(Previous) Action items

* ~~Order printer~~
  + ~~Order different color filament~~
* Dr. Mitchell wants to see software slicing development and facility study and back ups

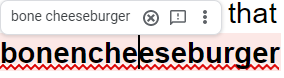
**Agenda**

* Progress update
* Facility update

Notes

* Dr. Mitchell likes **arduino** - independent growth and development for testing
* Get the cheap one and get your hands dirty :P

Action Items:

* Register for whatever that gemstone thing is
* Call **bonencheeseburger**
* Bone in cheese burger
* Boneless cheese burger
* 
* Next meeting with Dave
  + See conformal print
  + Test setup/testing - outline an experiment step by step by then?
* He’s satisfied ya’ll. We’re peeling the onion!

Internal

* Setup a grid for the print bed so we can align

Testing backup plan options

**Cheap:**

• A-frame bench shop press: $85

◦ <https://www.harborfreight.com/6-ton-a-frame-bench-shop-press-1666.html>

• Small load cells: $58 per

◦ <https://www.amazon.com/DYHW-116-Compression-Force-Sensor-Applicable/dp/B07H25FW3B/ref=sr_1_3?dchild=1&keywords=compression%2Bload%2Bcell&qid=1601247291&sr=8-3&th=1>

* Arduino and wires

**Total:** $201 (for two load cells; may want backups)

**Pros:** Very cheap

**Cons:** Only able to test failure loads

**Full data collection:**

• ES20 hand-wheel test stand: $595

◦ <https://mark-10.com/products/manual-test-stands/es10-es20/>

• 3-point bend fixture (G1095 + G1097) $795 + $150

◦ <https://mark-10.com/products/grips-attachments/compression-push-bend/bend-fixtures/>

• M4-100 force guage $845

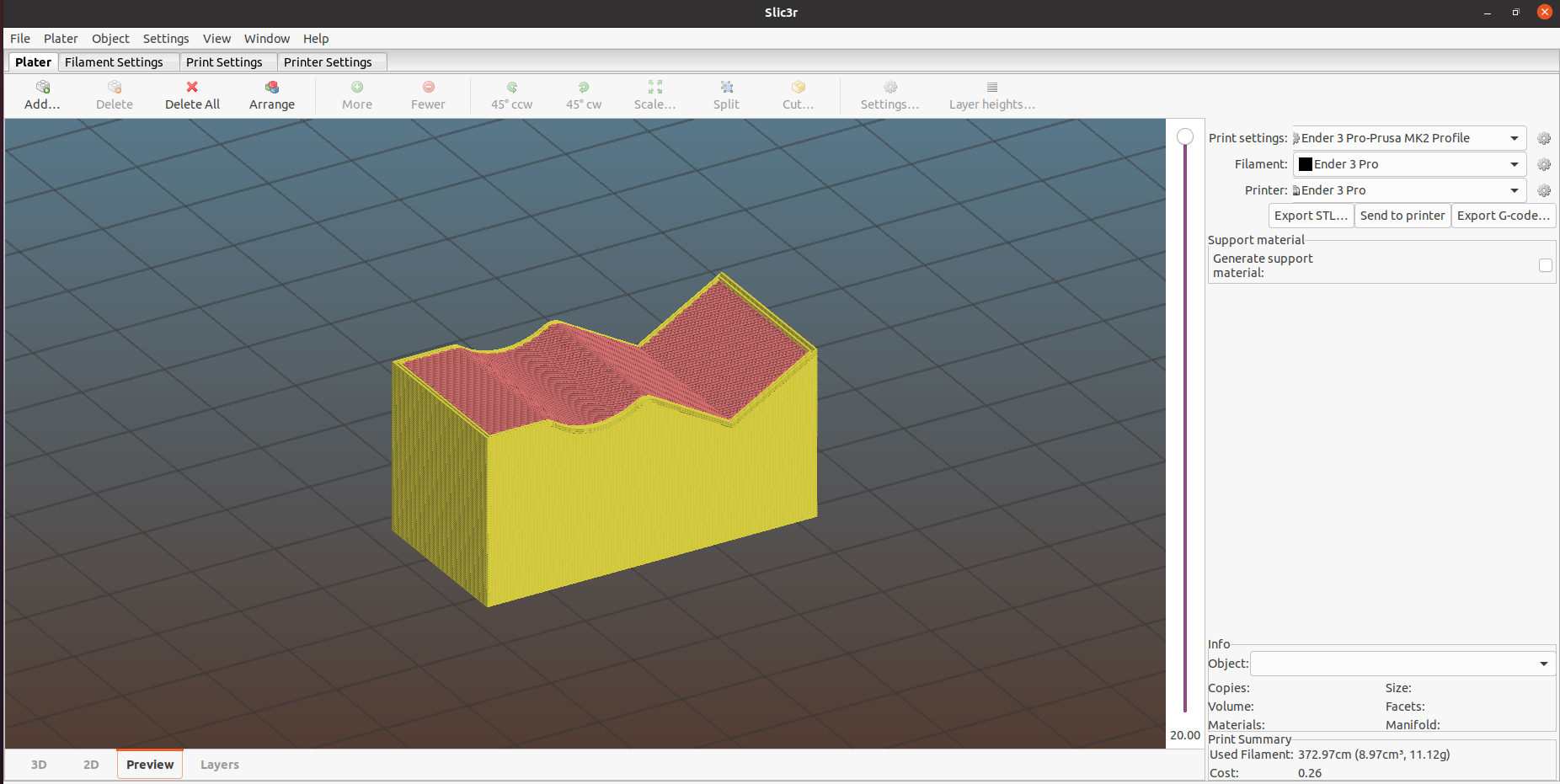
◦ <https://mark-10.com/products/force-gauges/series-4/>

**Total:** $2385 (+tax and/or shipping)

**Pros:** Allows continuous data collection, more precise measurements

**Cons:** We wouldn't be able to buy an endless amount of printers

**Slic3r:**

****