

FOR IMMEDIATE RELEASE

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**H.O.P.E. learns how to float your boat  
USING ARCHIMEDES PRINCIPLE**

**Our 8<sup>th</sup> grade classes are diving in to Archimedes Principle of buoyant force this quarter. This long term project is the culmination of an in depth investigation of fluids and forces.**

**Students in small groups begin with a basic understanding of the mathematics of Archimedes Principle. They then apply this understanding in the design phase of the project. This includes detailed drawings of both their boat and a scale model of the boat, including the mathematical calculations.**

**Once designs have been approved, students begin creating their scale models using cardstock and tape. Weights equivalent to the weight of displaced water (according to their calculations) are placed in the scale model. A test float is conducted in a water-filled tub. If the test is successful, students move into the construction phase.**

**Students are given a packet of information and guidelines including permissible materials and construction tips. Within the parameters of these guidelines, students are free to use their imaginations and creativity in utilizing materials such as cardboard, duct tape, masking tape, and latex semi-gloss paint in constructing a boat that will float one crew member across the school s pool without sinking.**

**During the launch phase the floater will don a wetsuit (in case their construction techniques fail them), and paddle the length of the school pool. If their boat should sink, that team is required to return to the drawing board to identify the flaw in implementing their approved design.**

**Heritage Oak is a traditional school appealing to parents who are seeing a proven curriculum and a safe, nurturing environment. Community awareness, academic achievement, and family values are just part of a program that focuses on the development of the whole child.**

**The U.S. Department of Education bestowed its highest honor upon Heritage Oak when it awarded the school the 1998-1999 Blue Ribbon award. The Blue Ribbon , our Nations most prestigious education award, distinguishes Heritage Oak for its excellence in leadership, teaching, curriculum, student achievement, parent involvement, and community support.**