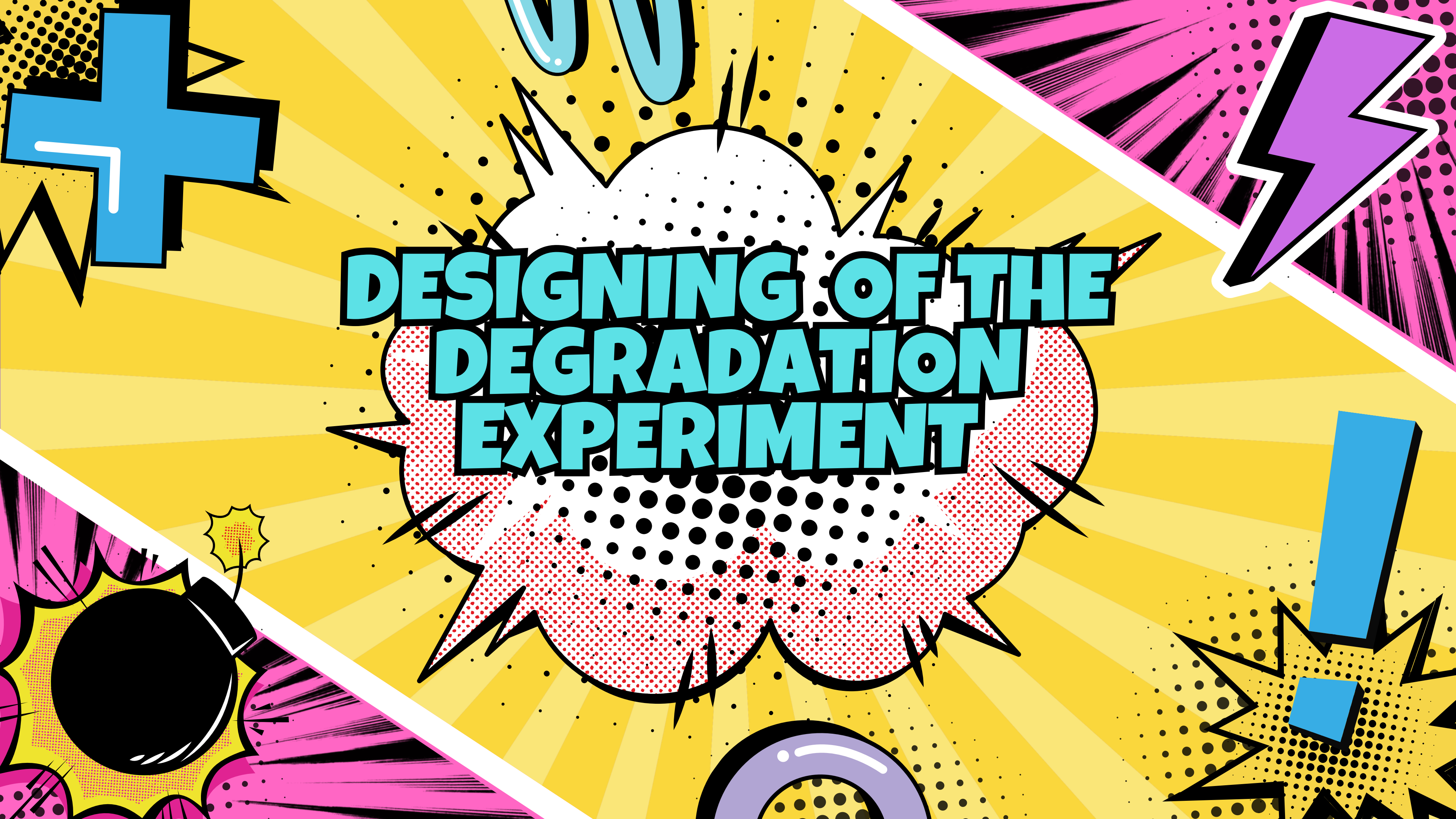


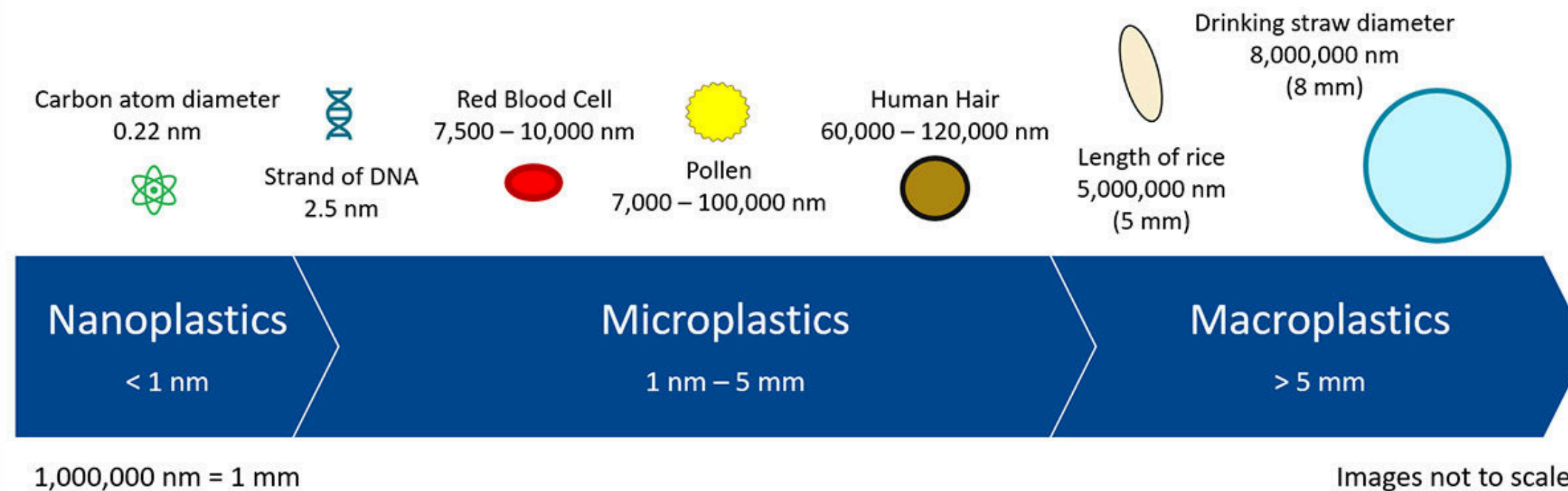


DESIGNING OF THE DEGRADATION EXPERIMENT

SAMPLES

Production of the samples (pBAT, PPAeT, PPAeT⁶⁰) is through a polymer extruder, then placed through a cryomill to be scaled down to microplastics:

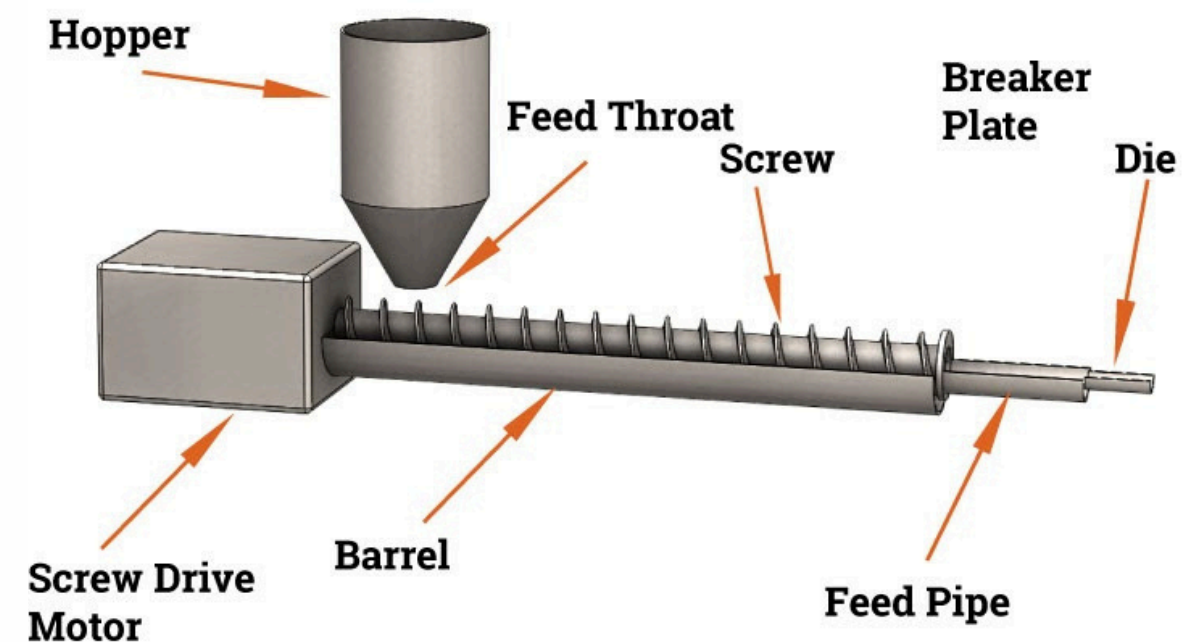
5 millimeters to nanometers



POLYMER EXTRUDER

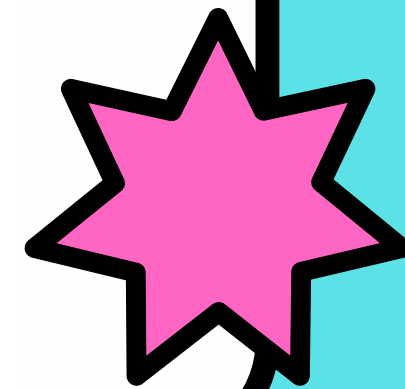
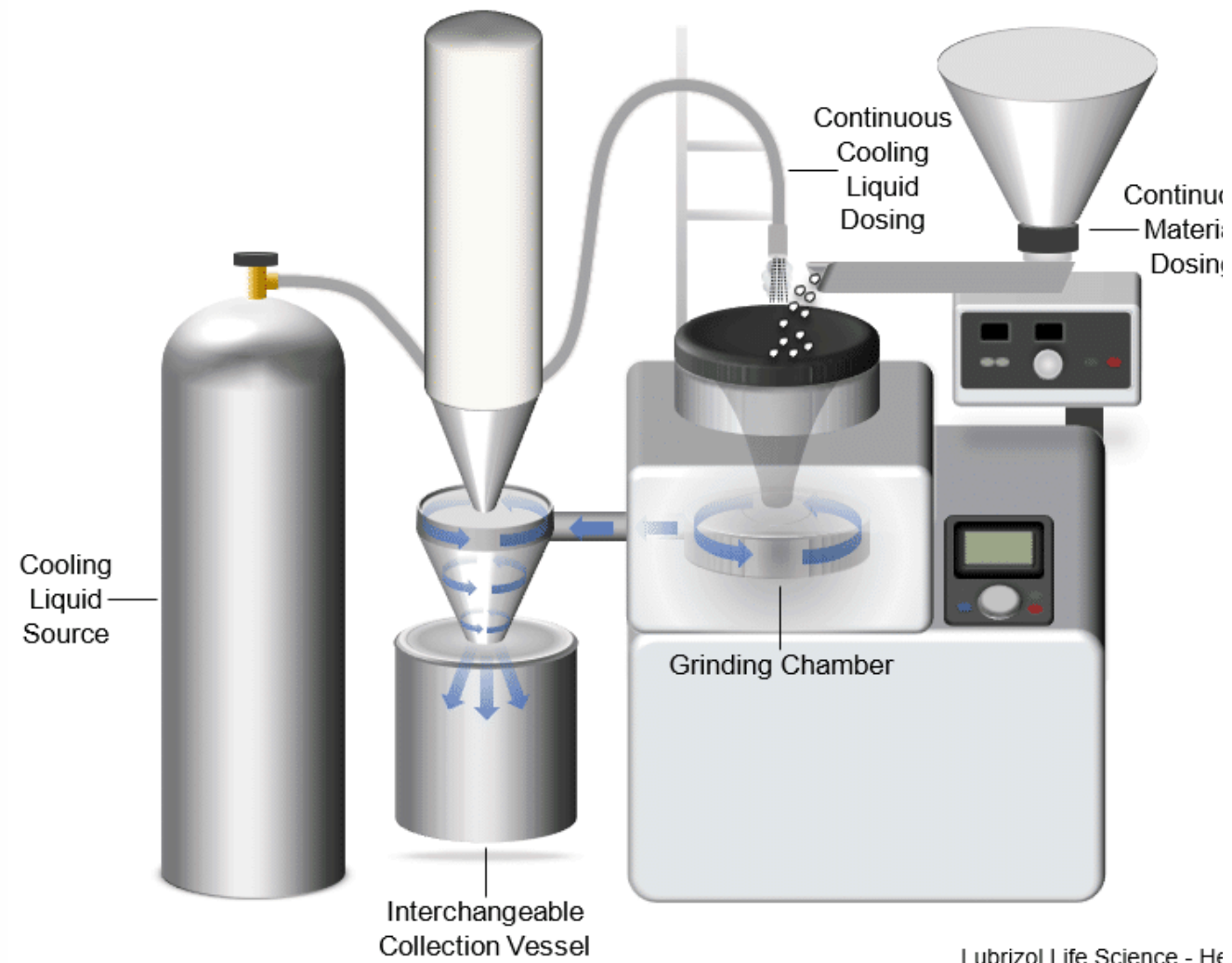


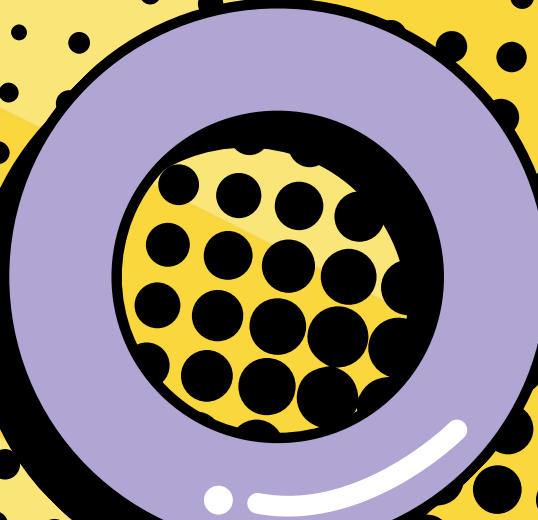
Plastic Extruder Diagram



CRYOMILL

CUSTOMIZED CRYOMILLING PROCESS

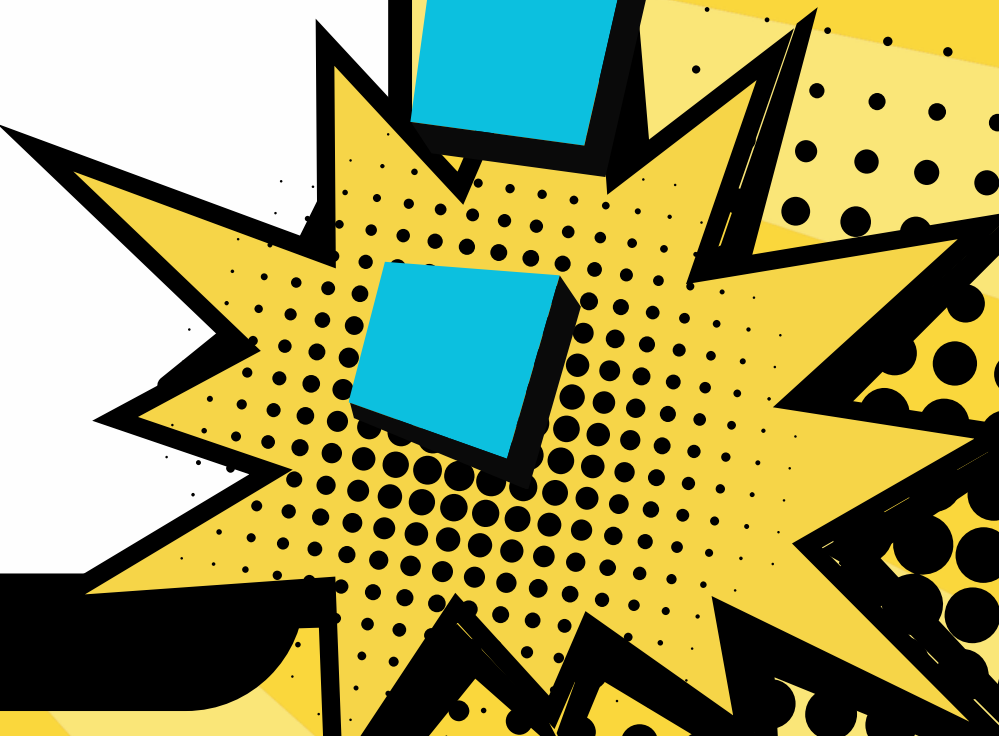




INCUBATION

Separate samples would be placed in batches of saltwater and soil.

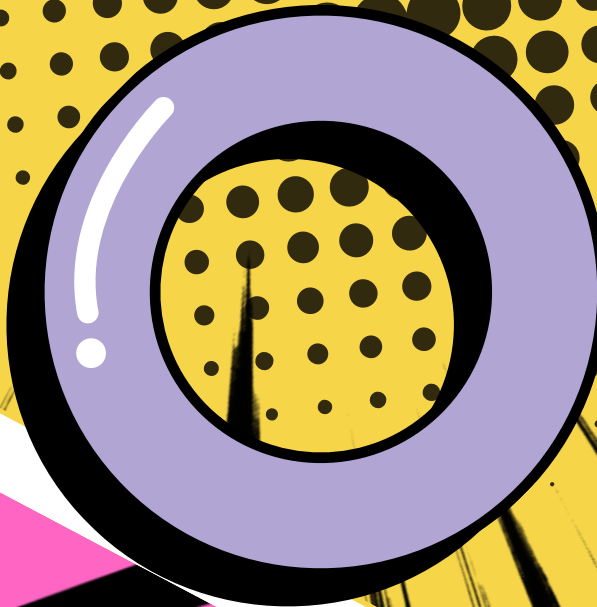
Afterward, they would be placed in an oven set to room temperature for incubation





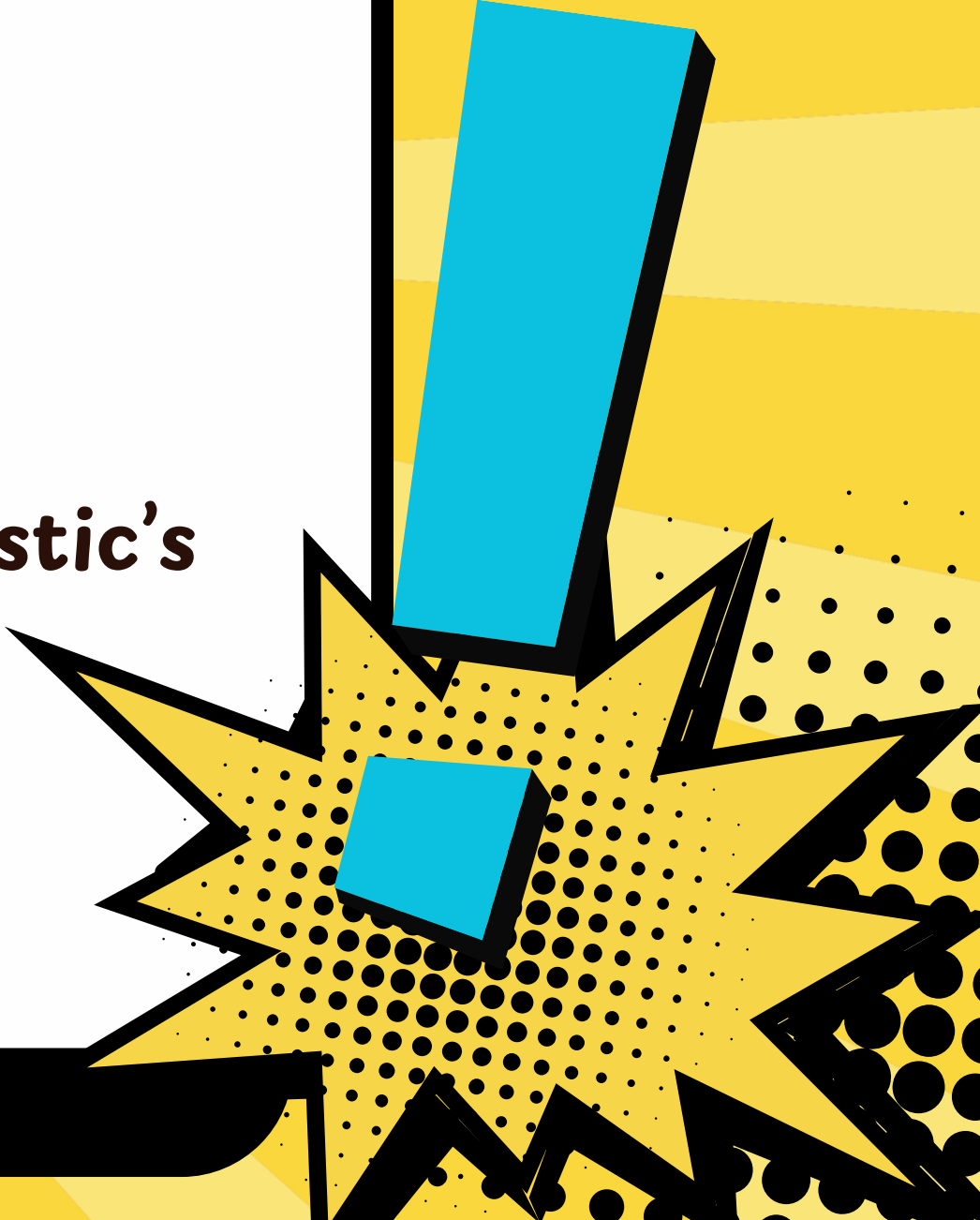
DATA

The data would be collected through multiple sets of batches representing each check-in point because of the destructiveness of the measurement collection process to the samples. It would include the size of the particles as well as the mass.





PITFALLS TO BE CONSIDERED

- Retrieving samples
 - Fine fragments lost due to filtration
 -
 - Salt residue affecting sizing
 -
 - Biomass being considered part of the plastic's metric
- 



**THANK
YOU**