Transportation Design! Design Brief

Activity:

You are an automotive design engineer in the research and development department of the TMS Automotive Company. You have been assigned the task of designing the new, fuel efficient, aerodynamically sound, stylish, and futuristic automobile for the company. You will be in charge of the designing, constructing, and testing of the new vehicle. All cars in the company will be compared for excellence in design, craftsmanship, aerodynamics, and the fastest racing time. Now if speed is not for you don't worry there will be a category for design. So be sure to make an out of this world or off the wall car design.

Challenge/Problem:

- Research, design, build and test a CO^2 Racecar.

Criteria:

Independent Work:

√ Must keep a progress log describing your activities and progress
√ Research steps and write a story describing how a CO^2 Racecar is made
√ Research forces that act on racecars and how they impact the design
√ Must draw 4 thumbnail designs of car ideas (both top and side view)
√ Must complete two rough sketches of your top two designs
√ Complete final car design drawing with measurements
√ Complete safety tests
√ Construct car: cut, sand, paint and assemble
√ Test
√ Reflection

Constraints:

√ Plan and develop your car using the Problem Solving Process
√ Must meet design requirements and design car in block provided
√ Must reach 100% on all safety tests
√ Car design can be for speed or concept

What to turn in:

Throughout the project you will turn in the following: Write a Story, Progress Log, Thumbnail Sketches, Rough Sketches, Final Drawing, Quia Quizzes and CO^2 Reflection

Write a story on the lines below. The story should be about designing, building & racing a CO2 dragster. Use all 20 of the vocabulary words. Underline the vocabulary words. Use your best spelling, punctuation & grammar.