|  |  |  |
| --- | --- | --- |
| **CHAPTER 8** |  | BLM 8–1 |
| SCIENCE INQUIRY | **Oil and Water** |  |

Name: Date:

Group Members:

Use this worksheet to assist you with Starting Point Activity: Oil and Water. Compare the cost of oil and water, and how much of each we have to use. Look at the concerns we have for each.

* Use information available in your classroom and on the Internet to complete the following chart.
* Answer the questions that follow.
* File this worksheet in the correct section of your notebook.

|  |  |
| --- | --- |
| **Water** | **Oil** |
| **•** Cost per litre: \_\_\_\_\_\_ | **•** Cost per litre: \_\_\_\_\_\_ |
| • Approximate amount of available reserves:    \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | • Approximate amount of available reserves:    \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| • Location of available reserves:    \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | • Location of available reserves:    \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| • Concerns: | • Concerns: |

**What Did You Discover?**

1. Which liquid — motor oil or drinking water — is the most expensive? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. Which liquid is more abundant? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. Which liquid is more important to your life? Use the space on the back of this worksheet to explain.

##### Extension

4. On the back of this worksheet, explain what you think might happen if we run short of motor oil or fresh water.

|  |  |  |
| --- | --- | --- |
| **CHAPTER 8** |  | BLM 8–2 |
| OVERHEAD MASTER/ SKILL BUILDER | **Map of Alberta** |  |

{AB.Sc24.B.K.4.i}{AB.Sc24.B.S.3.i}



|  |  |  |
| --- | --- | --- |
| **CHAPTER 8** |  | BLM 8–3 |
| OVERHEAD MASTER | **Earth’s Reserves of Oil and Water** |  |

{AB.Sc24.B.K.4.iii}{AB.Sc24.B.K.4.v}{AB.Sc24.B.S.2.ii}{AB.Sc24.B.S.3.i}

**Earth’s Water Supply**

**(includes fresh water, salt water, ice, and water vapour)**

|  |  |
| --- | --- |
| **Earth’s Water Supply**  **(%)** | |
| oceans | 97.3 |
| ice | 2.19 |
| ground water | 0.5 |
| soil moisture | 0.005 |
| atmosphere | 0.001 |
| inland lakes | 0.018 |
| rivers | 0.000096 |

**World Oil Reserves**

**(as of December 2000)**

|  |  |
| --- | --- |
| **Location of Oil Reserves** | **Amount**  **(billions of barrels)** |
| East Asia and Pacific regions | 30 |
| Africa | 80 |
| Middle East | 690 |
| Eastern Europe and former USSR | 65 |
| Western Europe | 15 |
| Central and South America | 100 |
| North America | 55 |

|  |  |  |
| --- | --- | --- |
| **CHAPTER 8** |  | BLM 8–4 |
| OVERHEAD MASTER | **World Map** |  |

{AB.Sc24.B.S.2.ii}{AB.Sc24.B.S.3.i}

