

Name: Klasse:

Intramontane Basins – The Empty Interior – Solution



Great Salt Lake close to Salt Lake City



Colorado Plateau

High-altitude basins are enclosed by the Rocky Mountains to the East and the Pacific mountain system in the West. Large parts of the natural environment are composed of the Great Basin and the Colorado Plateau. The U.S. Department of State characterizes the space of intramontane basins as "The Empty Interior" because it has a very low average population density.

1. Describe and explain the climate and vegetation using the examples given in the film "USA: From the Rocky Mountains to the Pacific Ocean" and summarize them at the end of the question.

a) **Great Salt Lake:** *Due to high temperatures, the water evaporates, leaving salt fields without any vegetation.*

b) **Grand Canyon:** *From the rim to the bottom of the canyon conifers turn into bush vegetation and then dryness, as a result of the increasing temperatures from top to bottom.*

c) **Death Valley:** *The basin has a typical desert climate with temperatures of over 50 degrees Celsius and only very sparse vegetation.*

Summary: *The intramontane basins lie in the rain shadow of the surrounding mountains, resulting in a vegetation of cacti and small shrubs or even none at all.*

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2. The intramontane regions suffer from hostile natural circumstances, poor infrastructure and low population density. But in some areas the basins are nonetheless of great economic importance. Explain this in the following columns according to economic sector.

Mining	Energy Industry	Tourism	Gambling
<p><i>Since the 19th century gold and silver have been mined here. Today the copper mines in Salt Lake City are among the most important in the world.</i></p>	<p><i>Energy is generated at the Hoover Dam since the 1930s. Oil processing and petro-chemistry are important industries in Salt Lake City.</i></p>	<p><i>National parks like the Grand Canyon and the traditional Route 66 are famous tourist attractions.</i></p>	<p><i>Las Vegas attracts millions of gamblers and tourists each year. The pre-planned city generates multiple billion dollars annually.</i></p>

3. A problem in the intramontane basins is water supply. Assess the development of the city of Las Vegas since the 1930s under this aspect.

Las Vegas needs to provide millions of tourists with water. Additionally the water consumption of swimming pools, fountains, golf courses and luxury hotels can be considered extremely wasteful. Even the immense power required to run neon signs, etc. is generated by hydroelectric plants. As a result there is not enough water for agricultural use (for the irrigation of fields). Other environmental problems (like the lowering of groundwater levels) make the creation of such a city in the middle of a desert more than questionable.