CREYA IGNITED MINDS CHALLENGE 2017

IDEA Document

SCHOOL NAME :

PARTICIPANT STUDENT NAME 1 & Grade :

PARTICIPANT STUDENT NAME 2 & Grade :

PARTICIPANT STUDENT NAME 3 & Grade :

SUBMITTED ON:

Provide details of the real world problem that the students want to solve

During summer, many people in Indian cities use water cans with water dispensers.

As many of us have seen or experienced, these cans are heavy and it is difficult to lift the cans and place them on the dispenser without some water leaking out.

We want to create a mechanism that can be used by anybody to lift a can off the ground and place the can on any dispenser with minimal effort and with no danger of leakage.

Who are the people impacted by the problem and what is their need ?

All home makers, people who load water cans in public places and offices and anyone who uses water cans and water dispensers.

These people need a device or mechanism to help them lift a full water can and place it on a dispenser without unduly stressing themselves and without spilling water.

What is the high level solution that the students have come up with for this problem?

We want to build a device using the engineering constructibles such that a water can may be rolled on to it and a winch is used to lift the can to the desired height. Another assembly will rotate the barrel directly over the dispenser while the lid is covered. A third mechanism will remove the cover from the lid such that it fits snugly into the dispenser.

What are the tools or materials that the students need to create the solution (please note that these include the Creya engineering and digital media manipulatives, as well as any other tools or materials that the students would like to use for the solution)?

Creya Engineering Constructibles

Scaled water containers and dispensers