

## AN “EGGSCCELLENT” CAR CRASH LAB: PRE-CONSTRUCTION RESEARCH

*Instructions: In order to prepare yourselves to design a car for this project, do research and answer the following questions...BEFORE working on your blueprints!*

1. What is a crumple zone? Describe how auto-makers design their cars so that there is a crumple zone.
2. What standards does the insurance institute for highway safety use when they determine “safety ratings” for passenger vehicles?
3. Describe the details of how seatbelts work and are useful in a car crash.
4. How do airbags work, and how do they add to the safety of passengers in a car crash?
5. What kinds of things must you consider when designing your car? You should use the words **force** | **time** | **change in...** | **momentum** and any other words from physics you need to answer this question.

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