

Name:	Date:
Teacher:	Period:
Group members, if any:	

1. Please work on this individually:

Is extreme weather relevant? Is the topic of extreme weather important to you personally? Is the topic important to your community?

Please circle the choice below that best matches how you feel about the topic's relevance.

Extreme weather is not important to me <i>and</i> is not important to my community	Extreme weather is not important to me, <i>but</i> is important to my community
Extreme weather is important to me, <i>but</i> is not important to my community	Extreme weather is important to me <i>and</i> is important to my community

When instructed, flip over to Page 2.

2. Please work on this individually and read the following information carefully.

Humans create **models** to help explain things.

Below are two models. These provide different explanations for increases in extreme weather events over the last 50 years. These events include intense hurricanes, heavier rainfall and flooding, dangerous wildfires, and heat waves.

Model A: Increases in extreme weather events are linked to climate change. Current climate change is mainly caused by human activities, such as fossil fuel use.

A person who supports this model makes the following argument:

Human activities are increasing the amount of carbon in the atmosphere and changing Earth's climate. Increases in extreme weather events must then be linked to current climate change and human activities that cause this change.

Model B: Over time, increases and decreases in extreme weather events are mainly caused by changes in Earth's orbit around the Sun.

A person who supports this model makes the following argument:

The number and strength of extreme weather events varies over time. The amount of sunlight received by Earth also varies over time. Because energy from sunlight is a major contributor to Earth's climate and weather, changes in extreme weather are a result of orbital variations.

Plausibility is a judgment we make about the potential truthfulness of one explanatory model compared to another. The judgment may be tentative (not certain). You do not have to be committed to that decision.

Circle the plausibility of each model. [Make two circles, one for each model.]

	Greatly implausible (or even impossible)					Highly plausible				
Model A	1	2	3	4	5	6	7	8	9	10
Model B	1	2	3	4	5	6	7	8	9	10