Copper Pipe Magic
Making Programs Stand Out
Melissa’s Signature Projects – Punkin’ Chunkin’

- Final Project for the fall semester
- Students given goal of launching a small pumpkin (I provide the pumpkins)
- Rules:
  - Device must fit through the classroom door without being taken apart
  - Any adjustments must be made on the field
- Students make a poster that analyzes the device based on the concepts covered in class
- Launching takes place the day before Thanksgiving Break
Melissa’s Signature Projects – Punkin’ Chunkin’
Melissa’s Signature Projects – Cardboard Regatta

- Final project for the spring semester
- Students construct a boat made of cardboard and white school glue (I provide the glue)
- Captains are chosen from the school staff (Bonus: Their classes come out to watch the race and I spend time answering their questions about physics)
- Rules:
  - No extra materials can be used on the boat
  - Boats must be able to fit in one lane of the pool and carry one person
- Students make a poster analyzing the boat based on the units discussed in class
- Race takes place in late April
Melissa’s Signature Projects – Cardboard Regatta
Zak’s Signature Projects (Physics Olympics)

5 Events:

Individually
- Meter Stick Reaction Time (t)
- Constant Velocity Run \( (a = 0 \text{ m/s}^2) \) - VA
- Consistent Triple Jump \( (\Delta x) \) - VA
- Basketball Acceleration \( (\uparrow a) \) - VA

Team
- Problem Solving Challenge
Zak’s Signature Projects (Physics Olympics)
Zak’s Signature Projects (Cardboard Cars)

Never attempted but currently in progress (stolen from Theresa Burch)

Corrugated Cardboard, White School Glue, 1” Dowel Rod

I only provide Dowel Rod, students collect cardboard and purchase glue

Build on their own time.
Zak’s Signature Projects (Cardboard Cars)
Zak’s Signature Projects (Water Balloon Human Target)

Students in LF, me in CF in a larger circle
Each student gets 2 shots
I will move in circle to attempt to get hit