PRODUCTION AND CONSUMPTION:

- METAL
- STEEL
- OIL
- NYLON
- FABRIC
- PAINT
- CARDBOARD
- ALUMINUM
- WOOD
- PAPER
- OIL
- TIRE
- RUBBER
- BLOCKS
- OIL
- PLASTIC
PC 1A

Production and Consumption: 10
**The Life History of a Shoe:**

### Upper
1. My top - better known as my "upper" - began as part of a cow in Texas, U.S.A. When the cow died its' hide (or skin) was cured with salt then sent by train and ship to South Korea.

2. In South Korea, this cowhide was cleaned and tanned to make leather. Tanning is a process that uses strong chemicals to make the hide soft and long lasting. Afterwards the tanning plant dumped the leftover cow hair, leather scraps and chemicals into the Naktong River.

3. The next stop for my leather was the shoe factory in Indonesia. Here my leather was cut into perfect little shoe pieces. A woman named Yuli sewed all my upper parts together before she passed me on to be glued to my bottom half!

### Midsole
7. My midsole also started as oil from Saudi Arabia. This time the oil was shipped to South Korea to be processed.

8. In South Korea the oil was changed into a chemical called “Ethylene”. The ethylene was made into a cushy foam that was easy to shape yet strong and stiff. This foam was then shipped to the shoe factory in Indonesia.

9. In the shoe factory the foam was cut by machines to make the midsole that gives you bounce when you walk.

### Sole
4. My sole, (the part that hits the ground when you walk) started out as oil from Saudi Arabia. This oil was sent to Taiwan.

5. In Taiwan the oil was mixed with a chemical that comes from coal called Benzene. This mixture makes rubber. There are also trees that make rubber naturally. My rubber was shaped into huge sheets, which were sent by airplane to Indonesia.

6. At the shoe factory, machines cut and molded my soles. Some of the rubber oozed out of the machines, which creates the largest amount of waste in the factory. The waste used to be sent to the dump but now it is ground in to powder and put back into the next batch of rubber. This saves 5 million pounds of rubber a year! My soles are then glued to the rest of me by workers in the factory.

### Box
10. My box came from trees that were changed in to cardboard in a paper mill in Mexico. This paper mill is special, because it recycles all of its sludge (excess paper pulp and water) so none is wasted. There was no bleach or other chemicals used in my box. The glue that held it together was not toxic and it was printed with special earth friendly ink.

11. My box was shipped to the United States first and then to the shoe factory in Indonesia.

12. After all my parts are glued and I am given shoelaces, I am stuffed with tissue paper made from Indonesian rainforest trees and placed in my box-ready to be shipped to the store where you will buy me!

LIFE-CYCLE INVESTIGATION SHEET:

1. Toy/Object: 

2. Made in what Country: ________________________________

3. Approximate miles traveled to get to your town: ____________

4. Materials used in object (plastic, metal, paint, wood, paper etc.)

5. Type of packaging: _______________________________________

6. Materials used in packaging: _________________________________

7. Weight of object: ________________________________

8. Weight of packaging: ________________________________

9. Does toy/object need additional “stuff” (batteries, accessories etc.)? __________
   If yes, what kind? ____________________________________________________________________

10. How long will toy/object probably be used before it is thrown away? _____________________

11. Can the toy/object be reused or recycled? ___________________________________________

12. After the toy/object is broken or no longer useful where will it go in your community?

______________________________________________________________________________

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