Team Brainiacs

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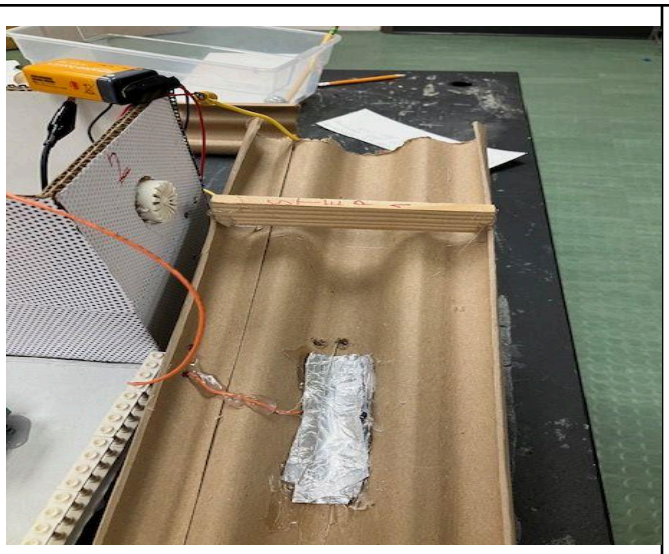
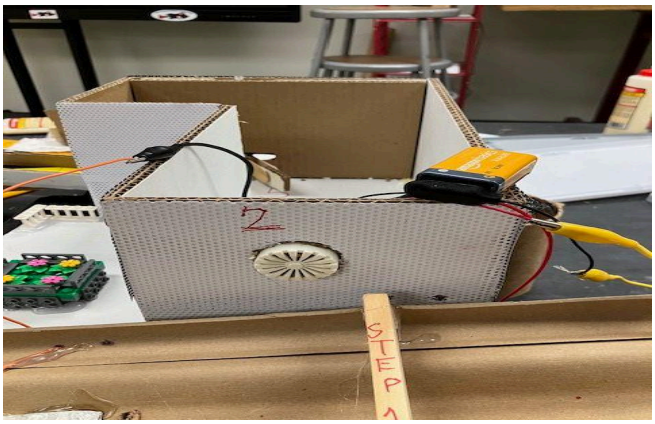
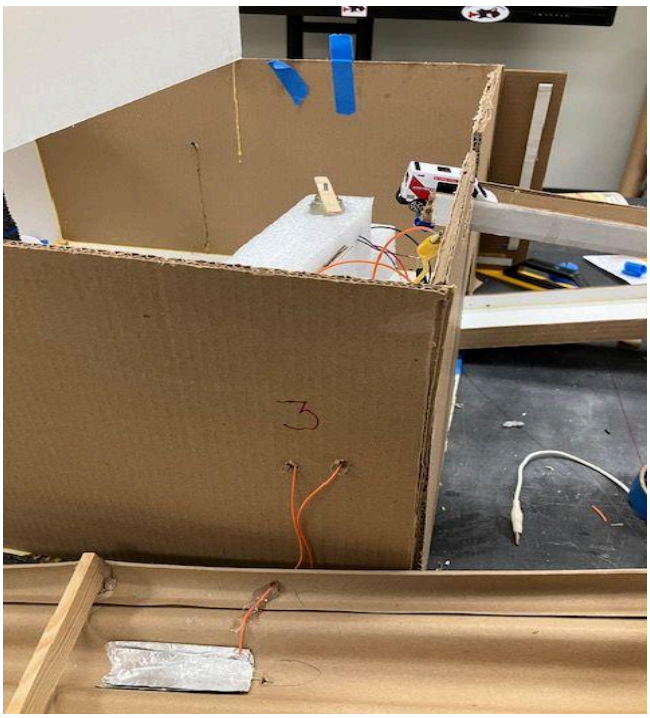
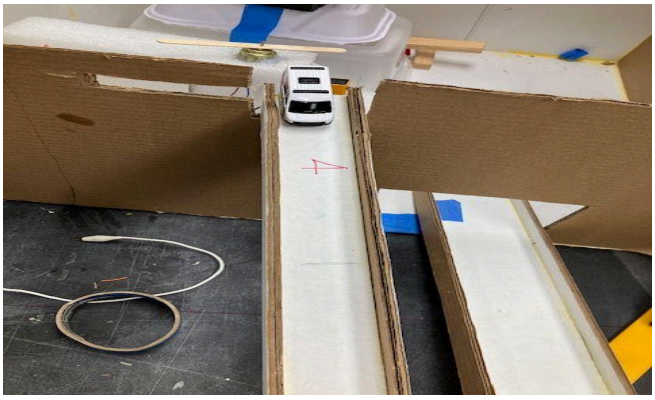
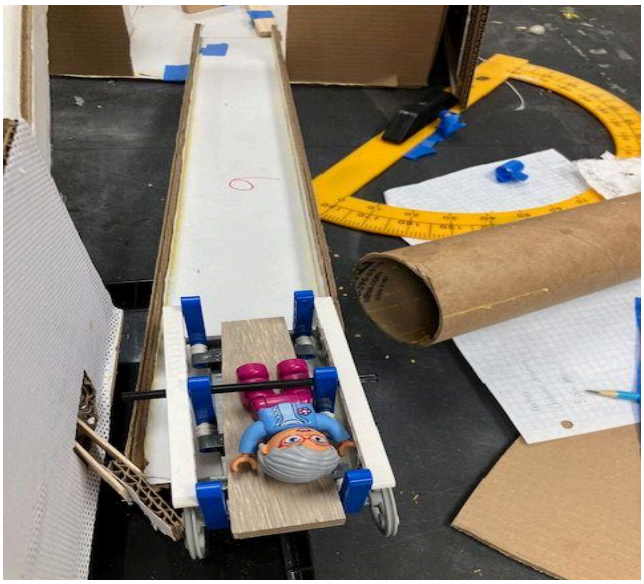
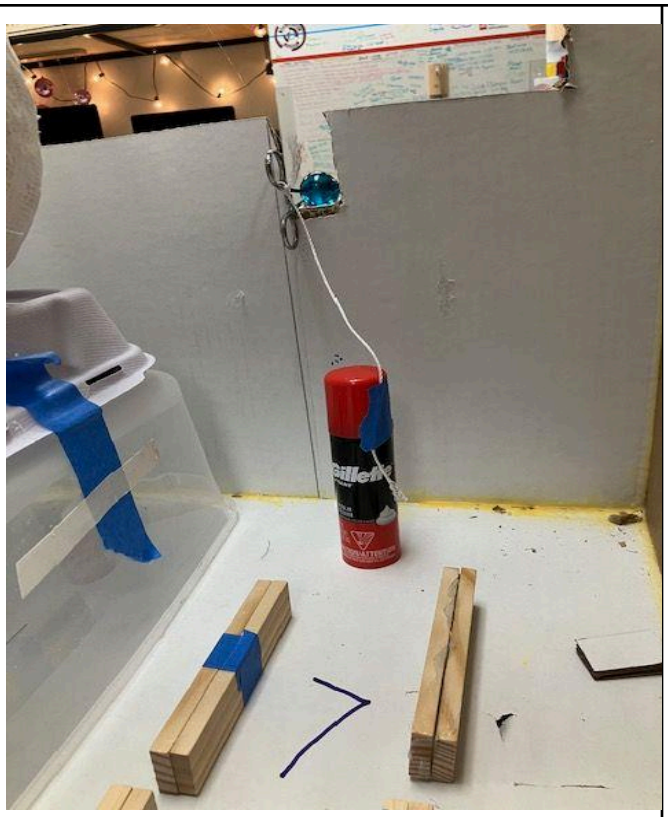
Craniosynostosis: symptoms to surgery

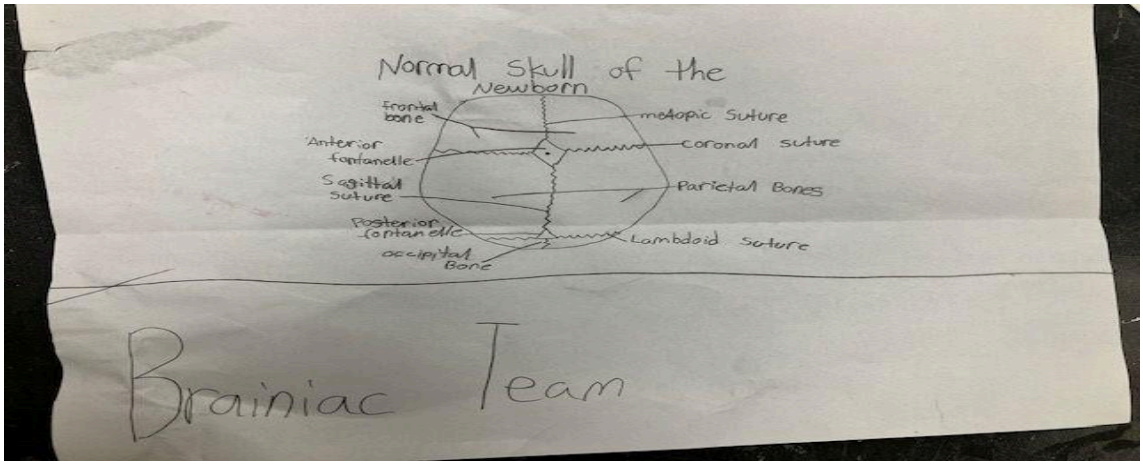
	Step 1: Inclined Plane known as a ramp. The marble rolls down the inclined plane - kinetic energy.
	Step 2: Electric energy. The marble pushed the wire onto the aluminum and makes a contact and a circuit. The battery energy rings the alarm because the little girl in the house where the alarm is located is in trouble. She is in pain.

	Step 3: Electric Motor. The marble makes another contact and this time the electric energy from the battery turns on a motor that turns a stick that hits the ambulance. All the wiring is inside the hospital.
	Step 4: The Ambulance Truck Goes Down The Inclined Plane. Kinetic energy when the electric motor hits the ambulance.

	Step 5: When The Ambulance Truck Goes Down The Inclined Plane it hits the stick on the axle and pushes the stick forward. The other end of the stick moves in the opposite direction. This looks easy but it was hard to do. We used different materials that were too sift like pipe cleaners. But the stick was best and not expensive.
	Step 6: When The Ambulance Truck hits the axel, The axel hits the gurney and goes down the inclined plane. The little girl is on the gurney and the kinetic energy moves the gurney.

	Step 7: Preparation For The girl's surgery, The doctors shave her hair and cut her skin. We used shaving cram and scissors to show this step. The scissors are tied to the shaving cram and is a wedge. When the guney hits the shaving cream can, the string pulls the wedge out.
	Step 8: Inclined Plane. The marbles are on the ramp untl the wedge is pulled. Then they roll with kinetic energy (from potential) down and into the bucket.

	Step 9: The marbles drop into the bucket and it is tied to the skull with a string on a pulley. Three marbles can lift the skull up and the surgery is successful.
	Step 10: Electric Energy; The weight of the marblesi hth ebusket is enough to push the bucket down. The bottom of the busk has aluminum and wire and it makes contact with another wire and the battery energy lights the lights, The little girl is ok and the family is happy again.



Bibliography

1. Mayo Clinic information about craniosynostosis: https://www.mayoclinic.org/diseases-conditions/craniosynostosis/symptoms-causes/syc-20354513
2. Engineering Machine Design Contest Team Resources. VERY important.
3. 2024 Engineering Machine Design Contest Official Handbook
   This is the guide. We tried to do everything.
4. EMDC 2024 Theme Introduction
   This video helped understand the theme and gave us good ideas.