

2021 United States Geography Championships – Written Examination (Middle School)

Student Name _____ School _____

General instructions - Respond to each of examination questions in the space provided. Only answers written in the appropriate space on the answer document will be marked. Where appropriate, you should write sentences or phrases instead of single words. If a question or section asks for a specific number of reasons or answers, give only the number of answers specified. Please write clearly and legibly.

Section 1 - [25 points]

1. Define the term 'Rust Belt' as it applies to the United States. [3 points]
 2. Define the term 'Sun Belt' as it applies to the United States. [3 points]
- Identify whether each of the following are Rust Belt or Sun Belt states.
3. Texas [2 points]
 4. Ohio [2 points]
 5. Florida [2 points]
 6. California [2 points]
 7. Pennsylvania [2 points]
 8. In a paragraph, discuss reasons why Americans have migrated to and settled in Sun Belt states in such large numbers since 1960. [9 points]

Section 2 - [25 points]

Use the map in section 2 to complete the following.

1. Define the term aquifer. [2 points]
- Answer the following questions about the Ogallala Aquifer and water use in agriculture.
2. Over 50% of the water taken from the Ogallala Aquifer is used for drinking. [T/F] [2 points]
 3. The Ogallala Aquifer supplies over 80% of the drinking water for the over 2 million people who live in the colored area shown on the map. [T/F] [2 points]
 4. Center-pivot irrigation is commonly used by farmers in the area of the map. [T/F] [2 points]
 5. The areas with the biggest decline in water level are all in Nebraska. [T/F] [2 points]
 6. There are no areas of the aquifer where the water level has risen since 1950. [T/F] [2 points]
 7. The Ogallala Aquifer replenishes itself naturally every 50 years. [T/F] [2 points]
 8. Roughly 80% of the consumptive water use in the US is for agriculture. [T/F] [2 points]
 9. Briefly explain 3 specific ways farmers could conserve water. [9 points]

Section 3 - [25 points]

Use the map in section 3 to complete the following.

1. List four different types of renewable energy. [4 points]
- Answer the following about new electrical power generation in the US in 2021.

2. A majority of the new power generation in the US in 2021 came from solar energy. [T/F] [2 points]
3. A large nuclear power plant is scheduled to come online in 2021 in the southeastern US. [T/F] [2 points]
4. Several new power plants using coal are scheduled to come online in 2021. [T/F] [2 points]
5. The Manatee Solar Energy Center in Florida combines solar generation with battery storage. [T/F] [2 points]
6. The largest wind generation plant coming online in 2021 is located in Wyoming. [T/F] [2 points]
7. No new natural gas plants are scheduled to come online in 2021. [T/F] [2 points]
8. The percentage of total US power generation from coal has been decreasing since 2010. [T/F] [2 points]
9. Define the term biomass. [2 points]
10. Should biomass be considered a renewable energy source? Provide a short explanation of your answer. [3 points]
11. Roughly what percentage of total US power generation in 2020 came from renewable sources? [2 points]

Section 4 - [25 points]

Use the map in section 4 to complete the following.

Identify the deserts indicated at each of the following numbers.

1. 1 [2 points]
2. 2 [2 points]
3. 3 [2 points]
4. 4 [2 points]
5. 5 [2 points]
6. 6 [2 points]

Answer the following questions about deserts.

7. Most hot deserts in the world are located between 10 degrees north and 10 degrees south latitude. [T/F] [2 points]
8. Deserts receive an average rainfall between 200mm and 250mm per year. [T/F] [2 points]
9. Hot deserts have a mean average temperature between 100 and 120 degrees F during the hot-weather months. [T/F] [2 points]
10. Briefly explain why the Atacama Desert is the driest non-polar desert in the world. [7 points]