

# SWITZERLAND



## PISA Rankings

2006			2003			2000		
MATH	SCIENCE	READING	MATH	SCIENCE	READING	MATH	SCIENCE	READING
6	16	14	9	12	13	8	18	17

Population size:	7,550,020
Student enrollment:	806,905 in 2006
U.S. states with similar statistics:	Colorado, Minnesota

### General description of K–12 education:

Compulsory education includes primary and lower secondary education and spans nine years. The school year is at least 190 days long. Switzerland has no national standards or curriculum. Each canton (analogous to U.S. states) has its own minister of education and may institute standards and/or curriculum. Attempts are underway to harmonize teaching among the cantons in foreign languages, mathematics and science. Nationwide targets are to be set in certain subjects. There is no national system of assessment in Switzerland. However, there are nationally recognized study guidelines for the exams leading to the Maturität certificate (school-leaver certificate) and the DMS diploma (entrance into vocational education). Students seeking to attend college take the 'national' Swiss Matura examination.

### Required subjects:

One national language (depending on the region, German, French, Italian or Romanic), mathematics, history and political science, geography, science, drawing and design, handicrafts, music, and sports.

### EXCERPTS

The documents included for Switzerland are excerpts from study guidelines and school leaving exam for college-bound students obtained from the State Secretariat for Education and Research:

- History—grade 12
- Geography—grade 12

*Note: These documents were translated into English from French.*

# SWITZERLAND

## Excerpts

### MATURA GUIDELINES

#### History and Geography • Grade 12

#### SWITZERLAND: TIME AND SPACE

<i>History</i>	<i>Geography</i>
<ul style="list-style-type: none"> <li>▪ From the Ancien Régime to 1848 up until Helvetica (Swiss Confederation)</li> <li>▪ Rivalries and tensions in the establishment of the federal State</li> <li>▪ History and political system of Switzerland in the 20<sup>th</sup> century</li> </ul>	<ul style="list-style-type: none"> <li>▪ Geology, resources and natural dangers</li> <li>▪ Regional characteristics (physical, demographic, social and economic dimensions)</li> <li>▪ Land management, 3 levels: confederation, cantons, communes</li> </ul>

#### THE ROLE OF THE STATE IN THE ECONOMY AND SOCIETY

<i>History</i>	<i>Geography</i>
<p>Liberalism</p> <ul style="list-style-type: none"> <li>▪ Emergence</li> <li>▪ Adam Smith</li> <li>▪ Neo-liberalism (Reagan, Thatcher)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Industrial and post-industrial poles</li> <li>▪ Localization factors</li> </ul>
<p>Interventionism</p> <ul style="list-style-type: none"> <li>▪ The stock market crash of 1929</li> <li>▪ Roosevelt's New Deal and the American model</li> <li>▪ Totalitarian and fascist regimes</li> <li>▪ The Marshall Plan and the "Trente Glorieuses" ("Glorious Thirty", 1945 – 75)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Interdependence of economic spaces</li> <li>▪ State tools for intervention in the economy</li> <li>▪ Demographics and social policies (in Germany, in particular)</li> <li>▪ Environmental problems and policies</li> </ul>
<p>Statism</p> <ul style="list-style-type: none"> <li>▪ Socialism and Marxism</li> <li>▪ Planning, concept and functioning</li> <li>▪ Priority of industrialization</li> <li>▪ Reforms: NEP, Khrushchev, Gorbachev</li> <li>▪ Fall of the Soviet model</li> </ul>	<ul style="list-style-type: none"> <li>▪ Countries with economies in transition, passage from a planned economy to a market economy, to the example of the former Soviet Bloc countries</li> <li>▪ Ecological heritage (influence of economic activities on the environment)</li> <li>▪ Slicing and re-slicing of regions (historical, political, economic)</li> </ul>
<ul style="list-style-type: none"> <li>▪ Clash between these views of the role of the State: the Cold War</li> </ul>	

GLOBALIZATION SINCE 1900	
<i>History</i>	<i>Geography</i>
<ul style="list-style-type: none"> <li>▪ Expansion of capitalism and imperialism: colonial empires</li> <li>▪ Emergence of American dominance</li> <li>▪ (rapid development since the end of the 19<sup>th</sup> century)</li> <li>▪ Decolonization (process, consequences)</li> <li>▪ UN, collective security system</li> </ul>	<ul style="list-style-type: none"> <li>▪ Endangered natural resources around the world</li> <li>▪ Players and tools of globalization</li> <li>▪ IMF, World Bank, WTO; multinationals, countries</li> <li>▪ Global division of labor, North/South contrasts</li> <li>▪ Migrations on a global scale</li> </ul>
<ul style="list-style-type: none"> <li>▪ Globalization of the economy and the role of the Asian-Pacific region</li> </ul>	

EUROPE BETWEEN NATIONALISM AND INTEGRATION	
<ul style="list-style-type: none"> <li>▪ Triumphant nationalism and confrontations on the eve of 1914</li> <li>▪ Birth of new countries after 1919 (human rights, League of Nations)</li> <li>▪ Association, integration of European countries since 1945 (EU)</li> <li>▪ Exacerbation of nationalism, identity crises, minorities, clashes</li> </ul>	<ul style="list-style-type: none"> <li>▪ Geography of Europe: fundamental aspects (principal landscapes, climatic zones, population distribution, economic regions, communication channels)</li> <li>▪ Political organization: borders and new countries</li> </ul>
<ul style="list-style-type: none"> <li>▪ Regionalization in Europe (EU)</li> </ul>	

**MATURA EXAMINATIONS**

**History**

**First and Second Parts: Knowledge and Comprehension**

**A. Turning Points**

1. Check the period that corresponds with the American Revolution, first conflicts with England to the writing of the Constitution.

- 1724 – 1767     1764 – 1787  
 1724 – 1776     1820 – 1876

2. Describe and explain the system defined in the United States Constitution for balancing the power of the different states in the federal legislative branch.

3. Describe the main innovations in the area of ground transportation (before the automobile) and on water during the Industrial Revolution.

On ground:

On water:

**B. Swiss History**

4. Check the year in which the Sonderbund War took place.

- 1798     1745  
 1847     1815

5. Number and define the two opposing sides during the Sonderbund War. (Do not give the canton names.)

- a)  
b)

**C. Civic Education**

- 6a. Name the federal executive power.  
 6b. Describe how the federal executive power works.  
 7. Name the two current representatives (2007) of the federal executive power.

- a)  
b)

**D. Triumphant Europe**

8. Name two of the three military campaigns led by Germany to unify then explain the issues involved.

- a)  
b)

9. Name and comment on two reasons that pushed European powers to begin colonizing in the 19<sup>th</sup> century.

- a)  
b)

**E. The century of ideological confrontations**

10. Name, define and comment on the economic policy chosen by the Roosevelt Administration to fight the Depression in the United States in 1930.

11. Describe the military situation in France in the autumn of 1939 and the summer of 1940.

Autumn 1939:

Summer 1940:

**Third Part: Essay question, document analysis**

*“WHEREAS the peace of the world and the security of the United States and of all American states are endangered by reason of the establishment by the Sino-Soviet powers of an offensive military capability in Cuba, including bases for ballistic missiles with a potential range covering most of North and South America;*

*WHEREAS [...] the United States is determined to prevent by whatever means may be necessary, including the use of arms, the Marxist-Leninist regime in Cuba from extending, by force or by the threat of force, its aggressive or subversive activities to any part of this hemisphere, and to prevent in Cuba the creation or use of an externally supported military capability endangering the security of the United States; [...]*

*Now, THEREFORE, I, JOHN F. KENNEDY, President of the United States of America, acting under and by virtue of the authority conferred upon me by the Constitution and statutes of the United States, [...] and to defend the security of the United States, do hereby proclaim that the forces under my command are ordered, beginning at 2:00 p.m. Greenwich time October 24, 1962, to interdict [...] the delivery of offensive weapons and associated materials to Cuba.”*

Proclamation by President John F. Kennedy  
October 23, 1962

Structure your work, making sure to:

- define the type of document (A)
- place the situation described by the document in its general and specific context (framework) (B)
- show the relevance of the document (analysis) (C)
- show the impact of the document (D)

A. Define the type of document to be analyzed.

B. Place the situation described by the document in its general and specific context (Framework).

C. Show the historical significance of the document by proposing a logically structured analysis (by structuring it according to the ideas or principal themes) of the text, avoiding a summary of it (Analysis).

D. Put the analyzed document in perspective in terms of international relations. (Impact)

## Geography

### First Part: Knowledge Assessment

Respond to each statement with true (T) or false (F)

- 1.1 The earth as an element of the solar system
  - Equinoxes take place in the months of September and March
  - The Tropic of Capricorn is located in the northern hemisphere
  - The midnight sun is visible one day a year in the polar circle and lasts 6 months on the pole
  - The rotation of the earth takes 365 days and 6 hours
  
- 1.2 Structure of the earth
  - The crust as well as the upper part of the upper mantle forms the lithosphere
  - The oceanic crust is thicker than the continental crust
  - Subduction zones are plate convergence zones
  - All accretion zones are at the bottom of the ocean
  
- 1.3 Climates, natural environments
  - Atmospheric pressure increases with altitude
  - Oxygen is the main gaseous component of air at low altitudes
  - Meteorological phenomena occur in the troposphere
  - More than 80% of clouds are formed above seas and oceans
  
- 1.4 Population, habitat, economy
  - The global urbanization rate exceeds 50%
  - A megalopolis contains more than 8 million inhabitants
  - The “construction” industry is part of the service sector
  - Fallow refers to feed crops for livestock
  
- 1.5 Transport and energy
  - Wood is considered a renewable energy
  - Natural gas is a hydrocarbon
  - Middle East countries have the largest oil reserves in the world
  - Nuclear power plants were first built in the middle of the 20th c.

## Second Part: Comprehension and Application

### 2.1 Earthquakes

a) Define the notion of magnitude.

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b) Define the notion of intensity.

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c) List four elements that influence the intensity of an earthquake.

1. 

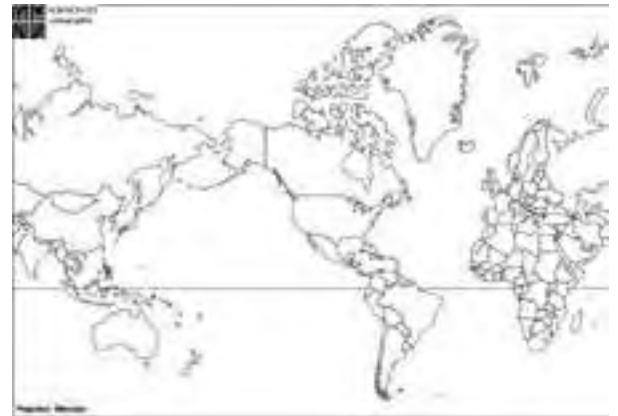
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2. 

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3. 

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4. 

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d) Using the atlas, draw on the map below the largest seismic areas on earth.



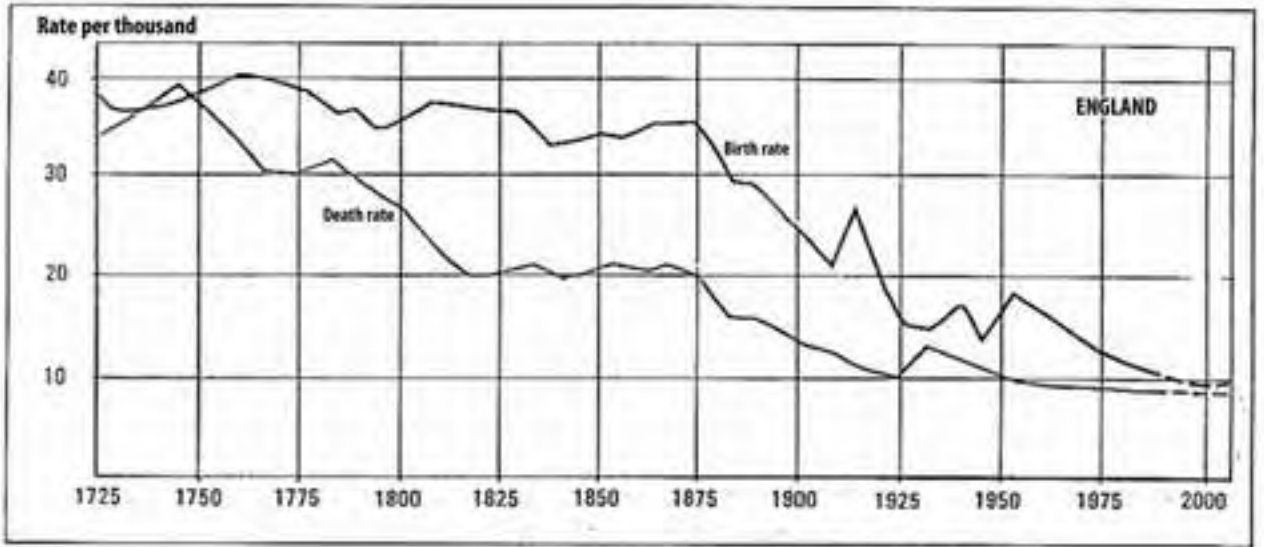
### 2.2 Demographic Transition

a) Name the phenomenon that is the subject of the document below.

b) Break this phenomenon down into 4 steps (draw the steps on the graph itself), describe and explain briefly what happens at each stage.

c) In which region of the world did this phenomenon begin? During which period? What are its causes? Explain.

d) What are the fundamental differences between this phenomenon in developed countries and the phenomenon in developing countries in terms of time, speed and the intensity of the phenomenon?



e) Define natural population growth and explain its evolution with regard to the graph above.

f) What was the natural population growth in England (see graph above):

- In 1850?
- In 1975?

**Third Part: Essay**

3.1 Fertility in Switzerland

a) Present four possible causes for the decrease in fertility in Switzerland since the 1970s.

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

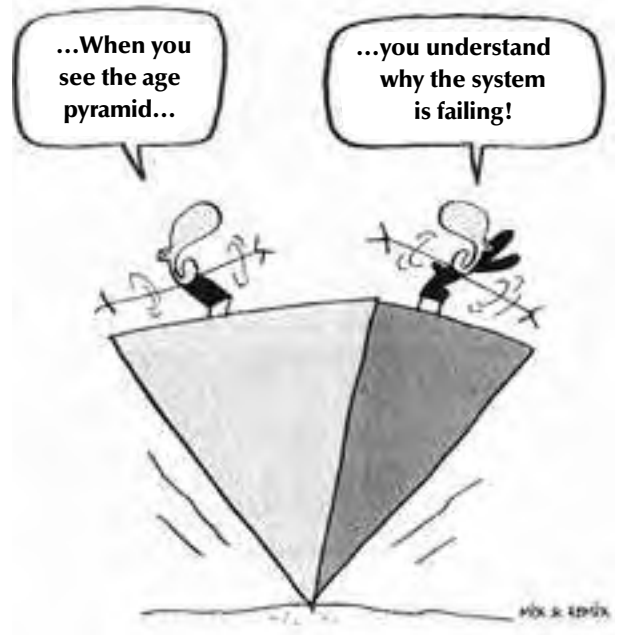
b) Present four direct or indirect consequences of the decrease in fertility in Switzerland.

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

c) Propose four solutions to increase the birth rate in Switzerland.

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

d) Describe and comment on the cartoon below.




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