CONSERVATION KIDS TOY COMPANY: OUR VISION IS TO BE THE GREATEST FORCE IN THE WORLD OF TOYS!

Step 1: Proposal Toy Car Inventor: _____

The Conservation Kids Toy Company wants YOU to build a car toy that moves. You will be expected to design the toy car, collect recyclable materials, and find the fasteners that you will need to build the car at school.
Since the Conservation Kids Toy Company is an environmental company, car engineers have been given the extra challenge of using only recyclable materials to build this car. No amount of money should spent on materials to build this vehicle (except perhaps a magnet). This challenge allows you, the designer and builder, to use your creativity to create the ultimate moving car toy and help the environment at the same time!!! You will take home your plan, collect all the items you will need to build your car toy, and bring them to school on the "building date" to work on building your car. DO NOT BUILD YOUR CAR AT HOME or it cannot be considered for a mark.

Step 2: Design

List some forces that you use (*other than muscular force*) to make the toy car move. Your car must use more than one force.

Muscular force _____

_____ _____

_____ _____

Draw a diagram of the moving car toy that you would like to build. Label all parts of your diagram . Your toy car can use muscular force to move, but it must also use at least one other force that we have talked about in class.

List all the materials and fasteners that you will need to build your moving car toy.

_____ _____

_____ _____

_____ _____

Explain **which force(s)will** make your toy car move and how it will work? (Remember to use science words like **force, push, pull, energy, magnetic force, repel, attract** etc.)

_____

_____

_____

_____

_____

Now that you have finished your planning, show your plans and designs to the Project Manager (teacher). You will then take your design booklet home to collect your materials and fasteners. You are permitted to bring any extra materials and fasteners to school (an even an alternate plan on another sheet of paper) in case your idea does not work. DO NOT LOSE THIS BOOKLET. NOT ONLY IS THIS YOUR DESIGN, BUT IT IS YOUR CONTRACT with The Conservation Kids Toy Company. You do not need to complete the remainder of this contract until AFTER you have built your toy car AT SCHOOL. That portion will be completed at school.

_____ _____

Project Manager's Signature date

The Agreement:

I understand this job. I understand that I will build this project AT SCHOOL. I know that my Project Manager is available to help me whenever I need help or to provide any advice. Also, my parents can provide advice to me when I collect my materials and fasteners at home, however, no changes to this original design contract should be made. The Conservation Kids Toy Company will also accept any extra designs, diagrams or ideas submitted with this original idea. I will submit my completed toy and design booklet on the agreed upon date. I also understand that as an employee of the Conservation Kid Toy Company, I will try to use recycled materials. I will not expect my parents to spend money for this project.

_____ _____

Inventory's Signature Date

Step 3: Car Building Day: Monday, January 30, 2012.

Step 4: Changes and Modifications

AFTER YOU BUILD YOUR MOVING TOY (TO BE COMPLETED AT SCHOOL)

Design Modifications:

Draw and label a diagram of the moving car that you actually built!

If you changed your design, explain what you changed and why you had to change it?

_____
_____
_____
_____
_____
_____
_____
_____

What advice would you give to a grade three student next year before they build a toy car?

_____
_____
_____
_____
_____

Dear _____,

My class has been learning about forces and movement at school in science. We have talked about many forces in science like push/pull and muscular force, magnetic force, static electricity, gravity and friction.

All of the kids in my class are employees of The Conservation Kid Toy Company and our job is to **design** and **build** a moving toy car using the forces that we have learned about. My teacher is my Project Manager for this science project. **First**, I will design my car toy and share the design with my Project Manager (or my teacher) at school. **Then** I will bring the design sheet home to share with you. On that sheet you can look at the rubric for marking the project. I need to collect all the items and fasteners that I will need to build my car toy AT SCHOOL. My design sheet is my contract, so **I cannot lose it!!** **The design sheet needs to come back to school on the due date with my materials!!!! It is very important!**

I need to try and build my design at school **independently**, but please give me any advice at home when I have my plan. I might need your help and have another idea ready in case I get stuck or if my design does not work when I'm building at school. If I discover that my design does not work, I can make changes to my design, and I will **fill in that information in the second part of the worksheet at school after building. I don't need to erase my first design!**

It is really important that I can explain everything about my car toy. I need to be ready to tell **how it moves, what makes it move. I also need to tell all the things I used to make the toy car plus any changes that I had to make in order to make my car toy move.** This project is going to be so much fun!

All materials and fasteners are due at school on:

Monday, January 30, 2012.

Love,

_____

Please sign below if all the information is understood.

_____ _____

student parent