



WRECS

Waste / Recycling / Environment /
Cleaning / System



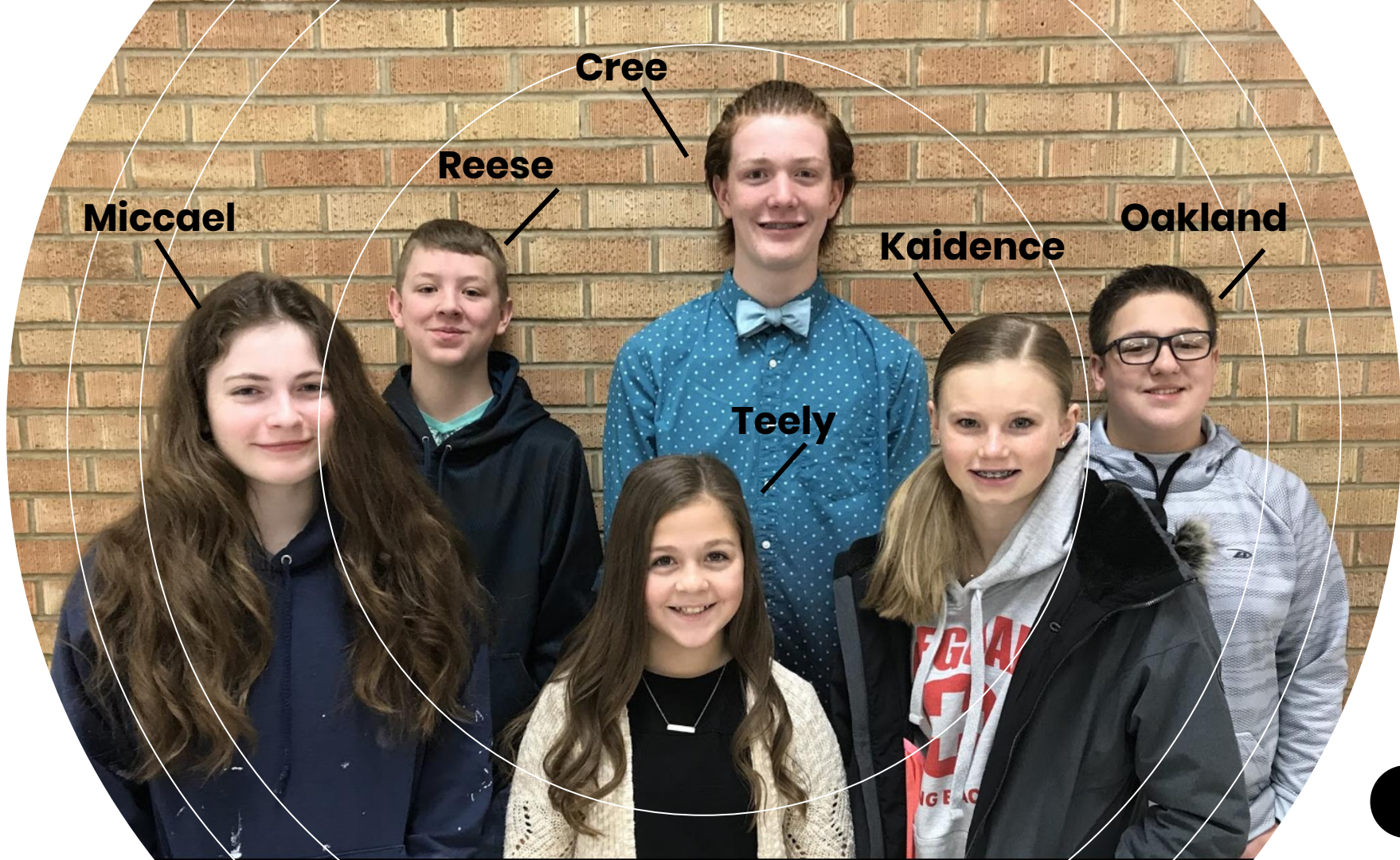
Not to be confused with

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Challenge
Theme:
**Natural
Resources**



The Problem

- Consumers not recycling
- No resources for recycling in rural areas
- Dumping trash into oceans
- The filling of landfills
- Most trash can't decompose quickly

The Bottom Line Is:

TOO MUCH TRASH





The Solution



Our Idea

1. Ideas to help solve too much garbage
2. Narrow it Down
3. We made a final decision... ..

A Garbage to Recycling
Sorting Machine



The Product

- Sorts garbage from the average consumer
- Puts it into different recycling bins
- Bins dump into truck trailers that take them to recycling plants



What can it sort to be recycled?

Plastics

We can sort plastic film and hard plastics together

Papers

Newspapers, magazines, and office paper can all be recycled.

Liquids

We will dry up the liquids and use them as compost

Metal

Most metals, metallic and non-metallic can be melted down and reused

Cardboard

The cardboard can be broken down and shipped off.

Glass

Can be melted down and reused. If glass is broken into little enough pieces it can't be recycled.

Electronics

All sorts of electronic parts can be reused.

Waste

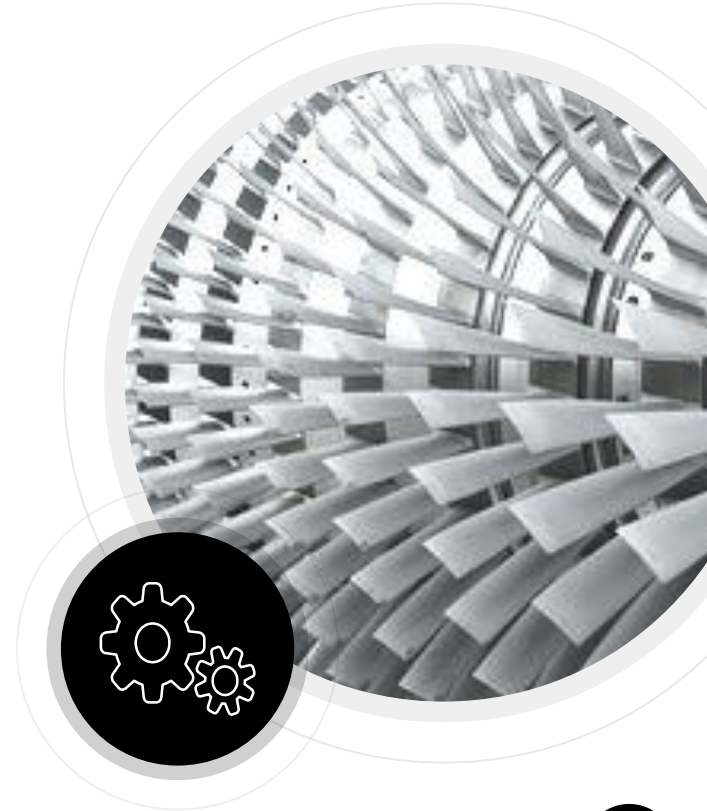
There is also things that can't be recycled whatsoever, such as styrofoam



Materials

- Stainless Steel (Body)
- Titanium (Blades)

Chemical Composition Cameras will also be made out of titanium



Cost

- The total estimated cost is about 1.1 million dollars



Scale

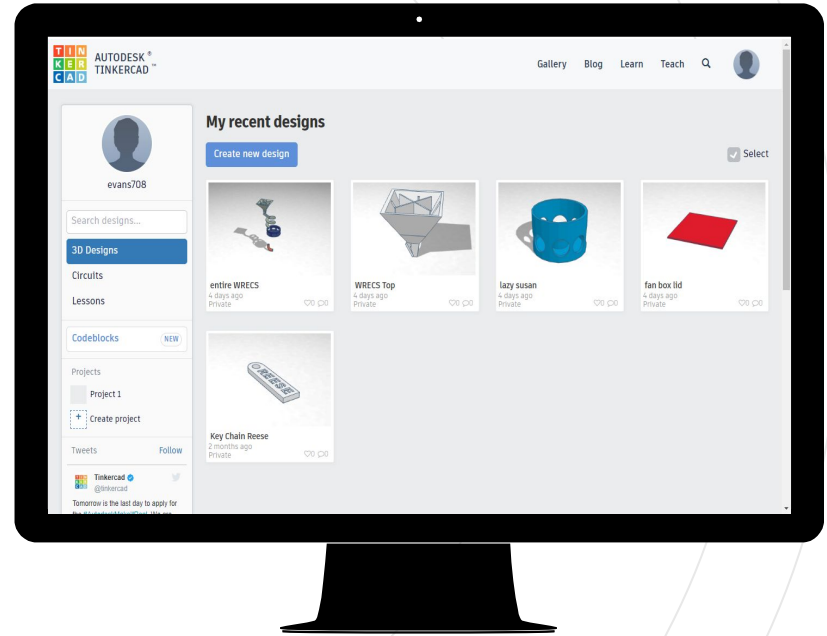
1:50

- 1 centimeter on the model equals 50 centimeters in real life
- The top would be 5 ½ meters
- We did it all in the metric system





Our Tinkercad Designs





Our Iterations



Solving our problem

- Get rid of garbage issues
- Send all the garbage to Salt Lake City
 - Program called Renewology turns plastics into Diesel Fuel
- Can be used nationwide rural areas





Impacting Natural Resources

- Helps water pollution
- Saving animals
- Slows down landfill filling





Website Link

<https://spark.adobe.com/page/uAtCfEZISRNpF/>



3rd Place



Student's Choice





Any Questions?

Thanks!