

# Langside Primary School

**Team:** M.A.L.I.A

**Project:** 'Drowning in Plastic'

"We chose the brief 'Drowning in Plastic' as people can easily stop rubbish going into the Clyde but what would one do with plastic that's already in the Clyde?"



## AIMS AND OBJECTIVES

We wanted to help solve the problem of the plastic already in the Clyde. Our group's motto was 'Reduce, Reuse, Recycle'. We felt they were important to our design so we could ensure that every step of the way we were helping and not harming the Clyde.



## OUTCOMES

In line with our 3 R's, we decided our design will be made from reusing plastic; it will reduce the amount of rubbish in the Clyde and we will recycle the plastic to make more of our invention.

We will make it sustainable by using a pulley system so there is no need for motors. We will make it inexpensive so we can have as many as possible to capture rubbish from all over the Clyde.

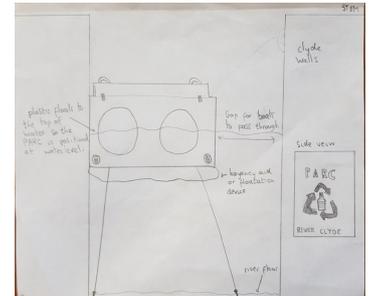


## RESEARCH

We did lots of research into designs, costs and materials.

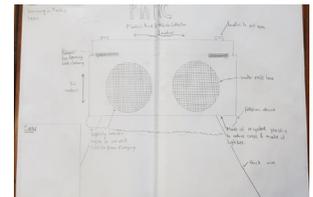
We researched how to make our design as sustainable as possible.

Two engineers from Jacobs came to share their engineering knowledge with us. They helped point out the flaws in our design so we could change and get rid of them.



## FINAL DESIGN

Our invention is called 'PARC' (Plastic and Rubbish Collector). Rubbish will float into the machine and water will be filtered out. The main structure will be two boxes. There will be two holes running through the boxes, with flaps that prevent collected rubbish escaping. There will be holes at the back with a filter. It will be buoyant



by having its own anchor, and have speakers to scare away fish. A boat will collect the rubbish from the PARC.



"We always push ourselves and each other to be the best that we can be...We all enjoyed working on the brief and think that this is an opportunity to help the Clyde and get better and many other things like STEM, teamwork and art."

*Team M.A.L.I.A, Langside Primary School*