Run For Your Life
Early Warning System
OR
Damage Zones

Student Name: ______________

Resource by Brian Soash
Problem

Describe the situation here that you’re trying to solve. Are there any design constraints (things you can’t do or have to do) in order to solve this problem?
Brainstorm

What do you know about the situation already? What information did you find from looking things up that you think might help you solve the problem?
Design

What solution do you have after you've analyzed the problem and done your research? How would you create the design? What would it look like? Would you need materials? What materials would you need?
Build/Testing

If you can build the design show yourself doing so right here. Be sure to include steps to describe what you did and pictures to show yourself doing it.
Testing

How would you test this design? You can’t make a volcano erupt, so how else could you go about testing to see if your ideas were correct or not?
Data

What information did you collect from your test. If you can’t actually test it, what could be the type of results you might get if you could test this and what would those results mean? What would a successful test look like in terms of data? What would a failure look like in terms of data?
Re-design

What changes would you make based off of these tests? If it worked, why did it work, and how could you make it better? If it failed, why did it fail, and what would you do so it wouldn’t hopefully fail the next time?
Conclusion

What did you learn about the scientific and mathematical principles in action here? Why are they important? Are there any misunderstandings that you thought the class had that was cleared up now after this activity? What would you tell someone in between 4 and 6 sentences about what you learned today?
Reflection

How did you do as a participant in this project? If you worked by yourself, how did you do when you did this alone? If you were with a group how were you as a partner? What would you do differently next time in terms of your behavior, effort, cooperation, focus, and determination. Remember, we can always grow, even if we feel that we did the best we possibly could have.