Research:

* Background material to place gold piece over (looking into polyester fabric, microfiber next)
* Gold hardness + any material that can scratch gold (avoid these in the design)
* Look into material for the camera apparatus + anything similar that has been made
* Read over the standards for an apparatus construct
* Motors + conveyor belts + “push mechanic” if we decide to make a fully automated system

Questions:

* Fully automated or semi automated clarification
* Technically challenging design clarification
* Ask teammates on what ideas they have for their sub system, a physical apparatus will need to take into account their design plans (Ask for weight and size + general shape details)

Build planning:

* Sized to fit dimension given and reasonably scaled to fit 5-10mm pieces of gold
* For beginning stages: Has slots that can support the weight of camera + light and allows them to be adjustable
* Takes into account the wiring that needs to power camera + light
* To add “technical merit” to the system: Achieve an automated system using a conveyor belt that will move a batch of ten gold pieces spread along the conveyor. When reaching the designated camera point, some pushing mechanism can push the metal underneath the camera to be tested. The same pushing mechanic will be used to push the gold back onto the belt, and the system will rotate throughout all the pieces. (A person can manually flip over the pieces, or we can think of another way to flip them over).

Parts: