Name _____ Date _____

CLIMATE

Jam
100% DATA

DATA JAM

Communicating Climate   *Data to Nonscientists*

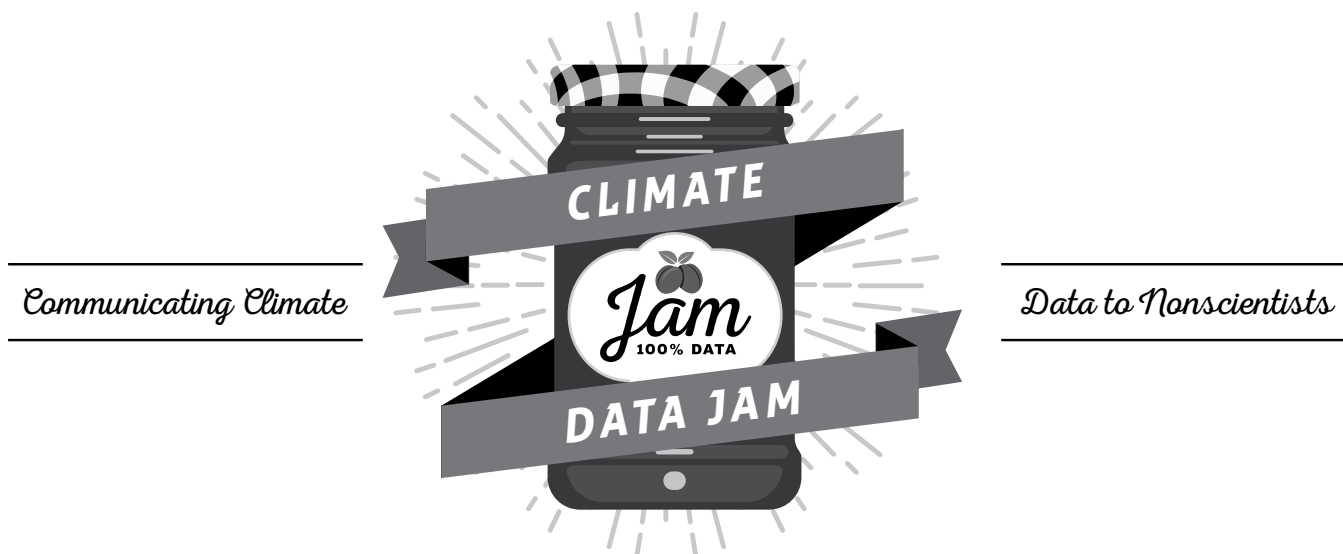**GOAL** - Examine climate data from your county, and then design a creative project that explains these data to a non-scientist audience. A good Data Jam project is:

> *Clear:* represent the data accurately and in a way that is understandable to non-scientists. **Make sure to include a legend explaining how you represent the data** (e.g., one water droplet graphic represents 10 mm of precipitation).

> *Creative:* use your imagination! This could be a song, demonstration, physical model, poem, skit, newscast, infographic, dance, rap, etc.

> *Concise:* keep it short and to the point. It is more effective to focus on one or two important trends in the data than to try to explain it all.

PROJECT DIRECTIONS

1. Decide if you would like to work alone or with one or two other students to complete your Climate Data Jam project.

2. Use the online USDA Southwest Regional Climate Hub Precipitation and Maximum Temperature maps to acquire the needed data from your county. Fill in the data tables on page 3 of this handout.

3. Examine the data and find one or two trends that interest you.

4. Read the Scoring Rubric so you know how your presentation and project will be evaluated.

5. Brainstorm and fill out the brainstorming notes section on page 2.

6. Create your Climate Data Jam project (infographic, skit, etc.).

7. Fill out the Climate Data Jam Summary.

8. Practice your presentation.

BRAINSTORMING NOTES

1. Look at the data carefully and list some trends you might like to explain to your audience.

2. List some possible ways to present the data (song, rap, interpretive dance, etc.). Think about the positive and negative aspects of each one.

CLIMATE DATA
BACKGROUND
As the climate changes, changes in temperature and precipitation will impact humans and ecosystems. Temperatures are predicted to increase throughout the United States. Some areas will receive less precipitation than historic levels, and some will receive more. However, how and when these changes in precipitation affect people and ecosystems may be complex. For example, seasonal changes in precipitation may have large effects on residential and agricultural water supplies if less precipitation falls in seasons that it is most needed by people. In addition, it is important to consider how temperature changes will affect water supplies. In warmer temperatures, more water is likely to evaporate or transpire from lakes, streams, oceans, soil, and plants (note: **evapotranspiration** is the total of evaporation and transpiration from the Earth's surfaces, bodies of water, and plants). Think about the effects of increased evapotranspiration on water for human use and plants and the food web. For your project, you will examine precipitation and temperature data from your county and identify a trend or trends in the data. Consider how climate change is affecting precipitation, temperature, and possibly the water supply and ecosystem in your county.

DATA DIRECTIONS
Use the online USDA Southwest Regional Climate Hub Precipitation and Maximum Temperature maps to acquire the needed data from your county. Write the name of your county in the blank at the top of page 3.
1. Follow the link for the Precipitation map: http://spatial-web.nmsu.edu/flexviewers/PrecipitationByCounty/
   a. Use the zoom and pan buttons on the left to zoom in to your state.
   b. Locate your county and click on it.
   c. A data box with a scroll bar will appear. Verify that you have clicked on the correct county by reading the county name in the data box.
   d. In table 1, record the following historic (1971-2000) mean precipitation data in mm: Annual Total, Winter Total, Spring Total, Summer Total, and Fall Total.
   e. Scroll down to the predicted data for your county. Also in table 1, record the following mean predicted future (2040-2069) precipitation data in mm: Annual Total, Winter Total, Spring Total, Summer Total, and Fall Total.
2. Follow the link for the Maximum Temperature map: http://spatial-web.nmsu.edu/flexviewers/MaxTempByCounty/
   a. Use the zoom and pan buttons on the left to zoom in to your state.
   b. Locate your county and click on it.
   c. A data box with a scroll bar will appear. Verify that you have clicked on the correct county by reading the county name in the data box.
   d. In table 2, record the following historic (1971-2000) mean maximum temperature data in °C: Annual Max, Winter Max, Spring Max, Summer Max, and Fall Max.
   e. Scroll down to the predicted data for your county. Also in table 2, record the following mean predicted future (2040-2069) data in °C: Annual Max, Winter Max, Spring Max, Summer Max, and Fall Max.

Your County Name: _____

TABLE 1: MEAN PRECIPITATION IN YOUR COUNTY

	HISTORIC (1971 – 2000) IN MM	PREDICTED FUTURE (2040-2069) IN MM
Annual Total		
Winter Total		
Spring Total		
Summer Total		
Fall Total		

TABLE 2: MEAN MAXIMUM TEMPERATURE IN YOUR COUNTY

	HISTORIC (1971 – 2000) IN °C	PREDICTED FUTURE (2040-2069) IN °C
Annual Total		
Winter Total		
Spring Total		
Summer Total		
Fall Total		

CLIMATE DATA JAM SUMMARY

Each group will have a maximum of 5 minutes to present their Data Jam project to the rest of the class. During these presentations, you will "show" your project. This will look different depending on your project. For example, you may act out your skit, show your video, read your poem, or show and discuss your physical project. While these presentations will vary depending on your project, the components listed below should be included in all presentations. **Use this page to write answers that will help as you plan and prepare your presentation**.

1. Introduce all of the **students** who worked on the project.

2. Give the **title** of your project. Make sure it is descriptive.

3. Explain the **data trend** you are trying to get across in your project.

4. **Showcase your project.** For example, read your poem, act out your play, or give a tour of your physical model. Make sure to explain your legend (how the data is represented). Work with your teammates to decide how to best show your project to the audience. Practice!!!

5. **Explain factors leading to increased temperatures.** In your own words, explain the factors that have resulted in the rise of local or global temperatures (even if your project focused on precipitation).

6. Give a **brief reflection** at the end of your presentation. Include the parts of this project that you enjoyed the most and the parts that were most challenging.