

Name: _____ Date: _____ Class: _____

Aerogel Pre/Post-Quiz

1. What is the engineering design process? Explain.
2. What is an aerogel?
3. What are aerogels made from?
4. What are some chemical, physical, mechanical, etc. properties of aerogels?
5. What are aerogels used for?
6. In 1-2 sentences, tell how aerogels are made.
7. For what purposes are they currently being studied?
8. How else could aerogels be used? Explain. (Discuss the chemical, physical, mechanical, etc. property that leads to the use.) How could they be used to improve your life?

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9. What are the current challenges facing scientists/engineers with aerogels?
10. What is an emulsion? What is a common emulsion?
11. What is an emulsifying agent (emulsifier)?
12. What does it have to do with aerogels?
13. How do you anticipate using the following in this project? (At the end of the project, you will be asked specific instances where you used these skills.)
- Critical thinking:
 - Perseverance:
 - Creativity:
 - Collaboration:
 - Communication:
 - Conflict Resolution: