



Completed (40 possible)	_____
Accuracy of answers (30 possible)	_____
Appropriate grammar (15 possible)	_____
Neatness of record (15 possible)	_____
Total	_____
A = 86-100 points	
B = 71-85 points	
C = 70 points or less	

4-H Weather & Climate Science

Advanced (Grades 9-12)

Record Sheet

Record for Year _____

A completed record sheet is due by the last business day of May to exhibit each project at the fair.
Use any 4-H publications, the internet, the library, or a professional to help you prepare your responses.

The Basics

Name _____ 4-H Club _____

Years in 4-H _____ Grade _____ Years in Project _____

At the Surface

Describe how a warm front is produced. _____

Describe how a cold front is produced. _____

Circle the characteristics that correspond to the air mass types listed below.

Air Mass Type	Characteristic Temperature		Characteristic Humidity	
Maritime Tropical Air Mass	Cold	Warm	Moist	Dry
Continental Polar Air Mass	Cold	Warm	Moist	Dry
Maritime Polar Air Mass	Cold	Warm	Moist	Dry
Continental Tropical Air Mass	Cold	Warm	Moist	Dry

Soaking It In

What is the Coriolis Effect? _____

In what ways do the heat index and/or windchill differ from the actual temperature? What causes the difference?

Watching the Weather

Identify the weather station model symbols in the chart below.

[Source: <https://www.wpc.ncep.noaa.gov/>]

Visit www.weather.gov and record today's weather. Simply enter the cities listed and record the results below.

Location	Today's Date	Where were the conditions recorded? (ie. Indianapolis International Airport)	Temperature	Humidity	Barometric Reading
Trenton, NJ			____°F / ____°C	%	in
Santa Fe, NM			____°F / ____°C	%	in
Juneau, AK			____°F / ____°C	%	in

Think of a tragic event in history that resulted from some form of severe weather. Provide the name of the storm or historic event and describe what happened to the people or place that it affected? _____

Forecasting

What is CoCoRaHS, and how does one get involved? _____

Some weather and climate issues can be controversial. Select a topic of controversy and explain the two opposing perceptions on the issue? _____

Name three colleges or universities in which you could study weather and climate science or a similar field of study.

1. _____
2. _____
3. _____

Of the professions that exist in weather and climate science, which appeals to you the most and why?

What is the potential salary earnings for this career? _____

Provide a brief description of your 4-H exhibit or plan for your exhibit.

What is one thing you learned or sparked your interest as a result of completing this project? _____
