2022 United States Geography Championships - Cartographic Examination (Elementary School)

Student Name _____   School _____

General instructions - Respond to each of examination questions in the space provided on the answer document. 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]

Use the map in section 1 to complete the following. This map shows various ocean currents in May of 2022. There is a word bank on the answer sheet to help you on some of the questions. You may not use all of the words in the word bank and you may use some of them more than once.

1. Identify the major cities located at numbers 1 to 6 on the map. [6 points]

2. Briefly explain the effect of the Loop Current (number 8 on the map) on the water temperature in the Gulf of Mexico. [3 points]

3. Briefly explain what would likely happen to a tropical storm or hurricane that passed through or got caught in either the Loop Current or the loop eddy at number 7. [3 points]

4. Identify the current at number 9. [2 points]

5. In what general direction is this current moving? [2 points]

6. Is the temperature higher inside the Loop Current at number 8 or north of the Loop Current? [1 point]

7. Is the temperature higher inside the Loop Current at number 8 or inside the loop eddy at number 7? [1 point]

8. In La Nina years like 2022, is average precipitation in this area expected to be higher or lower? [2 points]

9. Due to La Nina would Atlantic hurricanes be expected to be stronger or weaker? [2 points]

10. Briefly explain your answer for question 9. [3 points]

Section 2 - [25 points]

Use the map in section 2 to complete the following. This map shows satellite views of a certain area of the world at night. There is a word bank on the answer sheet to help you on some of the questions. You may not use all of the words in the word bank and you may use some of them more than once.

1. Identify the COUNTRIES indicated by numbers 1-3. [6 points]

2. Identify the CITIES indicated by numbers 4 and 5. [4 points]

3. Would the brighter areas of the image be expected to be richer or poorer than the darker areas of the map? Briefly explain your answer. [2 points]

4. Would the brighter areas of the map be expected to have more people or fewer people than the darker areas? Briefly explain your answer. [2 points]

5. Identify four benefits for people of having lights at night. [4 points]

6. Identify and briefly explain one reason why light at night is harmful to humans. [2 points]

7. Identify and briefly explain one reason why light at night is harmful to animals. [2 points]

8. Identify and briefly explain one way city governments can reduce light pollution at night. [3 points]

Section 3 - [25 points]

Use the map in section 3 to complete the following. There is a word bank on the answer sheet to help you on some of the questions. You may not use all of the words in the word bank and you may use some of them more than once.

1. Identify the types of forest indicated by numbers 1-4 by climatic domain. (polar, boreal, temperate, tropical, subtropical) [4 points]

2. For numbers 5-13, identify if the forest indicated is a tropical rainforest, a temperate rainforest or not a rainforest. (write tropical, temperate or not in the blank) [9 points]

3. Based on the map, roughly how much of the Earth's land surface is covered by forests? [1 point]

4. Based on the map, roughly how much of the Earth's forests are tropical forests? [1 point]

5. Identify the five countries that collectively contain more than half of the world's forests. [5 points]

6. Identify three reasons for deforestation throughout the world. [3 points]

7. Identify and briefly explain two negative effects of deforestation. [2 points]

Section 4 - [25 points]

Use the image in section 4 to complete the following. There is a word bank on the answer sheet to help you on some of the questions. You may not use all of the words in the word bank and you may use some of them more than once.

1. What world city does this image show? [2 points]

2. Besides the emirate shown in the image, name any four of the other emirates that make up the United Arab Emirates. [4 points]

3. Roughly what percentage of the residents of the UAE are Emirati citizens? [2 points]

4. What is the largest ethnic group residing in the UAE as of 2020? [2 points]

5. Identify three reasons why cities like the one pictured would want to build artificial islands like those shown or to reclaim land from the sea. [6 points]

6. Identify and briefly explain three problems with the type of land reclamation shown in this image. [9 points]