)** It is the result of the decomposition of prehistoric plants and animals.

|  |
| --- |
|  |

**c)** It is derived from the internal heat of the Earth.

|  |
| --- |
|  |

**d)** It emits more greenhouse gases than any other form of energy.

|  |
| --- |
|  |

**e)** It leaves behind radioactive waste.

|  |
| --- |
|  |

**f)** It is in danger of running out within the next few decades.

|  |
| --- |
|  |

**17.** Name three farming practices that lead to soil depletion.

|  |
| --- |
|  |
|  |
|  |

**18.** Name one advantage and one disadvantage   
 of using heavy machinery on farmland.



|  |
| --- |
|  |
|  |
|  |
|  |
|  |

**19.** Nitrogen oxides (NO*x*) and sulphur dioxide (SO2) are emitted by car engines and industrial   
processes.

**a)** What happens when they come into contact with rainwater?

|  |
| --- |
|  |

**b)** How does this rain affect the soil?

|  |
| --- |
|  |
|  |
|  |
|  |