

2024

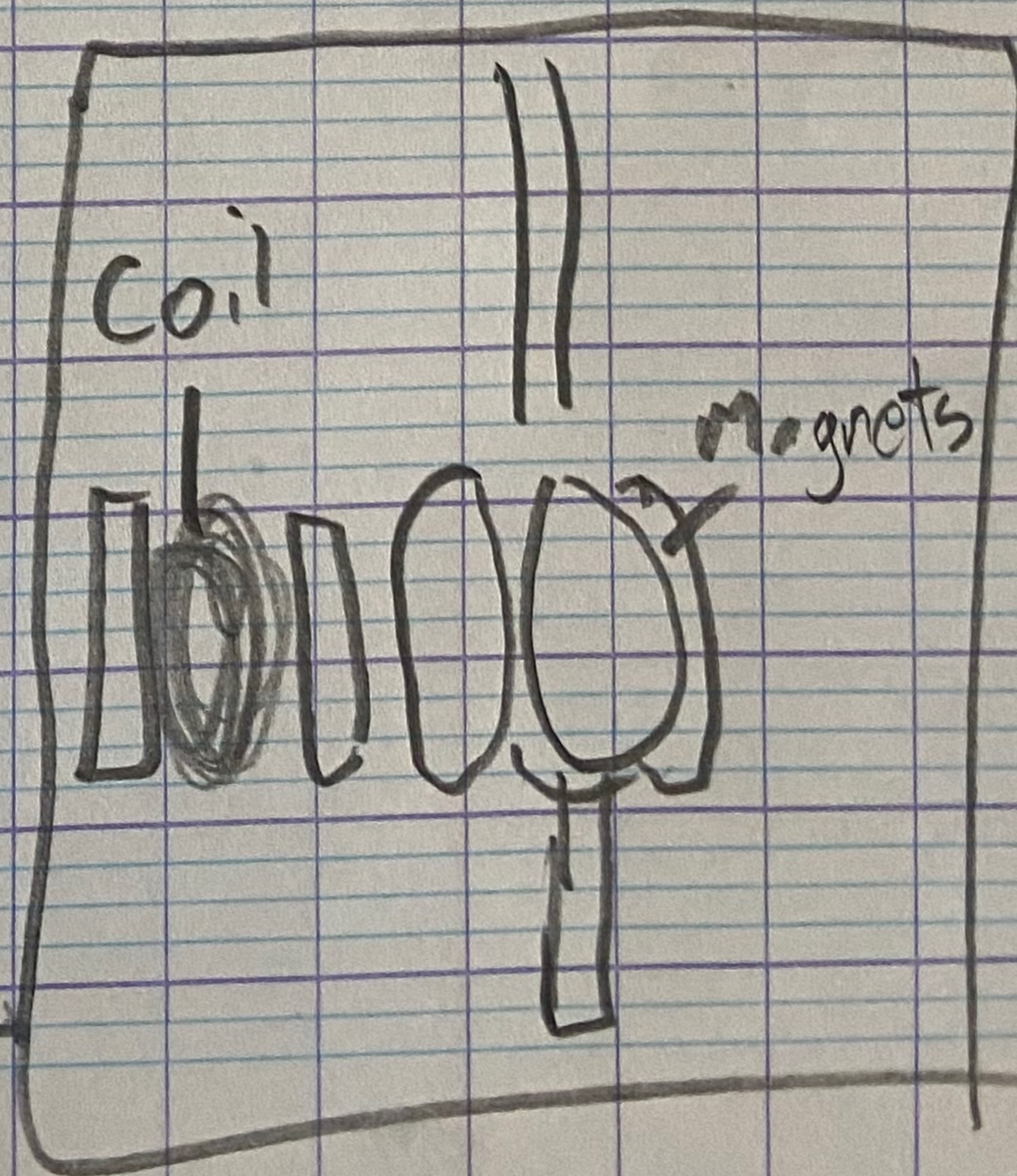
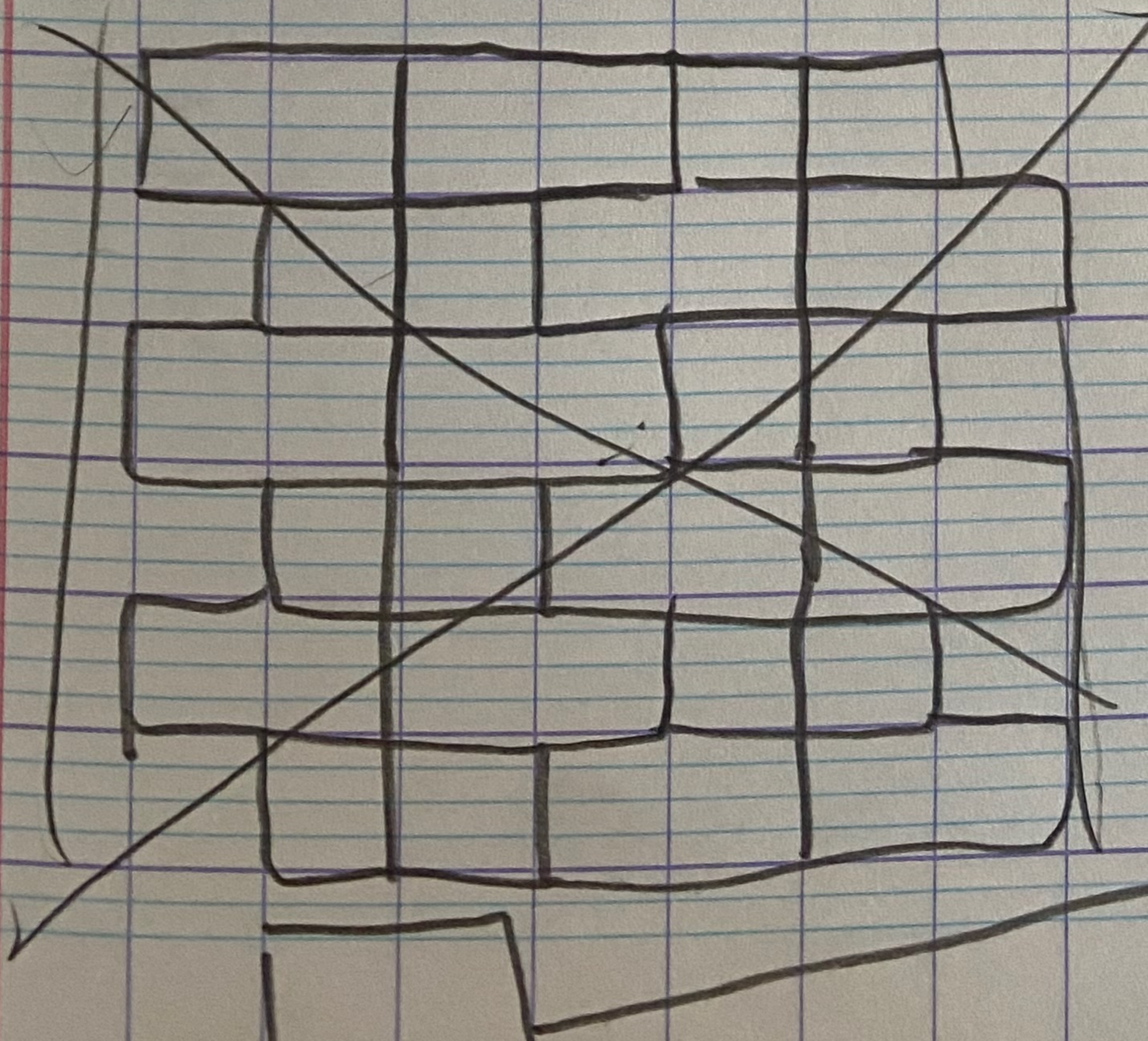
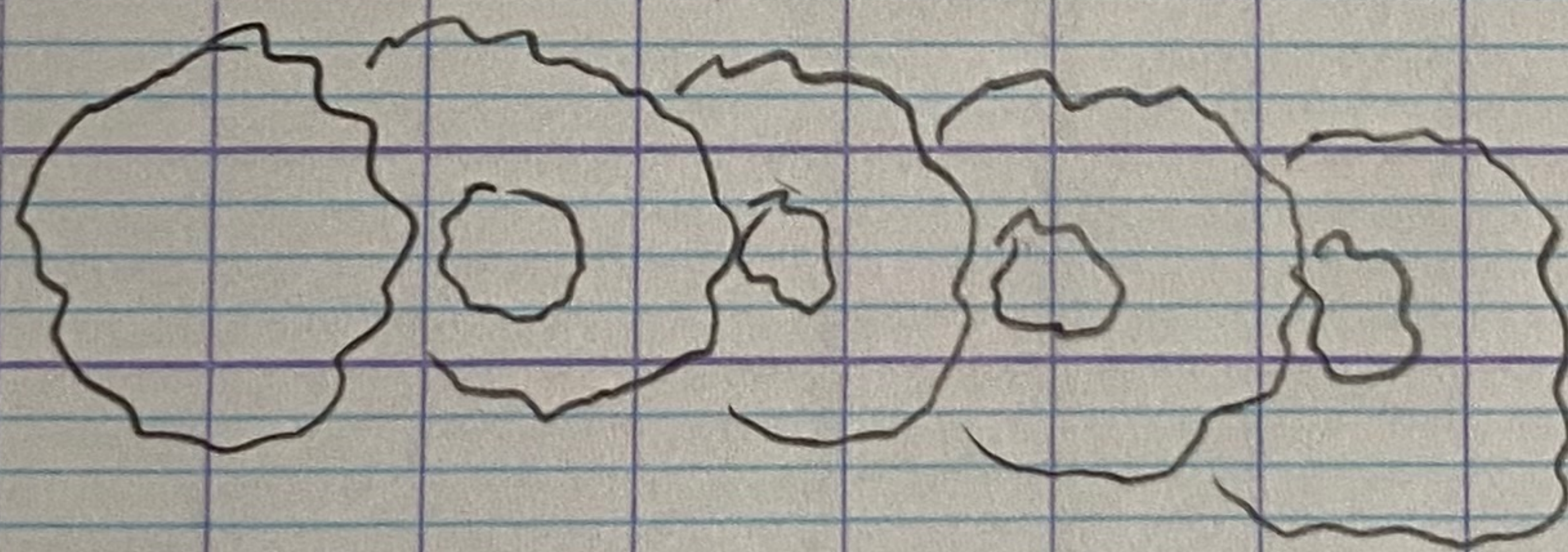
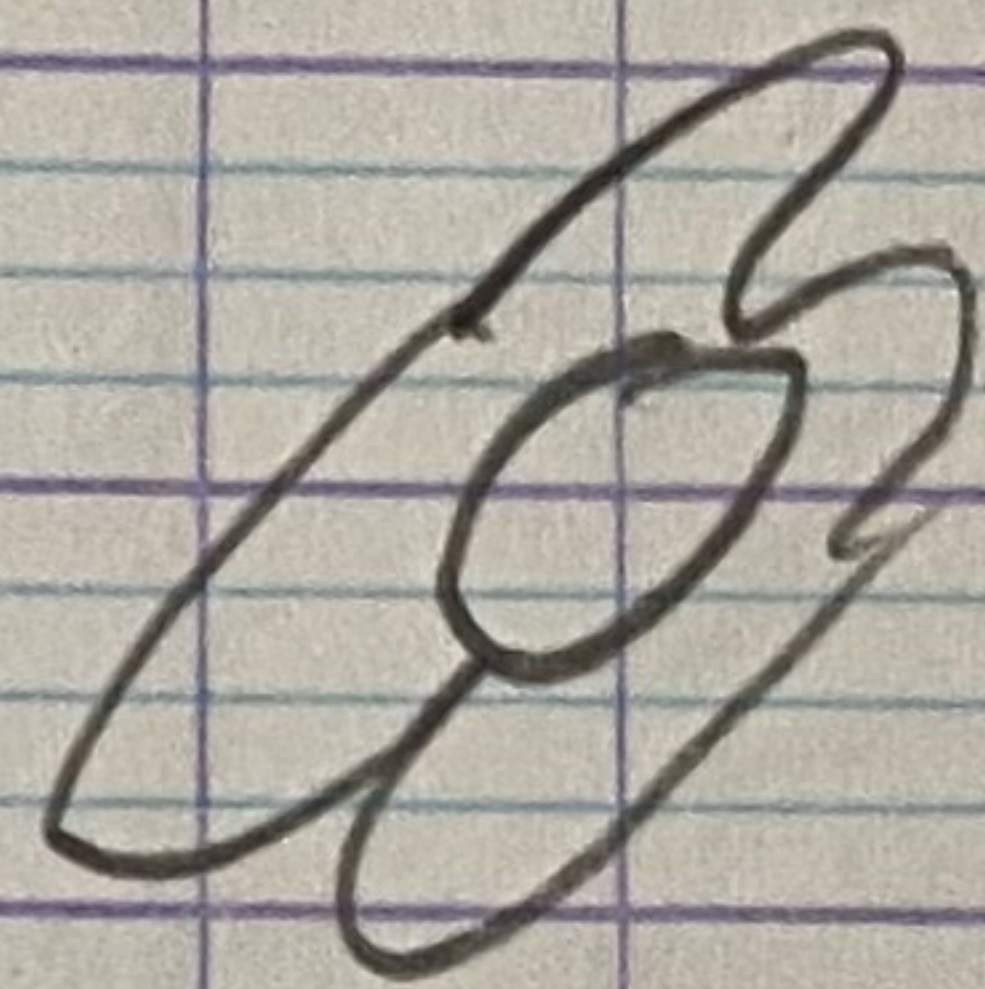
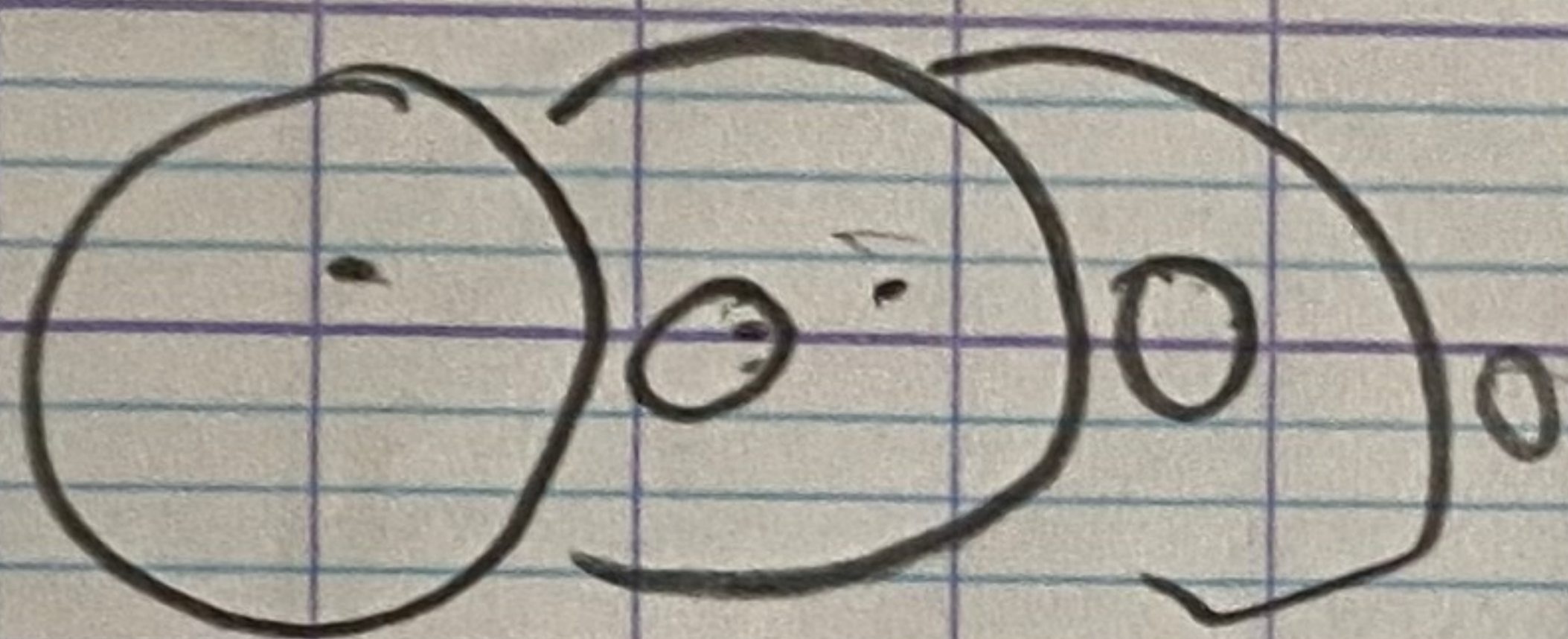
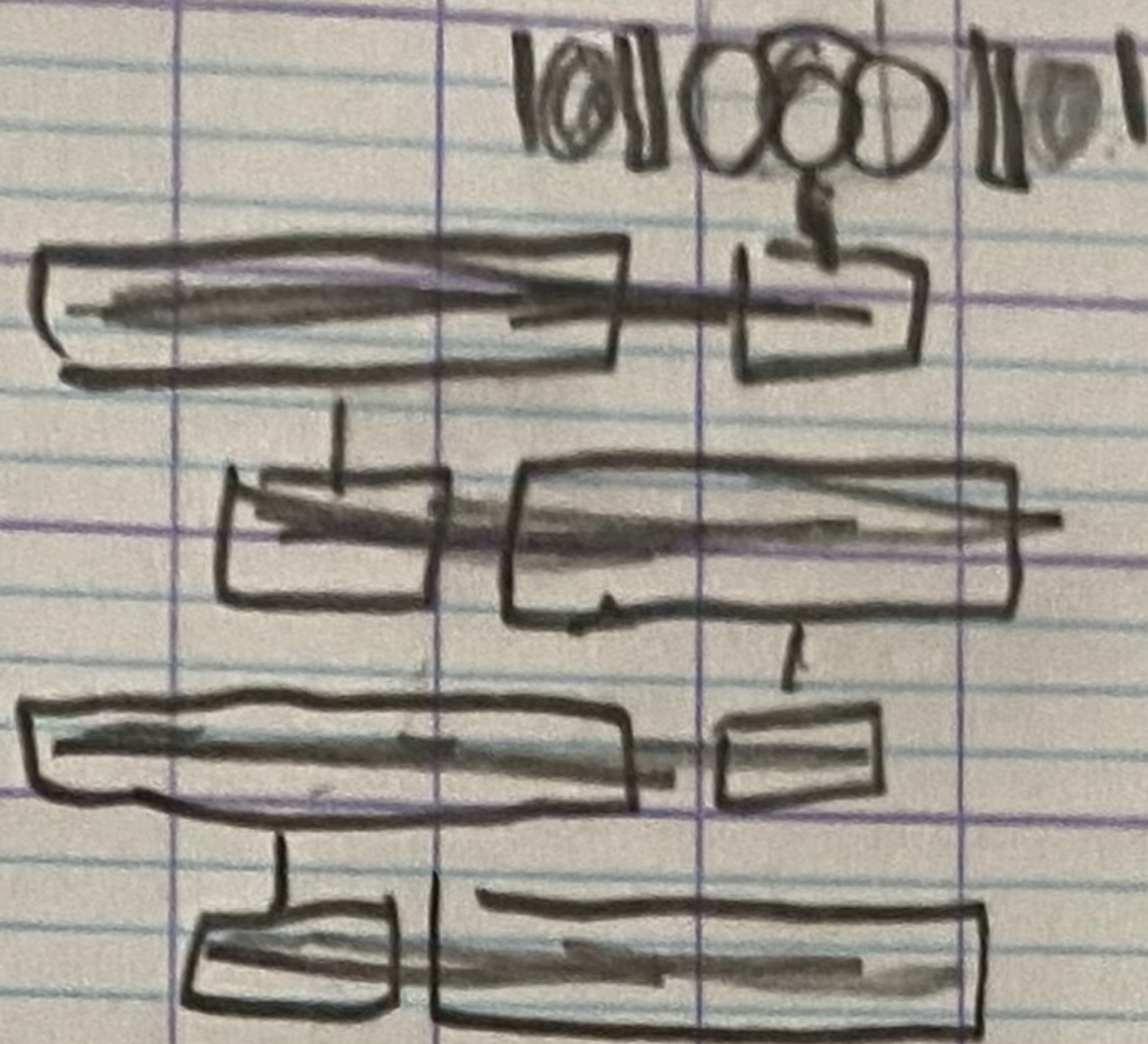
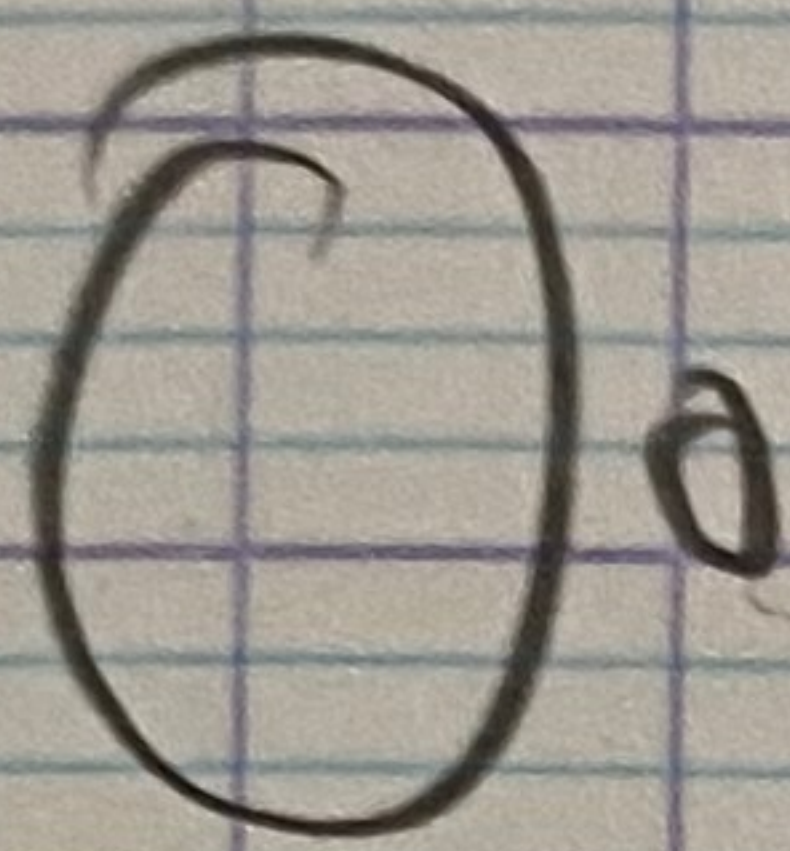
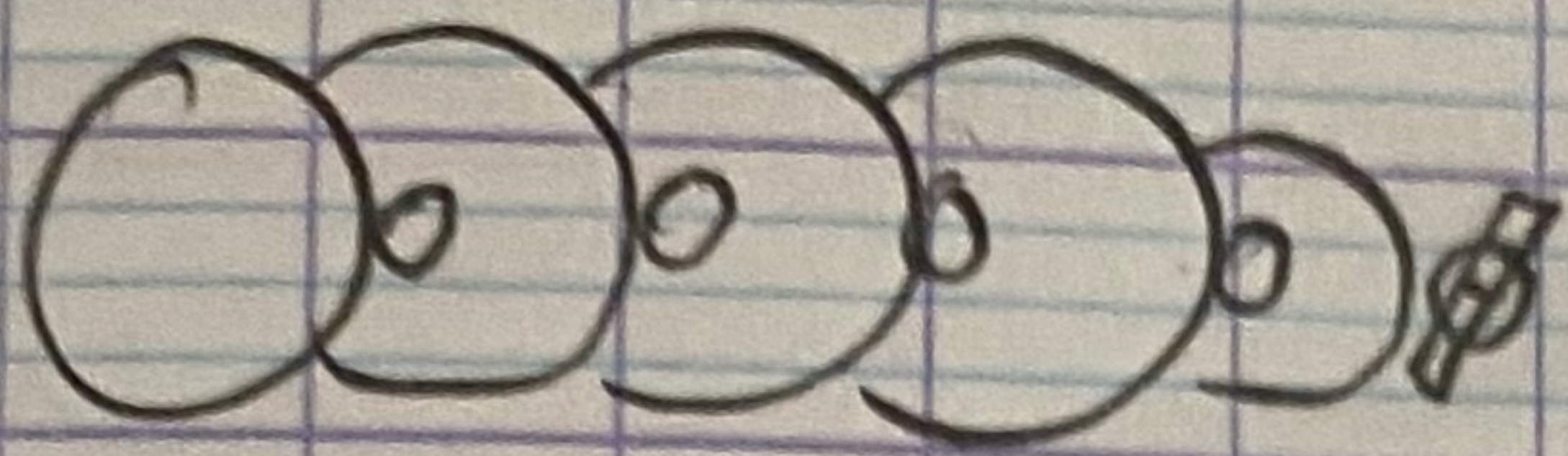
Elijah Lavole and Philippe Le Van

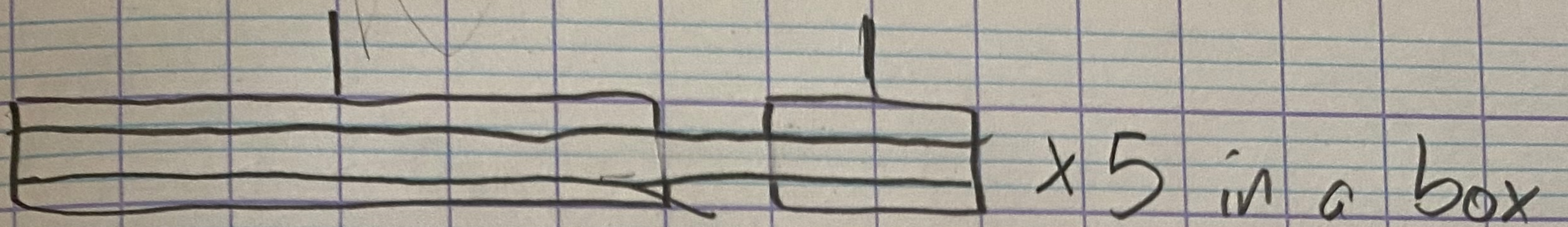
Science Project: Hand Cranked.
Generator

1. In the case of an emergency situation, you could power a device to call for help or to power your lights

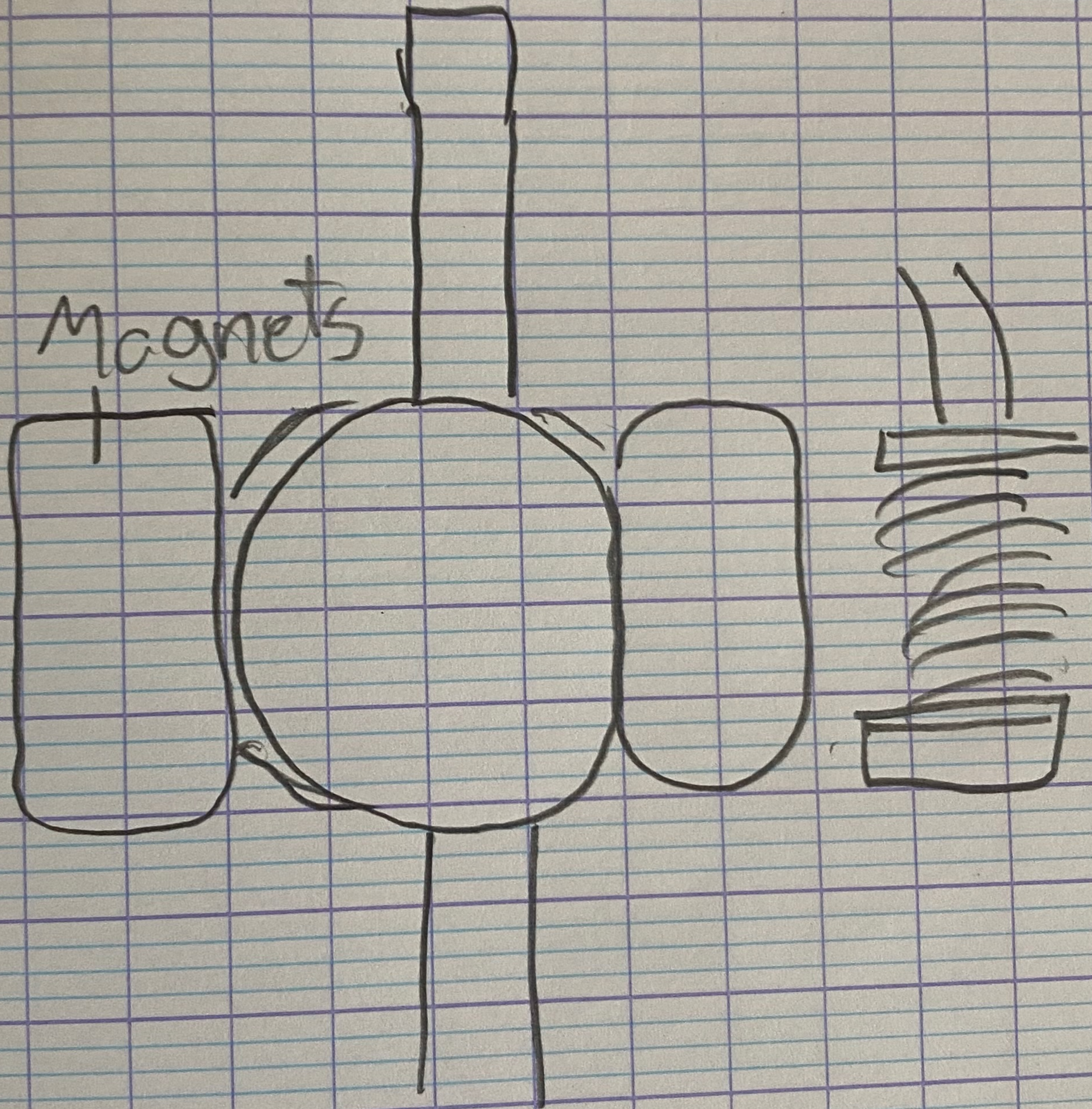
2. In a power outage, you could power small devices.

3. Camping in the woods, you could recharge your phone or a small heater with a nearby stream (optimised)





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Coils

3D printed Gears

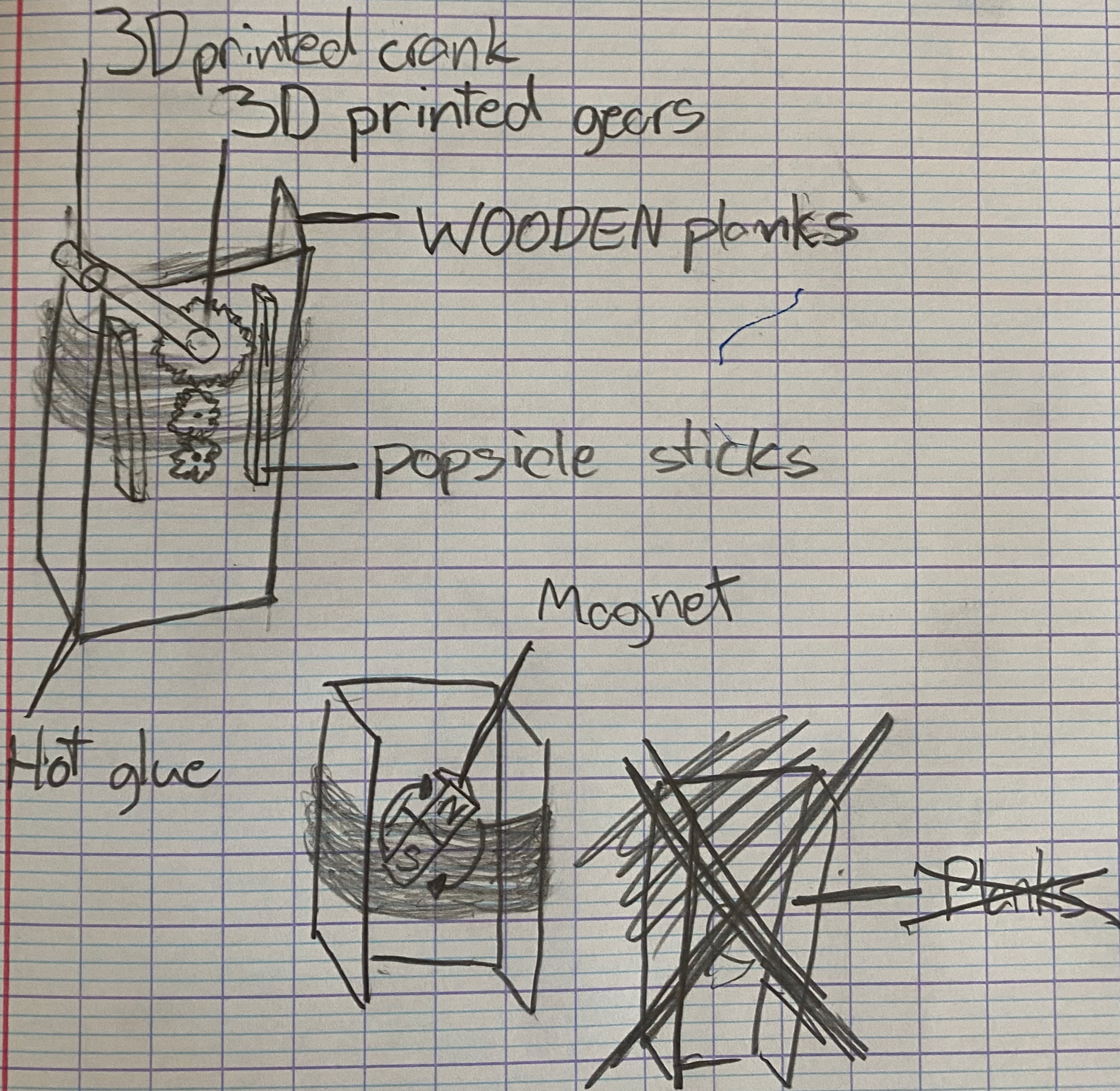
Elastic band

a base

Magnets

Date: January 20

Brainstorming #1:



Date: Jan 27

Construction #1:

We started making files on Tinkercad a 3D design website. We have 2 gears, one big and one small, and making them fit into each other was hard. We tried to print them but my 3D printer kept malfunctioning and if it doesn't work soon we'll have to make the gears differently, most likely using an elastic belt to connect the gears.

The link to my file:

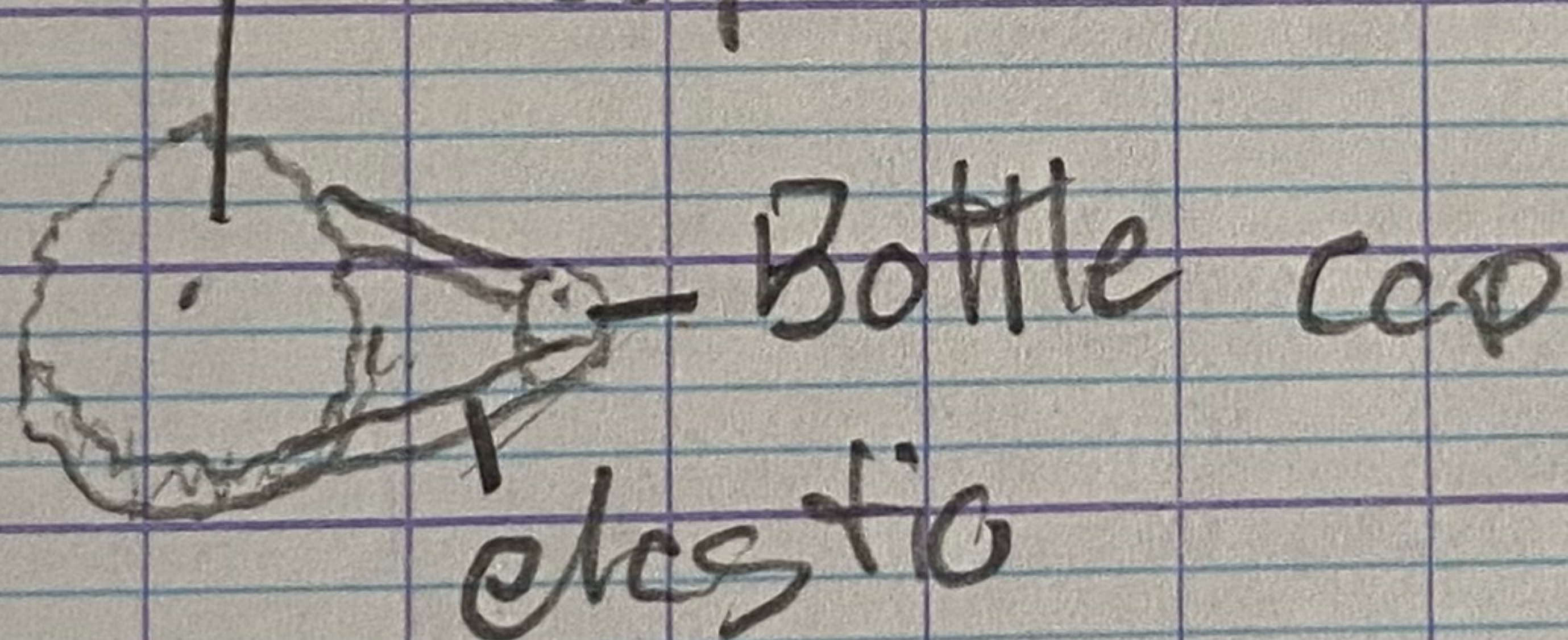
<https://www.tinkercad.com/things/3MYnX2Ljwck-cool-robo-uuscw/edit?returnTo=%2Fdashboard>

Date: Feb 3 2024

Construction #2

Because, we could not get the 3D Printing to work, we don't know how we'll make our gears, out of wood, out of a jar's cap. Here are some ideas:

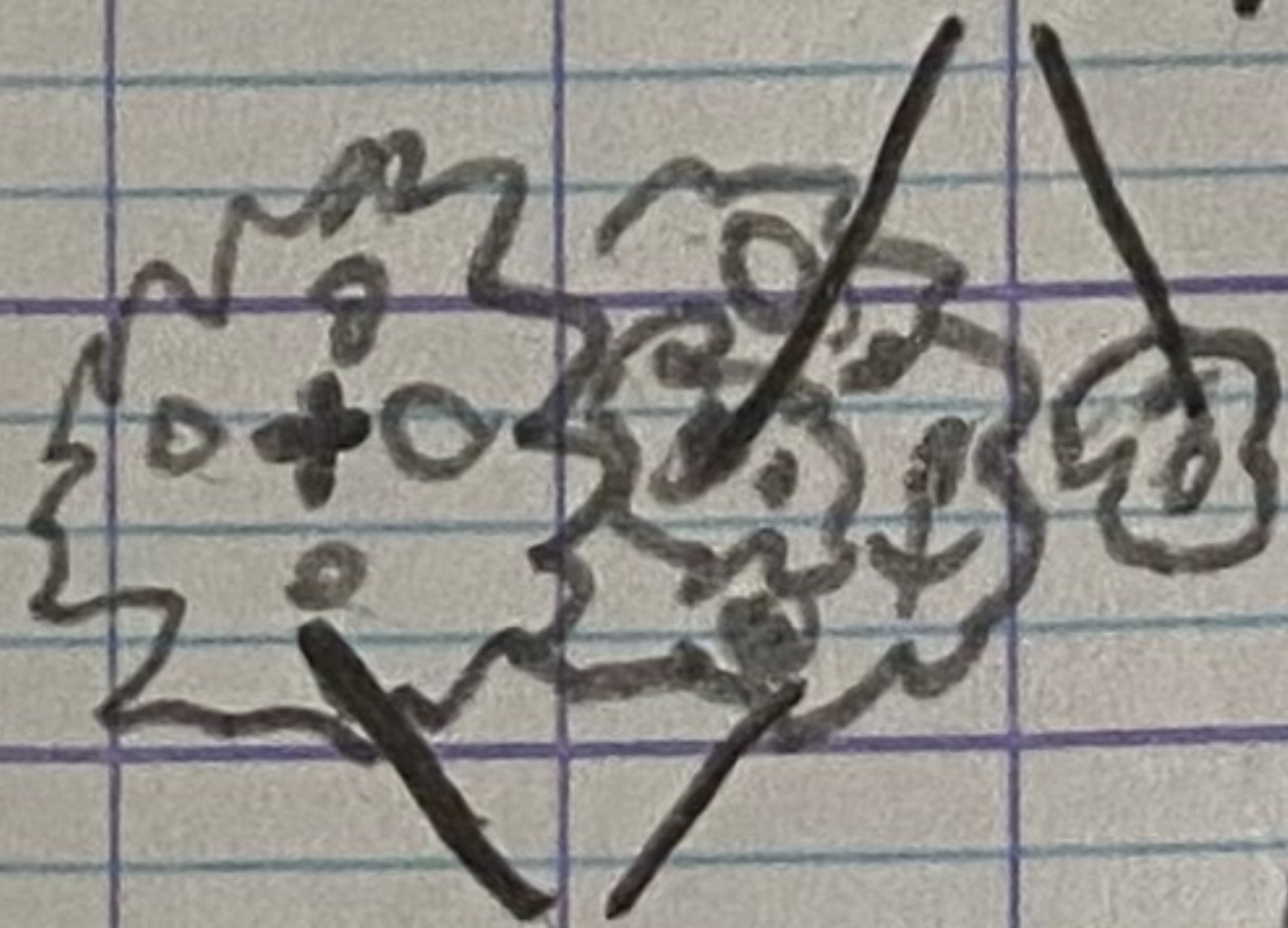
Jar cap



Bottle cap

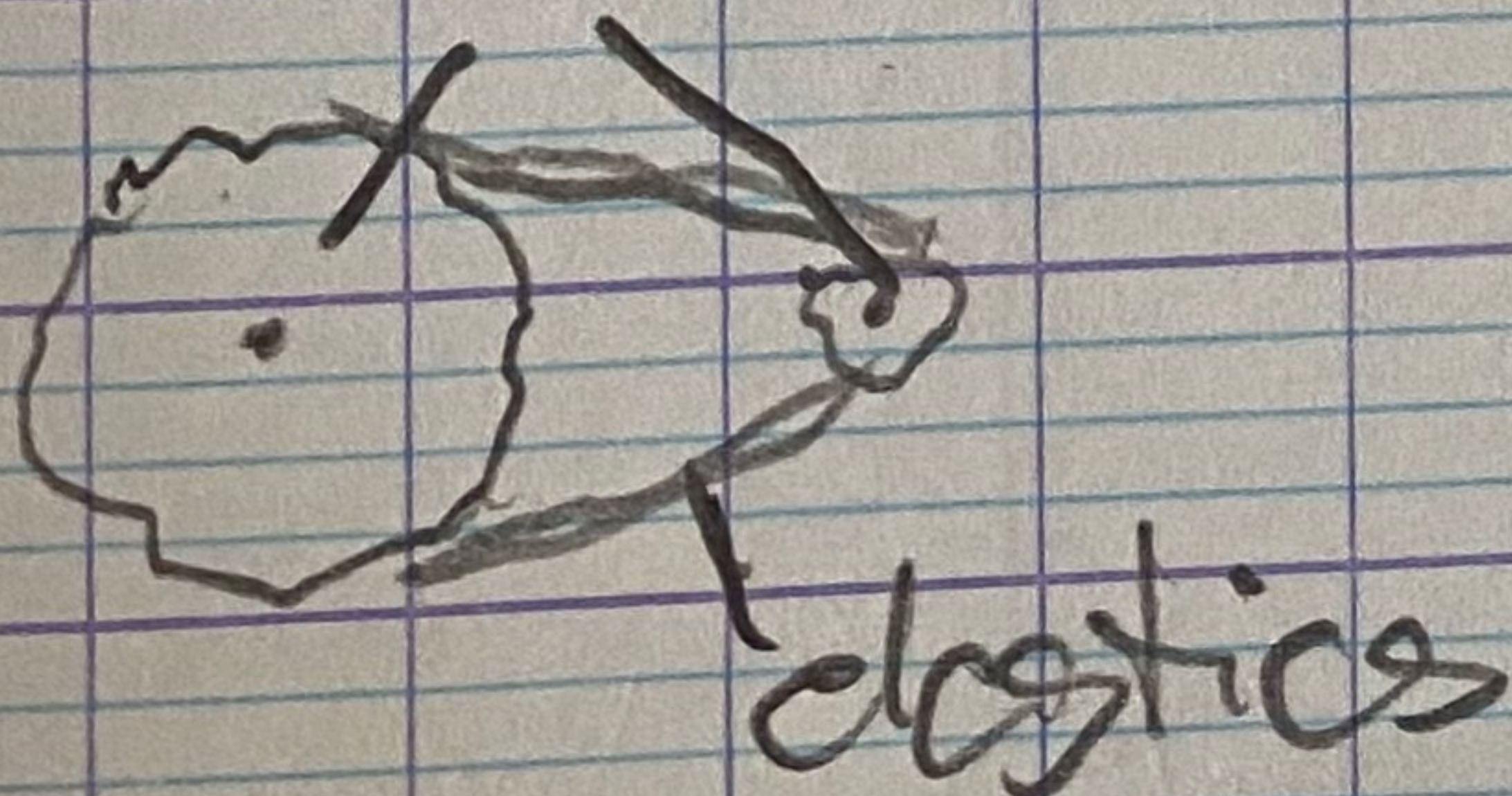
elastic

Small LEGOTM gears



large LEGOTM gears

wooden discs

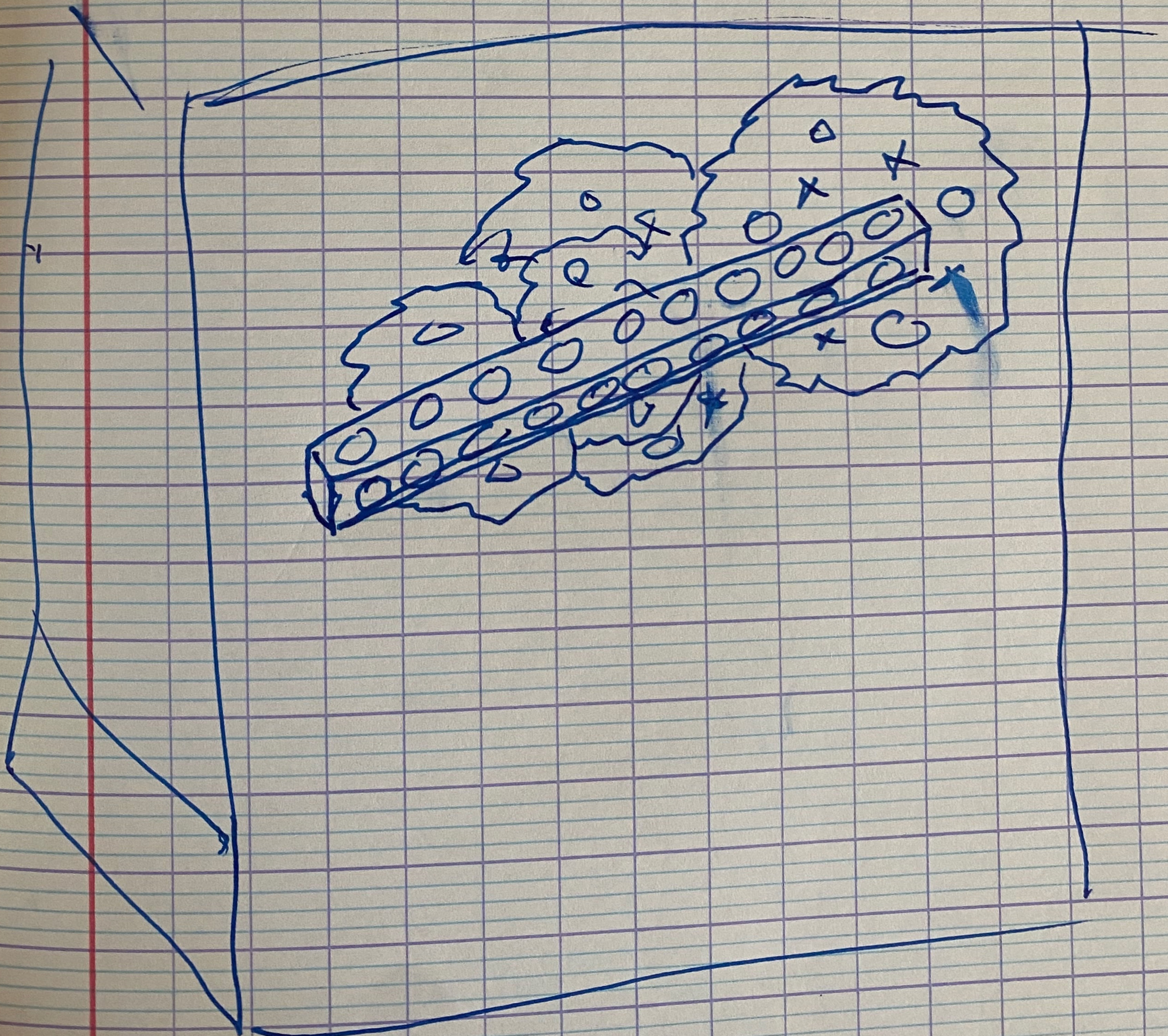


elastics

Date: Feb 10 2024

Brain storming #2

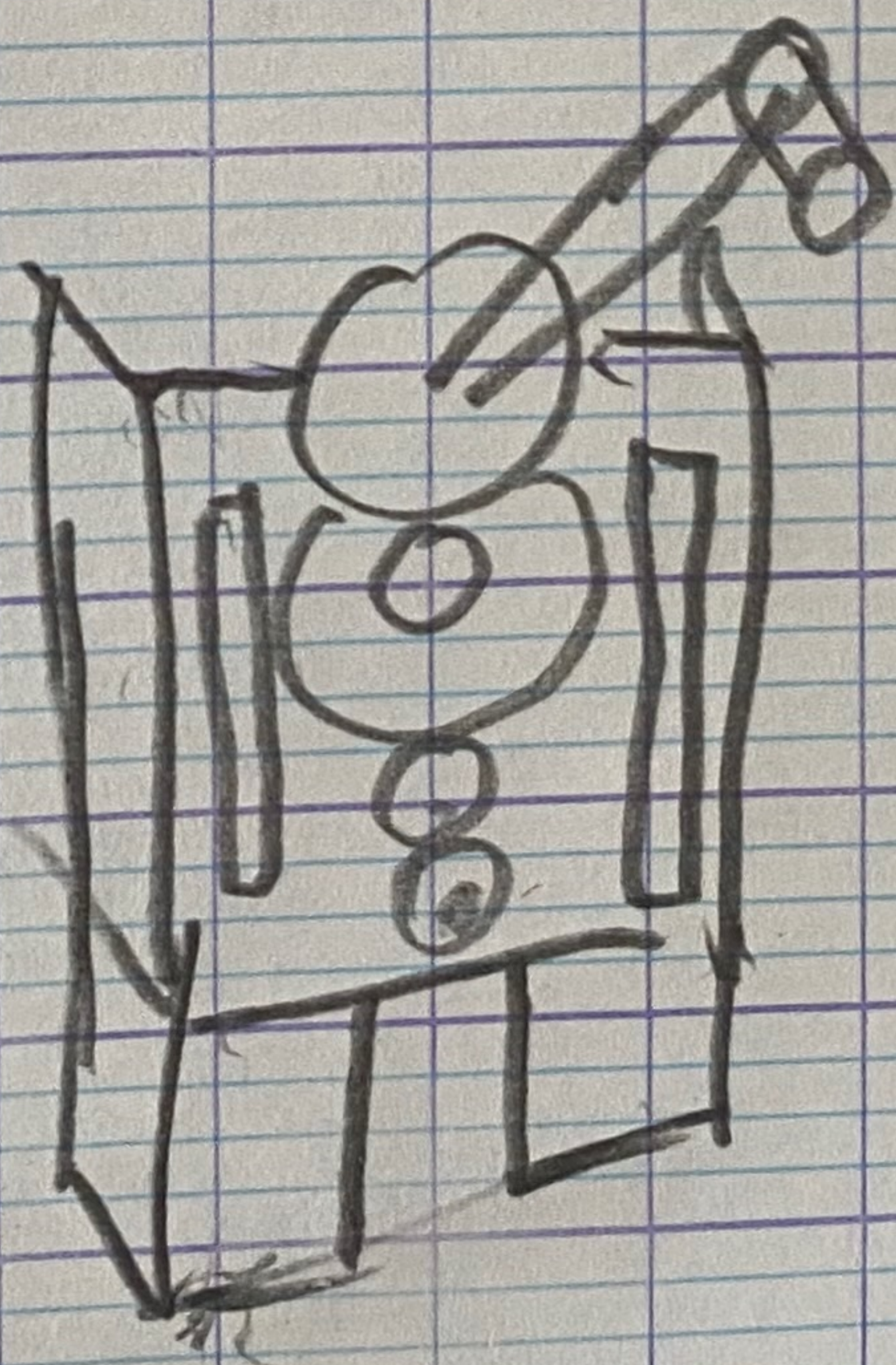
We think we'll do a design using
LEGOTM gears and a wooden body:



Date: Feb 17 2024

Construction #3

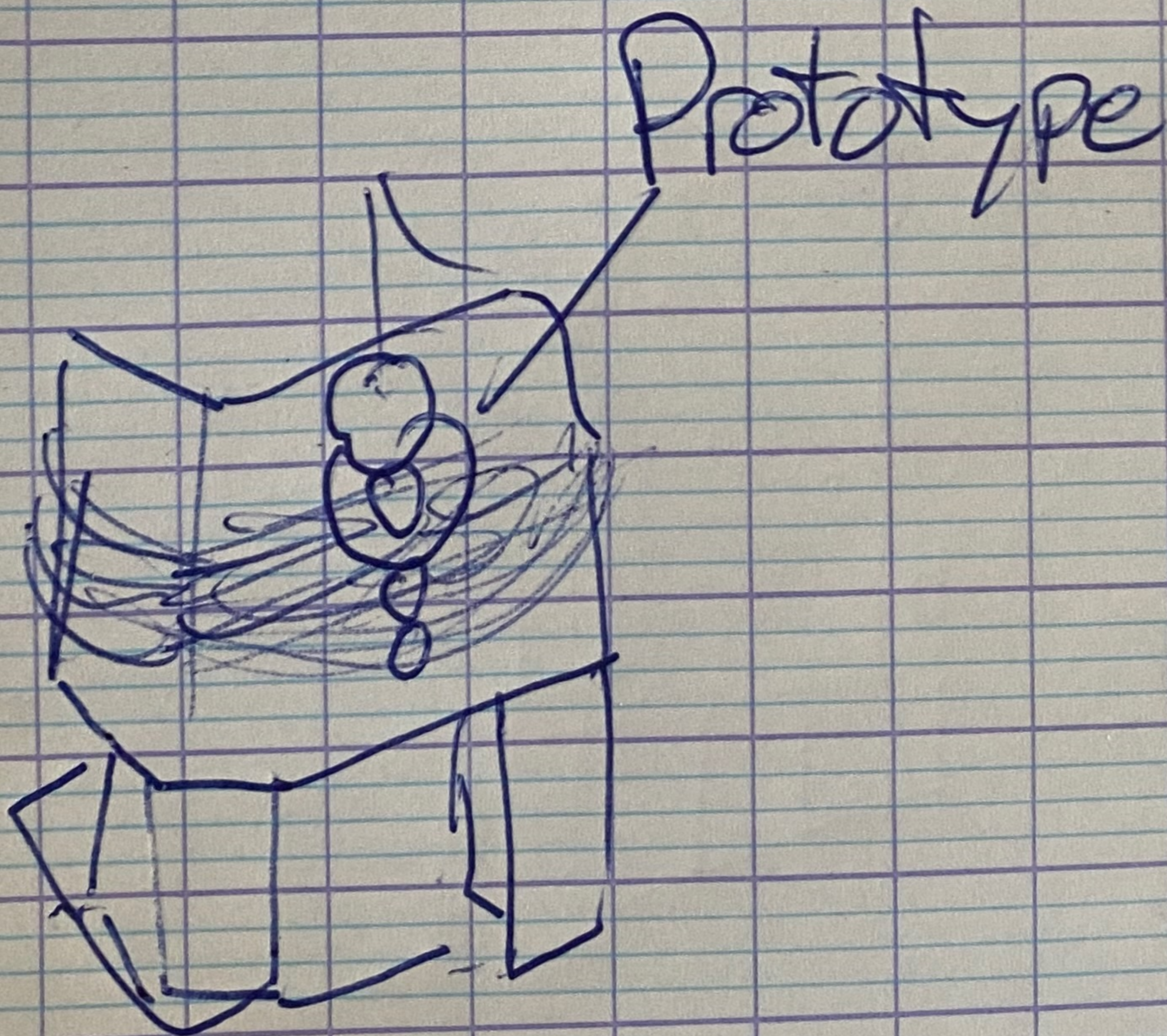
We have successfully made our generator, but there's an issue, the walls are caving in, we think that it won't work out, so I designed one out of lego.



Date: Feb 24 2024

Test #1

It works! The prototype is amazing!
It's awesome. We're going to
make the real version now!



Date: March 2 2024

Construction #9

We're coiling the wire onto the reel version, it's crankless right now, so testing is next time.

Date: March 9 2024

Test #2

We've assembled the crank and put it on. We're running it right now with everyone in the house. It's so awesome that Michael Faraday isn't a liar.

Trial #	Person	Score
1	Elijah's dad	1
2	Philippe	3
3	Elijah	3
4	Phil's dad	2
5	Karl	6
6	Zoe	5
7	Elijah's mom	4

