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

1. **Please work on this <u>individually</u>:**

Is the origin of the Universe relevant? Is the topic of the origin of the Universe 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.

The origin of the Universe is **not important** to me *and* is **not important** to my community	The origin of the Universe is **not important** to me, *but* is **important** to my community
The origin of the Universe is **important** to me, *but* is **not important** to my community	The origin of the Universe is **important** to me *and* 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 three models. These provide different explanations for the origin of the Universe and how it has changed since then.

Model A: Space, time and matter came into existence a finite time ago in a hot dense state. It has been expanding and cooling ever since.

A person who supports this model makes the following argument:
Current observations show that the universe is expanding and cooling. If you rewind the current expansion backwards, the Universe would have been an incredibly small point. It was extremely dense and hot. Over time space itself has been growing.

Model B: The Universe has always existed in its current state and always will. Matter is created in some places and destroyed in other places at different times.

A person who supports this model makes the following argument:
What we see in the Universe today is basically the same as what has always existed. Although there might be small-scale changes in certain locations, overall everything stays the same. It will continue to be like this forever.

Model C: The Universe began a finite time ago when a small ball of matter exploded. The matter then spread out throughout space.

A person who supports this model makes the following argument:
Everything that we currently see in the Universe used to be located in a tightly packed ball of matter. Billions of years ago, this ball exploded and distributed that matter across space. This resulted in the distribution of galaxies we see today.

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 three 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
Model C	1	2	3	4	5	6	7	8	9	10