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Answer Sheet

Module 4, Lesson 1

Growing Pains

Task 2: Compare birth rate and death rate data

**Q1)** Which world region or regions have the highest birth rates?

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**Q2)** Which world region or regions have the lowest birth rates?

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**Q3)** Which world region or regions have the highest death rates?

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**Q4)** Which world region or regions have the lowest death rates?

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**Q5)** If the overall rate of growth is based on the formula BR – DR = NI, which world regions do you think are growing the fastest?

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**Q6)** Which world regions do you think are growing the slowest?

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**Q7)** Choose two European and two African countries and record their birth and death rates in the tables below.

**Birth Rates**

|  |  |  |  |
| --- | --- | --- | --- |
| **Country and continent** | **1959-1964** | **1984-1989** | **2004-2009** |
| Gabon (Africa) | 30.6 | 38.4 | 28.5 |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

**Death Rates**

|  |  |  |  |
| --- | --- | --- | --- |
| **Country and continent** | **1959-1964** | **1984-1989** | **2004-2009** |
| Gabon (Africa) | 25.5 | 12.5 | 10.2 |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
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**Q8)** List three questions that the Birth Rate and Death Rate maps raise in your mind.

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Task 3: Add the Natural Increase layer

**Q9)** What is happening to the populations of countries that are pink?

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**Q10)** Which world regions are growing the fastest?

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**Q11)** Which world regions are losing people or not growing?

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**Q12)** Think about what it would mean for a country to have a population that is growing rapidly or one that is growing slowly or shrinking. Which of these two situations do you think would cause more problems within the country?

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List some of the problems you would expect to see.

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Task 4: Look at standard-of-living indicators for Europe and Africa

**Q13)** Complete the table below.

|  |  |  |
| --- | --- | --- |
| ***Layer Name***  **Indicator** | **Compare sub-Saharan Africa and Europe** | **What does this indicate about the standards of living in these regions?** |
| *Age Dependency Ratio Old*  Population 64 years or older |  |  |
| *GDP Current US Dollars*  GDP per capita |  |  |
| *Infant Mortality Last Reporting Year*  Infant mortality rate |  |  |
| *Life Expectancy Total*  Life expectancy |  |  |
| *Literacy Statistics*  Literacy rate |  |  |
| *Percent Population Working Age (15-64)*  Percent of workforce |  |  |

Task 5: Add the Net Migration layer

**Q14)** In Q13 you compared standard-of-living indicators for Europe and sub-Saharan Africa. Based on your observations of those indicators, which region would you expect to have a negative net migration?

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A positive net migration? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Explain your answers. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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**Q15)** Summarize the overall patterns of net migration in Europe and sub-Saharan Africa in the table below.

|  |  |
| --- | --- |
| **Net migration in sub-Saharan Africa** | **Net migration in Europe** |
|  |  |

**Q16)** What political or social conditions or events could explain any of the migration patterns you see on the map?

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Task 6: Draw conclusions

**Q17)** Based on your map investigations, write a hypothesis about how a country’s rate of natural increase affects its standard of living and its net rate of migration.

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**Q18)** In the table below, illustrate your hypothesis with data from one European country and one sub-Saharan African country.

|  |  |  |
| --- | --- | --- |
| **Europe** | **Data** | **Africa** |
|  | Country name |  |
|  | Natural increase |  |
|  | Net migration |  |
|  |  |  |
|  |  |  |
|  |  |  |

Middle School Assessment

Module 4, Lesson 2

Growing Pains

You have been selected by the United Nations to establish a model partnership between nations. Your job is to select two countries – one country with a slow growth rate from Europe and one with a fast growth rate from Africa. Refer to the activity if you need help in identifying the growth rate of a country.

Select the countries from this list:

* Belgium
* Denmark
* Germany
* Italy
* Madagascar
* Mozambique
* Nigeria
* Norway
* Poland
* Somalia
* Tanzania
* United Kingdom
* Zambia

Write a report that addresses the following points:

1. Identify issues critical to each country in regard to growth and standard of living.
2. How can these countries work together to address their respective problems?
3. Do current relationships (such as trade agreements) exist between these countries, and are these positive or negative? How can these partnerships be improved?

Support this report with maps and data from this activity. You may want to also refer to additional sources such as textbooks, encyclopedias, and the Internet to find additional details about your countries.

High School Assessment

Module 4, Lesson 2

Growing Pains

You have been selected by the United Nations to establish a model partnership between nations. Your job is to select two groups of countries – one group with a slow growth rate and one group with a fast growth rate. Each group of countries should consist of four to five nations from Europe or sub-Saharan Africa. The countries within each group need to have similar growth characteristics. Refer to the activity if you need help in identifying the growth rate of a country.

Write a report that addresses the following points:

1. Identify issues related to growth and standard of living that are critical to each group’s welfare.
2. How can these countries work together to improve their standards of living and address their respective problems?
3. Do current relationships (such as trade agreements) exist between these countries, and are these positive or negative? How can these partnerships be improved?

Support this report with maps and data from this activity. You may want to also refer to additional sources such as textbooks, encyclopedias, and the Internet to find additional details about your countries.