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Save Face

This project is about the damage airbags could do to children. To represent human faces, I used eggs boiled for different amounts of time: a raw egg represented a baby's face, a soft-boiled egg represented a school-aged child, and a hard-boiled egg represented a middle-school student. To model an airbag, I used an inflatable pillow. In my experiment, the egg and the pillow collided. My hypothesis stated that if I boiled three eggs different amounts of time, then the hard-boiled egg would sustain less damage because it was harder. I set up my experiment by making a pendulum. This was accomplished by screwing two pieces of wood together in a swinging "x." If I pulled the tops apart and let go of them, the pillow and egg would slam together. When they hit each other the egg would break. I rated the egg damage on a scale of 1 to 5, 1 being unharmed and 5 being destroyed. Based on where the eggs landed on the scale, I found that the hard-boiled egg, representing a middle-school student, sustained the least amount of damage. Next came the soft-boiled egg (school-aged child), and last was the raw egg, or baby. My hypothesis was proven because the hard-boiled egg was more durable. It landed on 2 on my scale. Even though it was barely damaged, it still had many cracks. This shows that a child under the age of thirteen should not ride in the front seat because of the possibility of injury.