Hand warmer Project

Need to Knows

1. What is inside current hand warmers
	1. What makes them lose heat?
2. What type of material is the best insulates heat?
3. How best can the hand warmer retain the heat?
4. How can we make the heat last?
5. What is in a normal hand warmer?
6. How many other successful products are out there?
7. Can we look at other hand warmers in order to produce one?
8. How to create an alternative longer-term heat source than conventional hand warmers.
9. Which chemical reactions are safe and create heat?
10. What are the properties of the chemicals we will be using?
11. How much material do we need to make the warmer?
12. How long will it take for the reaction to take place?
13. How much of each reactant do we need?
14. How do you have consistency in the reaction?
15. What different sources of heat can we use?
16. How do I do the required calculations?
17. What is the best packaging for a hand warmer?
18. What size should the hand warmer be?
19. How can we obtain the chemicals?
20. How do we insure the safety of your product? Keep it secure.
21. What are the safety precautions you will need to use in handle the chemicals?
22. Where should the testing of the chemicals take place?
23. Is the disposal of the product environmentally safe?
24. What patents do we need to be aware of?
	1. How do you get a patent if you want one?
25. How do we make sure to control the temperature?
26. How hot does it need to be?
27. How safe does it need to be?
28. How is the warmer activated?
29. How long does it take to fully heat and how long does it last?
30. Are the materials attainable?
31. How can we make it aesthetically pleasing?
32. What tools are we going to need to build it?
33. What safety materials will we need to build it?
34. Can we build it and market it in the time allotted?
35. What are the implications of mass production?
36. What will trigger the reaction?
37. How to make the heat begin?
38. What is the arrangement of the chemicals inside the warmer?
39. Who are our customers?
40. How do we market a product?
41. Where can I research good marketing techniques?
42. Will it be profitable?
43. How much will it cost?
44. How can we advertise it?
45. How will we price it?
46. Is there a specific group we should be marketing group?
47. Cost of materials you will use?
48. How do we finance it?
49. How many are we making?
50. Can we make them water proof?
51. Can it come in different colors or be scented?
52. Should it come with accessories?
53. Can we make different sizes?
54. How large should we make it?
55. What packaging should we use?
56. How much should we consider design in the final product?
57. How do you balance comfort and effectiveness?
58. How much Thermodynamics do we need to know?
59. Does it have to be just a hand warmer?
60. Can you make different levels of heat for different preferences?
61. What materials can we use to make it reusable?
62. What are we going to call our product?
63. How long can it be stored (shelf life)?
64. How do you store the hand warmer?
65. What is Thermochemistry?
66. What is enthalpy?