

Boat challenge

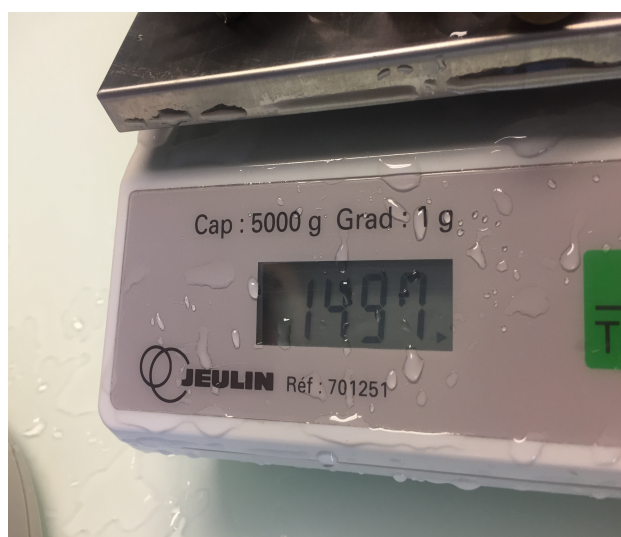
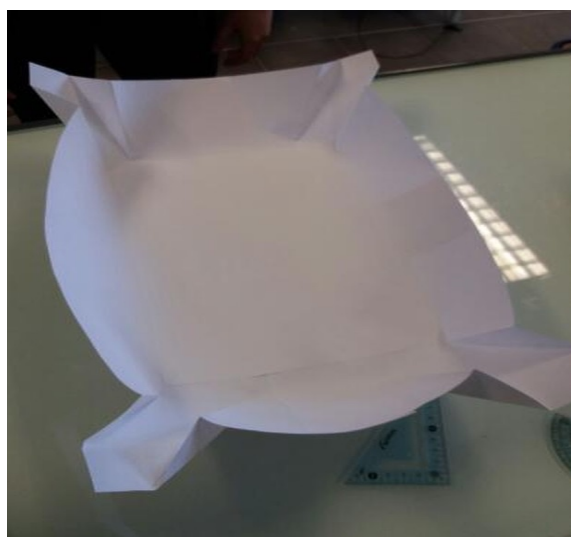
Our physic's teacher has presented us the boat challenge project : we had to built a paper boat with only five simple sheets, a glue stick and a pair of scissors. The boat has to support as much weight as possible.

We thought about the perfect boat's shape. It must have simultaneously a big surface to put weights, be resistant and not be too much heavy ; it would drown. Then, we had the idea of building two boats : we called them "Shrek" and "Apple pie" because of their shapes.

We build a few prototypes, changing the number of paper's sheets and trying different folds.



Here is the « Apple Pie ». We made it with 3 sheets : it supported 975g. We tried again with 5 sheets and we had better results : 1694g . For making the second one, we glued the sheets together, folded the edges to make a circle and finally put two sheets for the base of the boat to assure a better rebustness.



Here is « Shrek ». We made a first prototype with one sheet, it supported 435g. We created a second one, stronger, with 5 sheets ; it looks the same but larger. We assembled the 5 sheets, lined the bottom and folded the four corners. It supported 1497g.