

# **Geographic Information Systems (GIS)**

Minnesota on the Map

Name: Section:

Score: \_\_\_\_/10

Directions: In this contest you will be making an original map relating to a topic of your choice in Minnesota. Your map will be submitted with the chance to win a prize.

# **Possible Topics**

WildlifeNative AmericansSportsImmigrationPoliticsEducationIndustryLand UseEcologyHuman RightsMiningRecreation

Agriculture Transportation Urban Issues

**Economic Development** 

# **Map Construction Guidelines**

- You must use ArcGIS Online to construct your map.
- Your map must address the theme for 2016 Minnesota On The Map. You could map the entire state or some smaller area within the state. The area mapped should not be smaller than one square mile.
- Your map must be original and not created using only layers of data already available either online or from Esri. To meet that criteria, you must have created at least one layer of your own data for your map.
- Your final map for submission must be one of the following:
  - ArcGIS Online Presentation
  - o ArcGIS Online Web App
  - ArcGIS Online Story Map

## **Project Scoring**

## **Project Design, Organization, and Analysis (6 points)**

### Introduction (.5 points)

- Project has a title
- Project's geographic area is clearly defined
- The map clearly addresses the theme Minnesota On The Map

## **Data Preparation (2 points)**

- Source of data layers is clearly explained (i.e. created vs. downloaded).
- Each layer has appropriate metadata (an explanation of the data presented).
- Challenges related to data preparation are presented

#### Data Analysis (3 points)

- Identify the data layer you created to make your map. How did you create your layer?
- Identify and explain how any downloaded layers enhanced your map Base maps, Esri layers, etc.
- Explain how the data on your map creates a new and original view of Minnesota.
- What challenges did you encounter making your map?

## Conclusions (.5 points)

- Summarize your project

### **Project Presentation (4 points)**

## **Application of ArcGIS Online technology (1 Point)**

- Project demonstrates skillful and in-depth use of ArcGIS Online technology.

## ArcGIS Online Presentation, Web App, or Story Map quality (2 Points)

- Topic is clearly identified and explained

- Selected final map format is well-organized

Final map uses at least one layer of original data created by the student. Here are some examples of original layers:

- The layer is created by gathering original data in the field using a GPS collecting method.
- The layer is created by using an existing database from a reliable source and converting the data into a layer.
- The layer is created by using the Map Notes function in ArcGIS Online.

## **Attribution (1 Points)**

- All data was used with permission and attribution as to its source. Included in the Map Details section.