**Day 3: Amorphous Metals - In-Class Activity**

**Group # \_\_\_ Group Names:**

**Pre-Class Assignments:** [Bulk Metallic Glass - Amorphous Metals](https://www.youtube.com/watch?v=WbPpgQtv7Xc)  video, Amorphous Metals homework assignment

**Societal Concept:** Creating new knowledge and innovations offers opportunities in the handling of intellectual property.

Using the story of Alcoa and their experience with anti-trust, think about a firm that is involved in the production of amorphous metals and imagine that your research team has just made a breakthrough that allows for an inexpensive molding technique that will cut the cost of making cases for computers by a factor of ten. Although the technique could be patented, it also could be replicated and your firm has about a decade head-start on the competition in terms of actually supplying amorphous metal cases to market.

**Part 1 -** Do you patent the discovery which would protect you for 17 years until the patent runs out (of course you will have court costs from trying to enforce the patent) or do you try to keep it a trade secret (like the formula for coke) which could last forever but you also run the risk of someone else discovering how to do it and patenting the result before you? Explain your decision.

**Part 2 –** How would you approach the issue of anti-trust? Would you try to guarantee access to your technology from a number of firms, or instead fight any potential anti-trust prosecution as Alcoa did in its history?

**Part 3 –**Consider Robert Jackson’s argument on the need for anti-trust legislation in the industrial era. Do you think that the dynamics of the system he describes are still in place in the 21st century marketplace? Does technology make anti-trust policy unnecessary or essential? Explain

Grading Rubric. Your grade for the activity will be determined from the following criteria (max 5 points):

5= Responses are appropriate, comprehensive, and indicate thoughtful engagement with the information and concepts from the lecture, readings, and videos. Novel ideas, creativity, and attention to complexity are a plus.

4= Good effort. Responses and arguments are not as clearly presented, or as comprehensive and thoughtful as in a full credit answer.

3= Responses are less appropriate to the assignment, less thoughtful and engaged, with less complete information. Errors in grammar, punctuation and or sentence structure will also result in loss of points.

2= Responses are incomplete, showing little effort, thought, or use of preparatory materials.

1= Responses are not consistent with preparatory materials. Assignment is badly incomplete. Next to no effort.