Seeing is Believing/Shape of the World
Dr. Sarah's MAT 1010: Introduction to Mathematics

goals:

- Explore applications of geometry in everyday life.
- Identify geometric ideas/connections within local and global regions.
- Identify the role of probability and chance in real world situations
- Communicate geometric information in written documents.

The people in the video: Actor Danny Glover: Narrator, Art Historian Linda Henderson, Artist Pablo Picasso, Mathematician Dufret, Mathematician Tom Banchoff, Artist Tony Robbin, Astrophysicist Rob Kirshner, Mathematician Robert Osserman, Physicist Albert Einstein, Mathematician George Riemann, Mathematician Jeff Weeks

1. How do people in the video talk about, explore or represent higher dimensions (analogies, visual representations...)? For instance - Henderson uses x-rays and invisible realities as an analogy. Find as many as you can.

2. What are ways that the researchers in the video model and explore the geometry of the universe? For example, Riemann and Einstein used a higher dimensional sphere. Also list any experiments in detail. Find as many as you can.

3. Give one example from the video of a connection to the theme of local to global.

4. Give one example from the video of a connection to the theme of the role of chance/probability.