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TECHNOLOGICAL & APPLIED STUDIES

# Romeo Atra

## Bench Seat

*From Milk Bottles to Bench Seats*

*(Selected for SHAPE 2023)*

### REFLECTION STATEMENT

I was inspired by the concept of a circular economy of recycling waste items into usable community products; where the community involvement is present in both the recycling process as well as the enjoyment of the product that is created. Milk bottles were a perfect solution for my recyclable material as they are abundant and contain HDPE which is durable and weatherproof.

My idea was well received by my community who help me collect thousands of milk bottles, which I cleaned, shredded and moulded into 20mm thick plastic sheets. The use of sheets allowed me more flexibility in designing and manufacturing an ergonomic and aesthetically pleasing bench through fusion 360 and the CNC machine.

My bench seat both positively raises awareness about helping our environment, as well as raising awareness about the valuable resources that can be found in 'waste' products, demonstrated in the HDPE bench seat. The final product creates a consciousness of recycling and re-designing the valuable resources found in 'waste' products.





