## COSPLAY MATERIALS 101

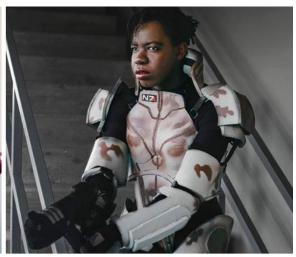
An Introduction to Cosplay Materials

## WHO WE ARE









**COOL BY PROXY PRODUCTIONS** 

RUBY COMMANDO COSTUMES

JAY JUSTICE

- Fiction vs reality: compromise impossible designs w/reality and comfort
  - Add joints and seams
  - Magnets and straps
- Alter the design to fit \*your\* body
- Focus on key pieces



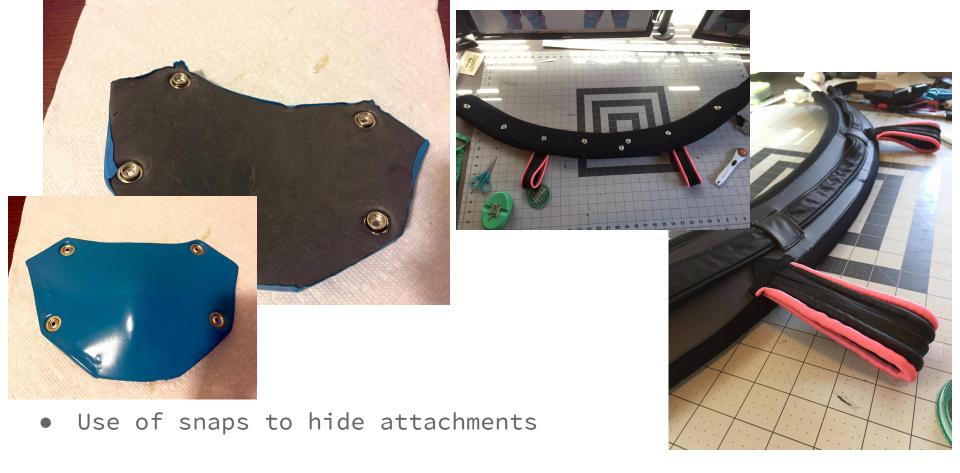








- Added joints & straps for flexibility/movement
- Magnets to simulate "floating weapons"



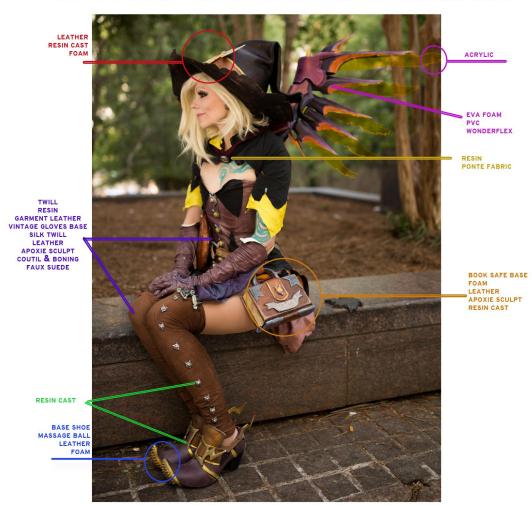
- Comfort & durability: what is this costume for?
- Photoshoot v Day at Con have different considerations (comfort/complexity)
  - Can I walk/sit down/eat in this?
  - o Consider the weather (will i overheat/freeze getting to & from the con?)



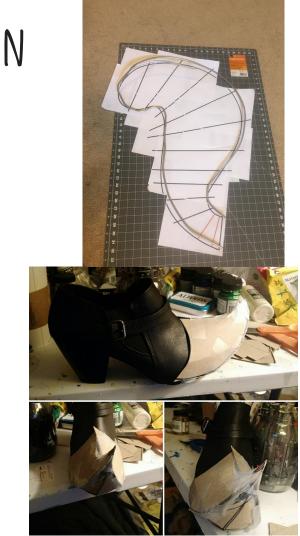


Mixed media:
 Costumes not made
 of one material,
 mix and match

#### MIX AND MATCH YOUR MATERIALS TO SERVE YOUR COSTUME!



- Comfort with the materials v. time
- Plan ahead! Make patterns/mockups out of cheap material first!
  - Cardboard
  - Paper
  - o Muslin
  - Cheap foam





# DON'T REINVENT THE WHEEL- START W/A BASE TO MOD/BUILD ON TOP OF







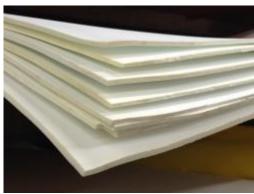


## FOAM

#### Types:

- Closed cell
  - EVA foam
  - o L200
  - Insulation Foam
- Open cell
  - Upholstery foam
  - o Styrofoam















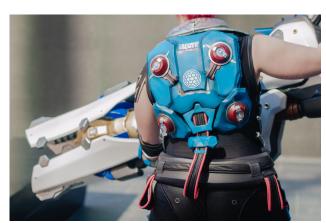






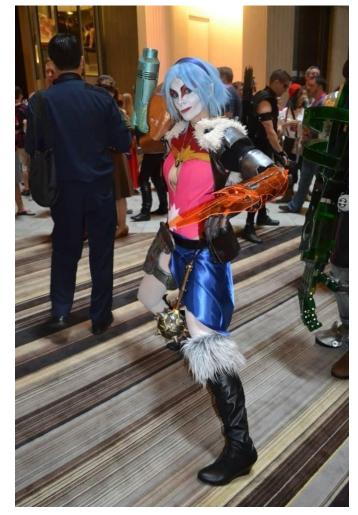


















## FOAM

- Tools/Materials Needed
  - Rotary tool (AKA Dremel)
  - Box cutter or saw (depending on thickness)
  - O Glues (barge, e6000, etc)
  - Heat gun (depending on the foam)
  - Gap filler (dynaflex)
  - Sandpaper
  - Respirator & safety goggles/eye protection





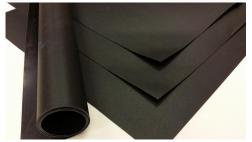


## THERMOPLASTICS

- What are thermoplastics?
- Pros/Cons
- Types
  - Worbla (regular, black, transpart, etc)
  - Wonderflex
  - Fosshape
  - Friendly Plastic
  - Kobracast
  - o So many more!







































## THERMOPLASTICS

#### How to use them!

- Trace pattern to thermoplastics (allowance if using sandwich method)
- Heat evenly w/heat gun until pliable
- o Form, reheating as needed
- Keep your scraps!

#### With what!

- Heat gun (or high quality hair dryer)
- Scissors or box cutter
- Craft foam (optional)
- Heat proof surface it won't stick to (table, cutting board, cardboard)
- Wax or vaseline & something to form to (optional)

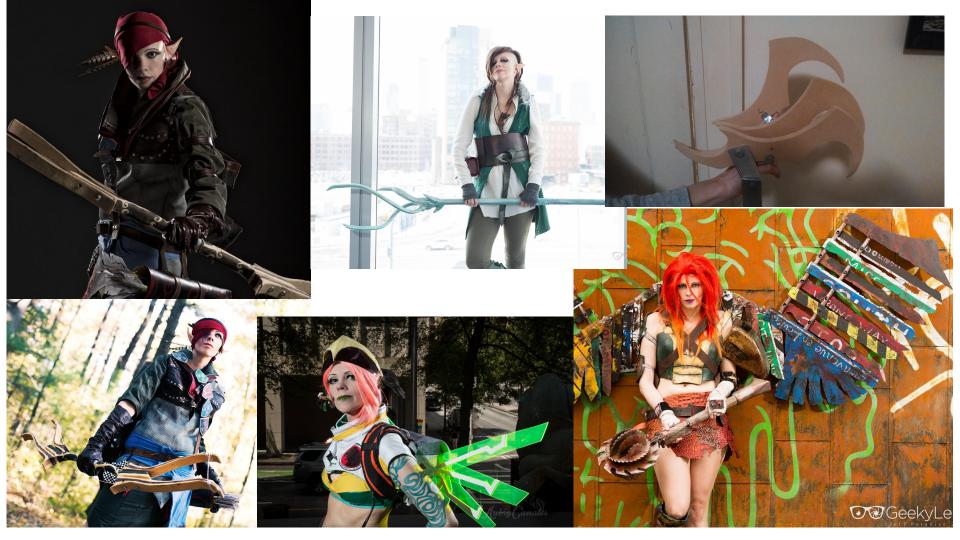




## PLASTICS & WOOD

- Plastics
  - o PVC Both pipes and sheeting
  - Acrylic sheeting
  - PETG and vacuum forming
- Wood
  - Lumber
  - o MDF





## PAINTING & PRIMING

- Types of primer (pros/cons for each)
  - Acrylic gesso
  - Plastidip
  - Wood glue
- Types of paint
  - o Acrylic
  - o Rattle can
- Types of sealant
  - Acrylic varnish
  - o Rattle can
- Other ways to finish your work
  - Cover in fabric





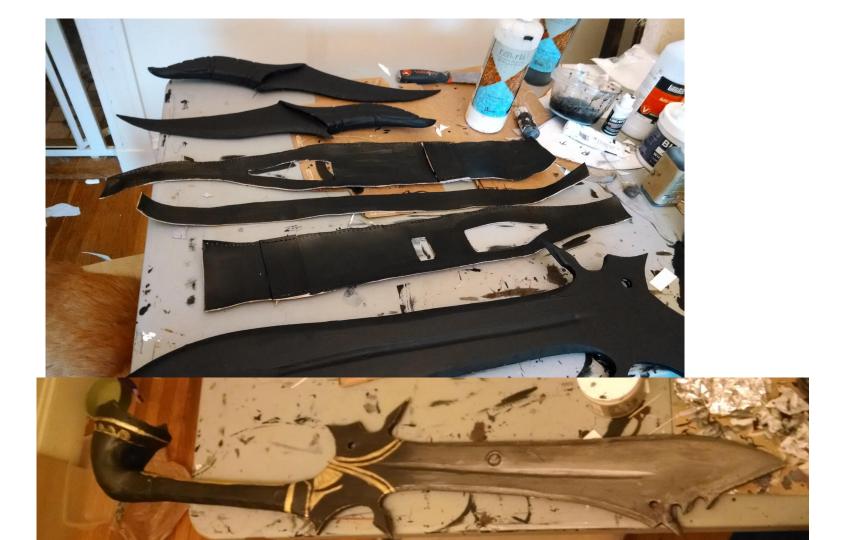












## FABRICS

- Modifying existing garments(painting/weathe ring)
  - Types of fabric paint/dyes
    - Jacquard fabric paint
    - Airbrush paint
    - dye-na -flow (silk paint)
    - Leather paints
    - dyes
  - Priming the surface for vinyl/faux leather
    - Treat with acetone
    - Reseal after painting (unless heat set)









## FABRICS

- Types of Fabric
  - Natural v. synthetic
    - How they take dyes/paint
    - breathability
  - Knit v. woven
    - Understanding pattern differences
- Sewing with different types of fabric
  - Hand sewing
  - Machine Sewing (Do I need a serger?)
  - Needle types & thread





Knit vs Woven





Synthetic fabrics vs. Natural

## FABRIC- PATTERNS, MOCKUPS & MORE

#### Patterns

- Cosplay specific patterns available now
- Commercial patterns tend to run big
- Indie pattern companies run smaller/more fitted
- Modify patterns to your needs
- Draft or Drape your own patterns!

#### Mockups

- Make in cheap fabric similar to your final
- Muslin (woven cotton)
- Cheap knit/spandex
- Cosplay-specific fabrics
  - o Yaya Han line (use coupon!)
- Dress form
  - Make your own (duct or paper tape)
  - Adjustable or professional dressform













## COSPLAY MATERIALS 201

- Metal
- Sculpting & Casting
- Electronics
- Leatherworking
- Vacuum Form
- 3D Printing

































## FURTHER RESOURCES

- Where to find us on the web
  - Cool By Proxy Productions
  - Jay Justice
  - Ruby Commando Costumes
- Recommended Reading:
  - Foamsmith books by Punished Props
  - Kamui Cosplay Books
  - Patternmaking for Fashion Design by Helen J Armstrong
  - Evil Ted Smith FX youtube channel
- More Info: www.coolbyproxy.com/materials.php