GRADE LEVEL: 3<sup>RD</sup> – 5<sup>TH</sup> GRADE

TYPE OF COMPETITION: INDIVIDUAL OR TEAM (PREPARED)

COMPOSITION OF TEAM: 1-3 STUDENTS

MAXIMUM NUMBER OF ENTRIES: 3 teams per Advisor

Purpose: To gain hands-on experience in project planning and completion using the principles of motion.

Student Objective: PRIOR TO MESA DAY, to design and build a car from different types of pasta. The vehicle will be judged separately on speed, travel distance, and creativity of design.

Judging Objective: To select the overall winner based on each of the three areas: speed, distance, and creativity in design.

**Construction Materials**
- Various types of pasta
- Any glue except super glue
  (hot glue gun is allowed)**

**Judging Materials**
- Ramp
- Scale
- Timer
- Measure tape

Rules for Construction

1) Only the materials listed above are allowed; absolutely no substitutions. **Note:** A hot glue gun may be used only under the direct supervision and handling of your advisor. This means only he/she may apply the glue to your car. Students **MAY** paint and decorate their cars.

2) Only cars constructed PRIOR to MESA Day will be allowed to compete in the competition.

Rules for Competition

1) At race time, car will be placed on ramp with its back wheels on start line. The ramp will have a 30-degree incline. One team member will release the car. Car will be clocked for speed from start line to finish line (2 feet from base of ramp).
2) Car will be allowed to roll to a full stop, where distance will be measured.
3) Car may not be touched while race is in progress.

Judging

1) Cars will be rated in categories of speed, distance traveled, and design creativity for an overall score.
2) The car with the highest overall score will be the winner.
3) In case of a tie, the lightest car wins for all three categories.