STEAM Showcase Design Options for 6th grade

Students will demonstrate their projects in class and at the evening showcase on Thursday, March 28 from 6:00-7:30 pm.

Projects are due in class on \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**1. Build a Catapult - Design and make a catapult that will launch a 1 cm modeling clay ball a** **distance of 8 meters to land in a pan 22 centimeters diameter**.

**Important Specifications**

* Device loaded must be no larger than 61 cm X 61 cm area (2ft X 2ft)
* You may not use a pre-designed kit materials
* Groups of 2 are permitted

**2. Build a Paper Table - Design a newspaper table than can support two science texts.**

 **Important Specifications**

* The table surface must be at least 15 cm high
* Use 1 Sunday edition newspaper
* Maximum of 1 roll of ¾ inch masking tape
* Must hold weight of 3566 grams (2 science textbooks)

**3. Design a Glider - Design a plane or hang glider that can carry a 10 gram payload over a 1 meter high barrier and land in a hula hoop a total of 7 meters from launch**

**Important Specifications**

* No motorized gliders, no pre-designed kits
* No hand launching, need to build a launcher
* Glider must be no larger than 61 cm by 61 cm (2ft by 2ft)
* The barrier is 3 meters from the launch
* The hula hoop is 1 meter in diameter
* Groups of 2 are permitted

**\*\*\*Any other project MUST be approved by the teacher before beginning**