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**Answer sheet**

Module 7, Lesson 1

Water world

Task 2: Look at Antarctica

**Q1)** Do you think this map gives you a realistic representation of Antarctica? Explain.

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**Q2)** Do any of these projections work well for viewing Antarctica? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Task 3: View of the South Pole

**Q3)** Does this projection work well for viewing Antarctica? Explain.

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Task 5: Explore Water World

**Q4)** What significant differences do you see between current landmass outlines and those of 20,000 years ago? List at least three.

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Task 6: Analyze global sea levels that would result if Antarctic ice sheets melted

**Q5)** Record your general observations for each layer in the table below.

|  |  |
| --- | --- |
| **Sea level** | **Observations** |
| Today |  |
| Plus 5 meters |  |
| Plus 50 meters |  |
| Total thaw (plus 73 meters) |  |

Task 7: View changes in water levels

**Q6)** What kinds of changes do you see in the rivers and lakes? Provide a specific example.

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**Q7)** With a sea level increase of 50 meters, what kinds of consequences do you foresee for the major river ecosystems of South America? Provide a specific example.

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**Q8)** Some inland areas around the globe are below sea level. One of them is in South America. Hypothesize how these low-lying areas were formed.

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Task 8: View changes in political boundaries

**Q9)** Predict possible consequences of the 50-meter rise in sea level to the populations living in the Southwest Asia (political disputes, trade and economic issues, transportation problems, etc.). Record those consequences in the first row of the table below.

|  |  |  |
| --- | --- | --- |
| **Region** | **Countries/areas affected** | **Possible consequences** |
| Southwest Asia |  |  |
| Asia |  |  |
| Europe |  |  |
| Africa |  |  |
| Oceania |  |  |
| North America |  |  |
| Latin America |  |  |

**Q10)** Record your predictions in the table above.

**Q11)** List other possible layers of data you might want to analyze to study the impact of rising sea levels.

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