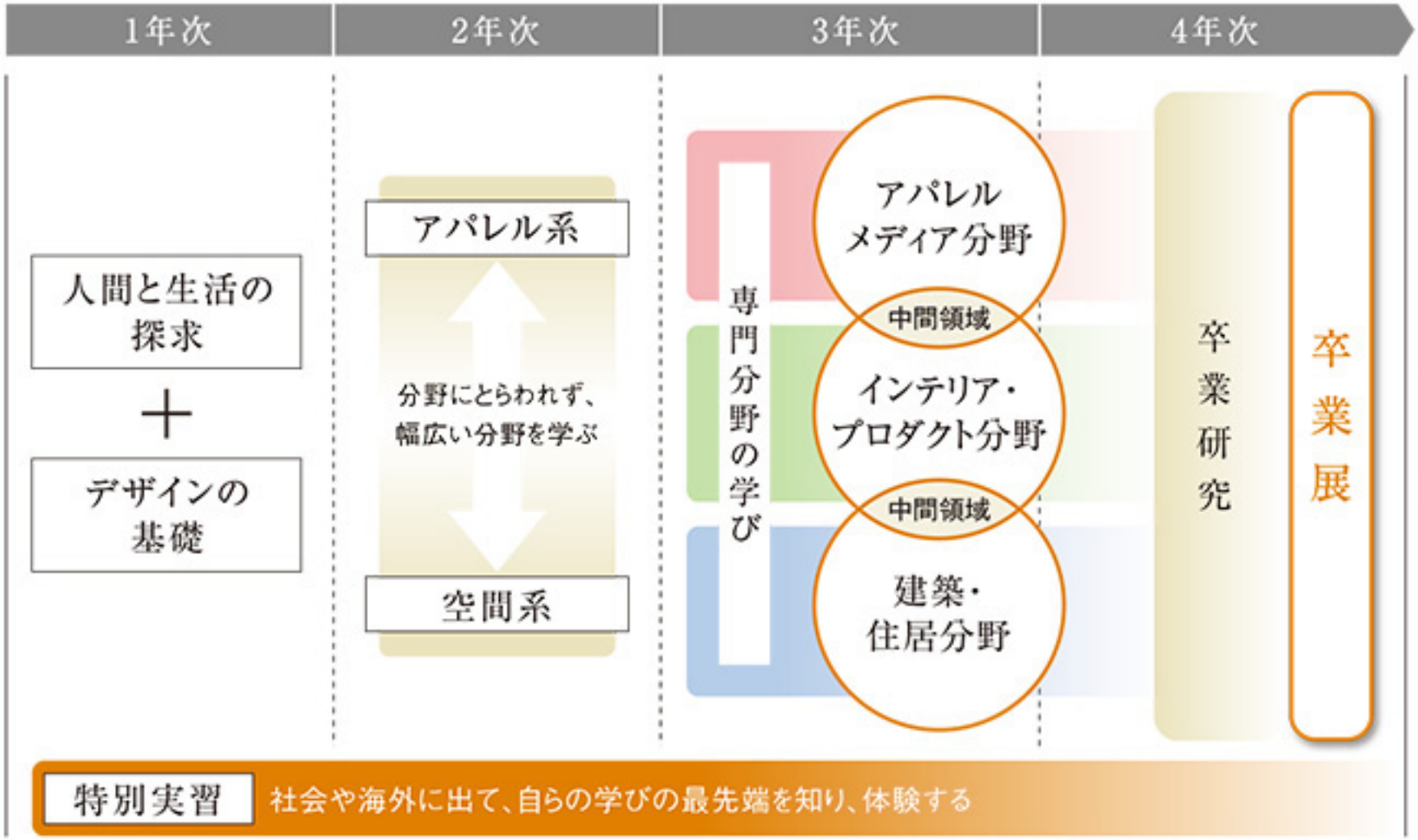
海外共有サイトを活用したインテリアプロダクト分野の作品制作実践力向上に向けた授業改善の試み

椙山女学園大学 生活科学部 助教 山下 健

生活科学部　生活環境デザイン学科



椙山女学園大学 生活環境デザイン学科　http://www.sugiyama-u.ac.jp/univ/academics/ls/design/

インテリアデザイン

インテリア計画・設計

インテリア

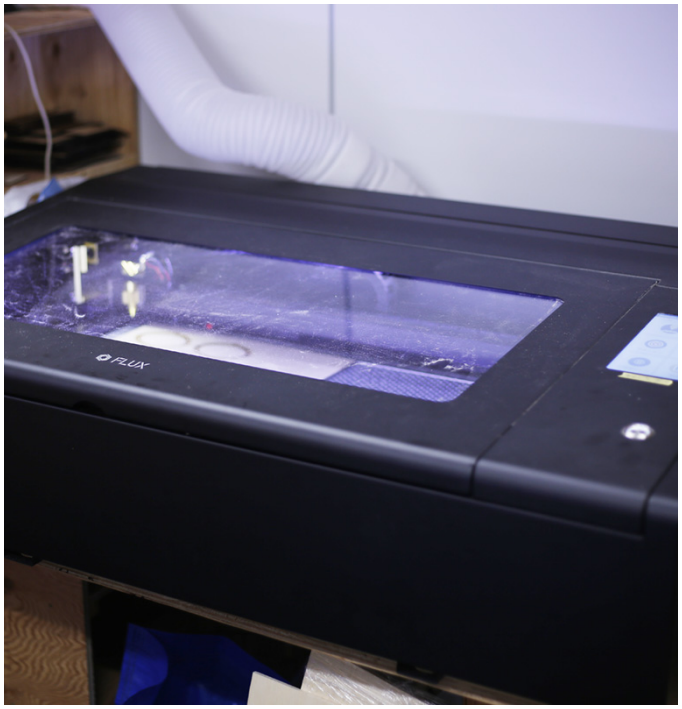
プロダクト

産業デザイン

歴史意匠学・建築計画学

環境心理学・感性デザイン

デジタルデザイン ⟶ **デジタルファブリケーション**
コンピュテーショナルデザイン


FLUX

zortrax

handibot

brother

海外共有サイトを利用した取組み

研究室配属：3 年生後期

プレゼミ（卒業研究の準備）

授業内容

・設計手法

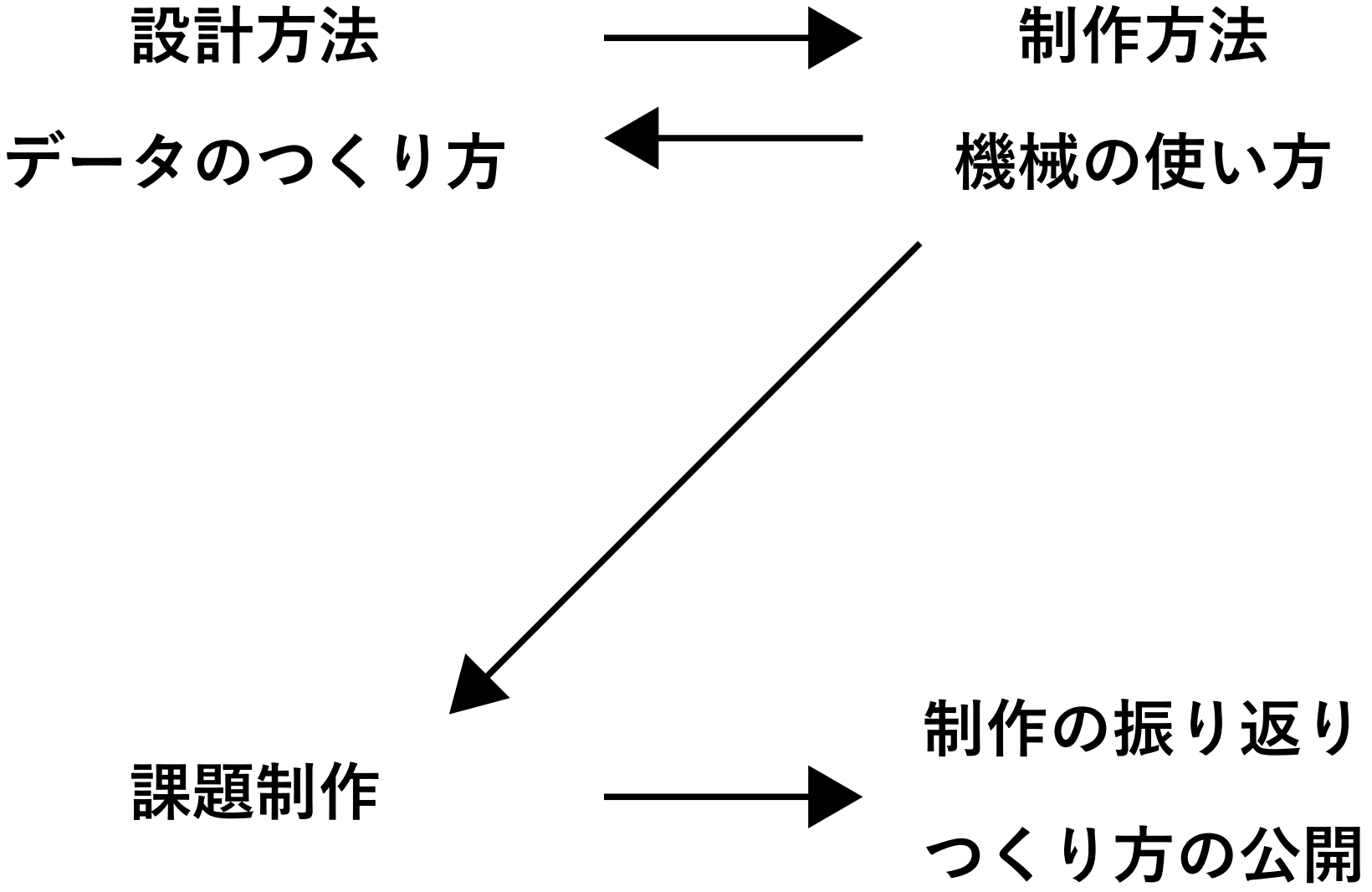
・ソフトの使い方

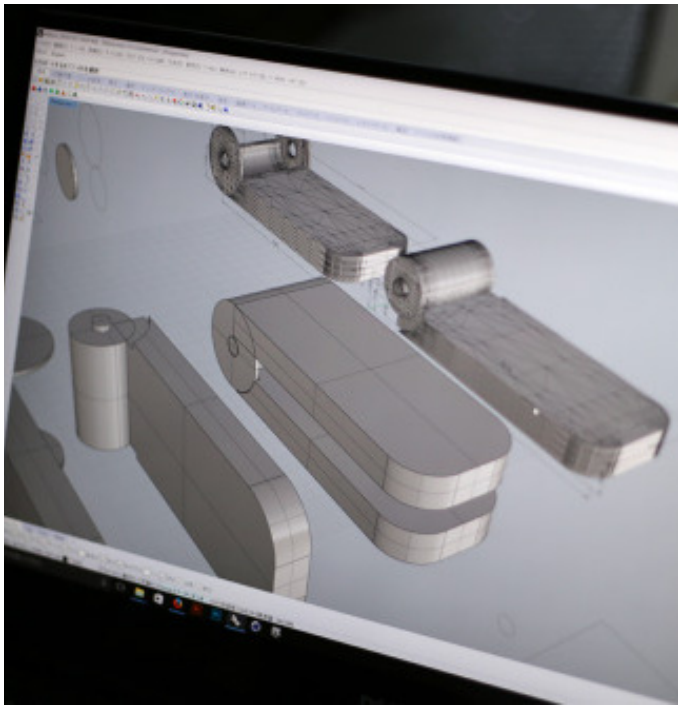
・工作機械の使い方

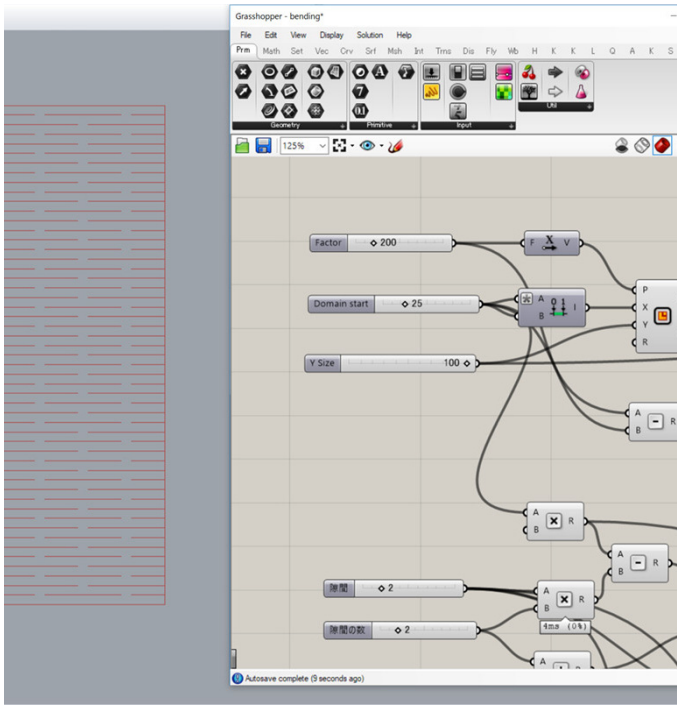
・もののつくり方

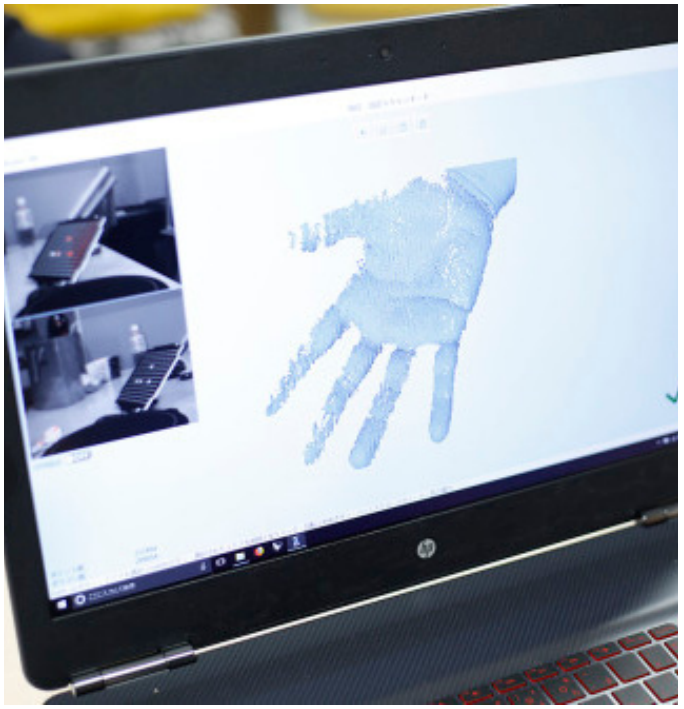
海外共有サイトを使用して

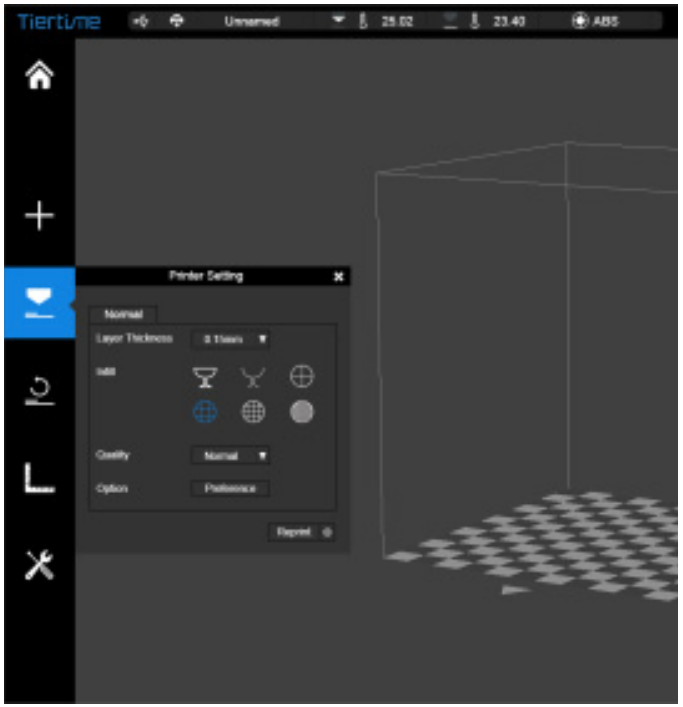
小課題の成果物を公開


設計方法
制作方法
データのつくり方
機械の使い方
課題制作
制作の振り返り
つくり方の公開



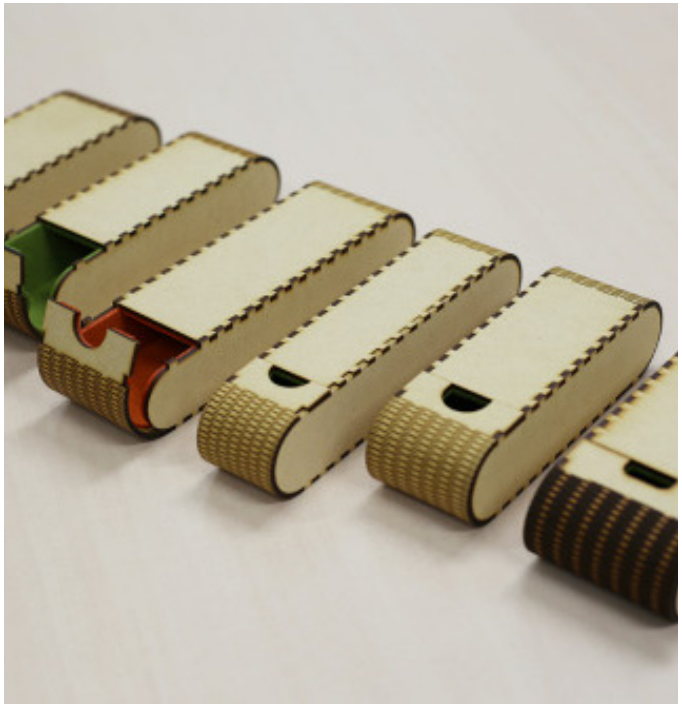

Grasshopper - bending*
Factor
200
Domain start
25
Y Size
100
Autosave complete (9 seconds ago)




Tiertime
Printer Setting
Normal

brother

handibot



50
60
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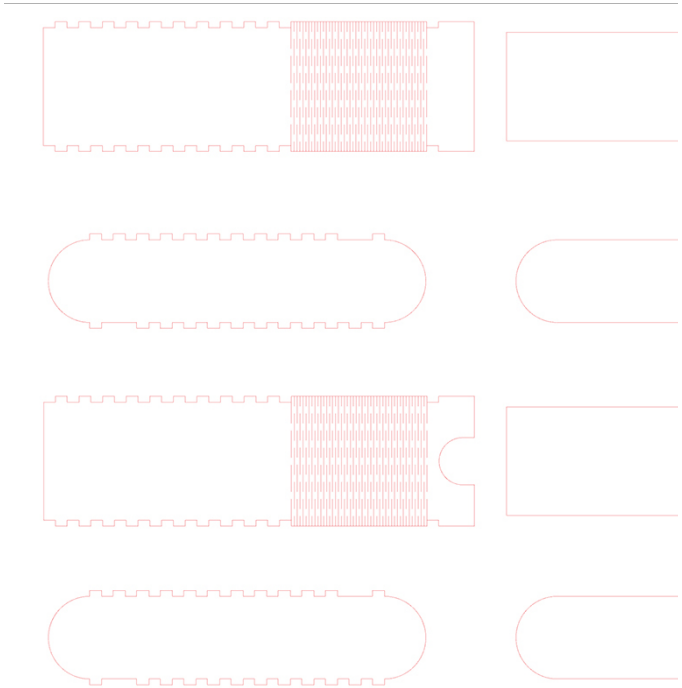
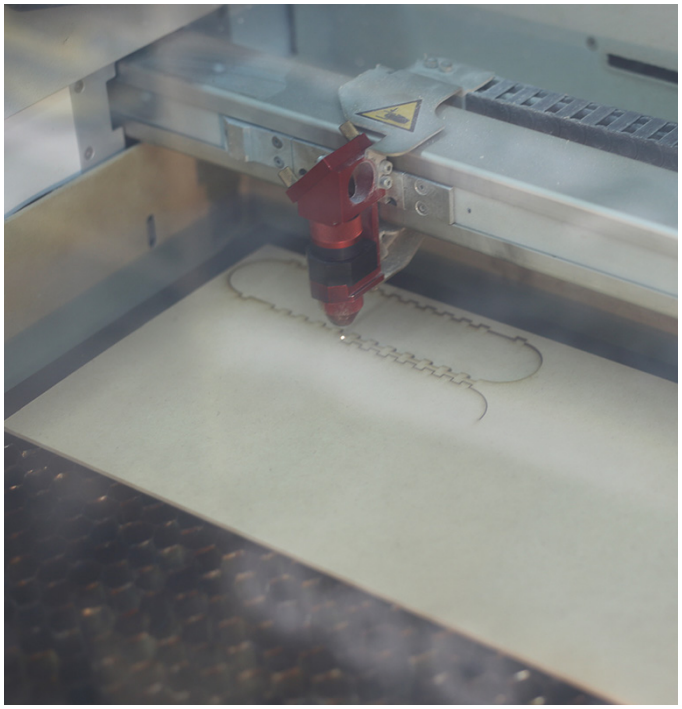
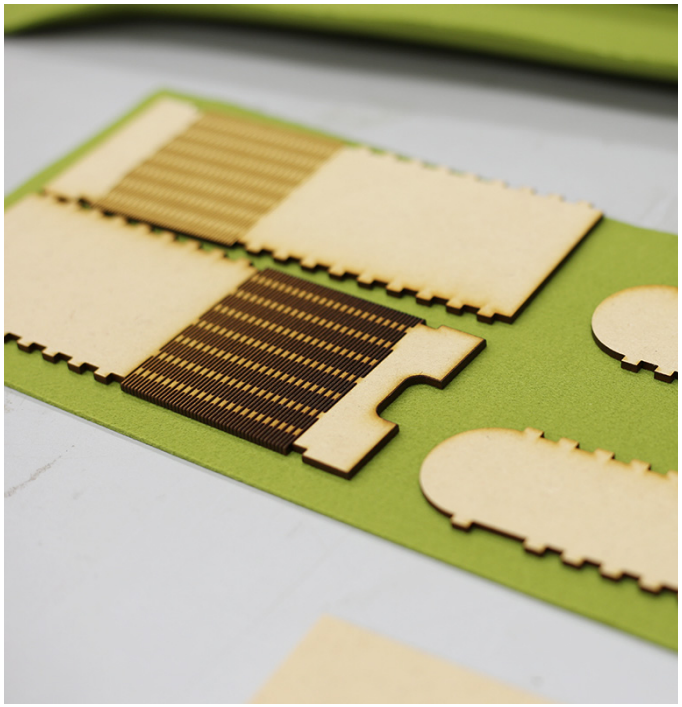
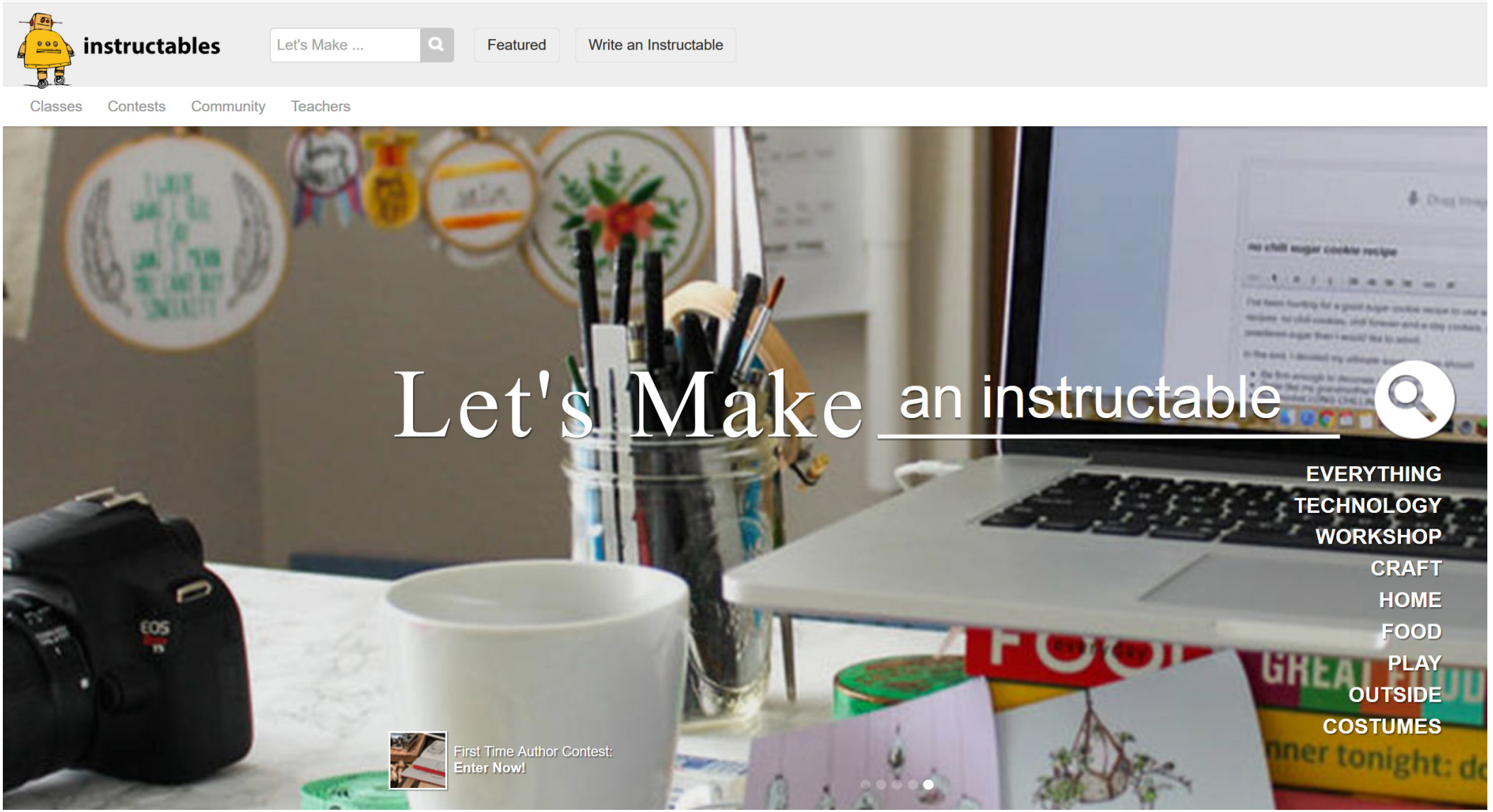
90
100
110
120
130
STAINLESS HARDENED









Instructables

https://www.instructables.com/

Instructables を用いて、つくり方、データを公開する目的

・制作の振り返り

・記録をとる習慣を身につける

・下の学年につくり方などを伝える記録として

・制作のモチベーションを上げる　外部評価

・海外のサービスである

制作のモチベーションを上げる

通常の授業：参考作品に選ばれるのは数名程度

制作の公開：他者からリアクションを得ることができる

- 見た人の数
- Favorite の数
- Featured の仕組み
- コメント

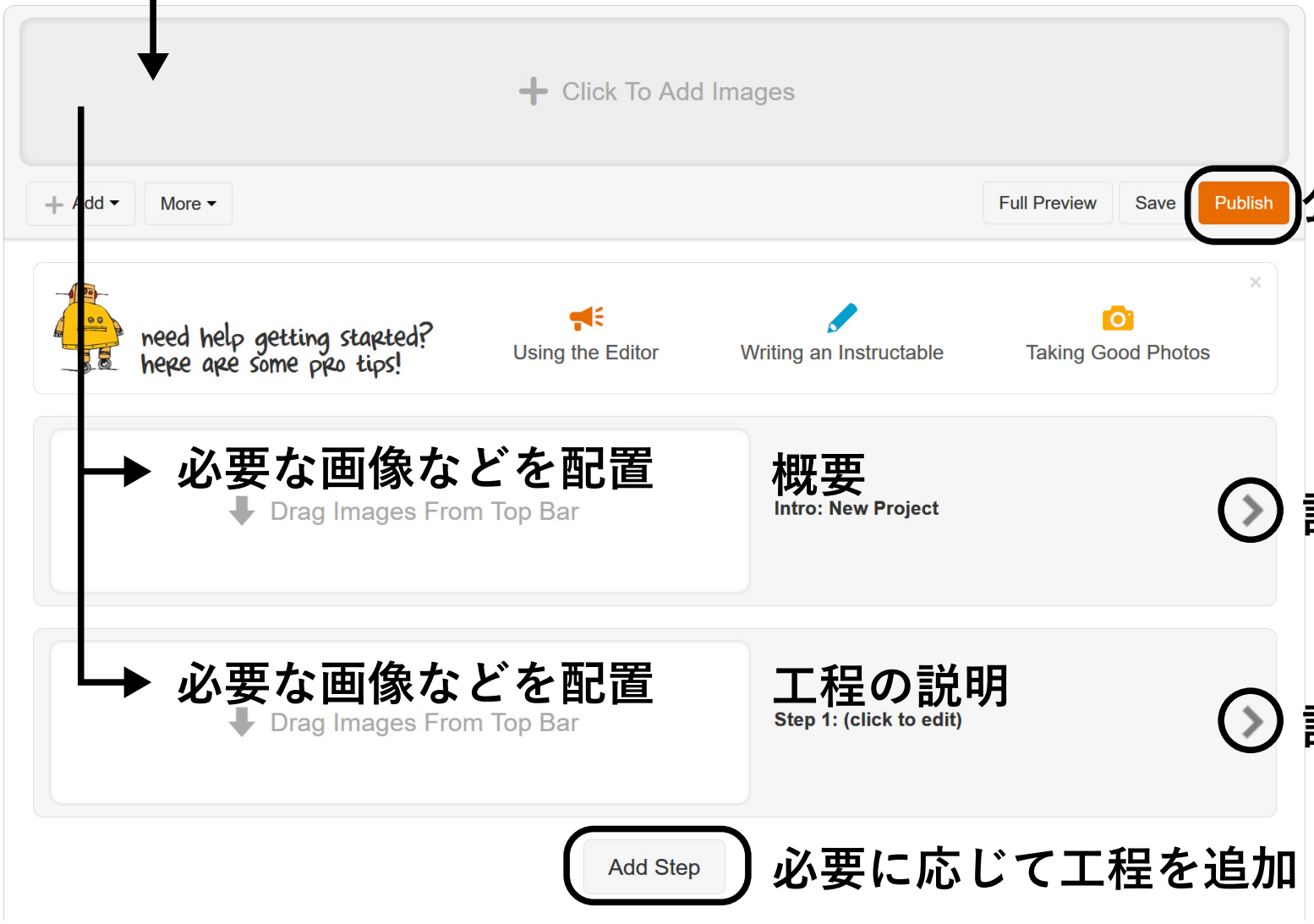
海外のサービスであること

・国内に比べると利用者数が多く、

　他者からのフィードバックを得やすい

・英語を使用する必要がある（英語に慣れる）

画像やデータなど制作の説明に使用するデータをアップロード



公開

詳細へ

詳細へ

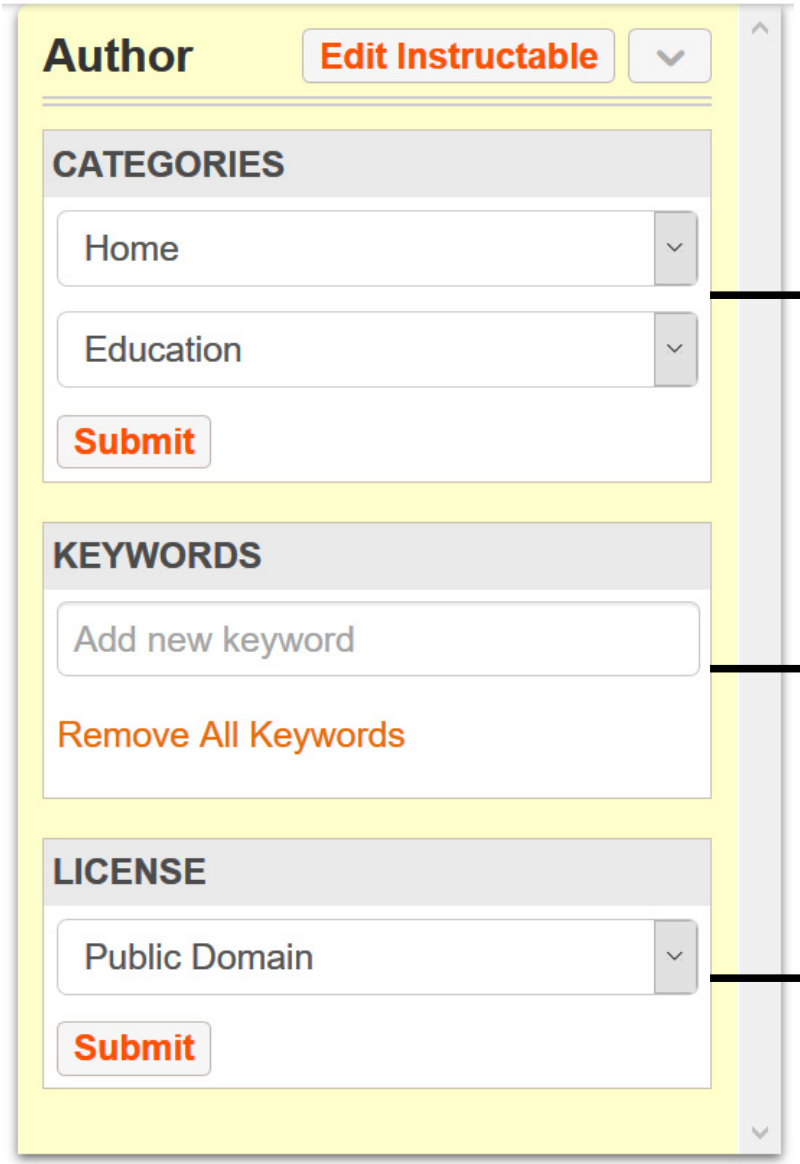
必要に応じて工程を追加

Instructables https://www.instructables.com/

概要や工程の詳細

Instructables https://www.instructables.com/

公開時の設定



カテゴリーの設定

キーワードの設定

ライセンスの設定

クリエイティブコモンズライセンス

Instructables https://www.instructables.com/

ライセンスの表示

Lamp Shade

Workshop > Lighting 3,683 50 2 Featured

他者からのリアクション

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Instructables Lamp Shade https://www.instructables.com/id/Lamp-Shade-1/

Lamp Shade

Workshop > Lighting 3,683 50 2 Featured

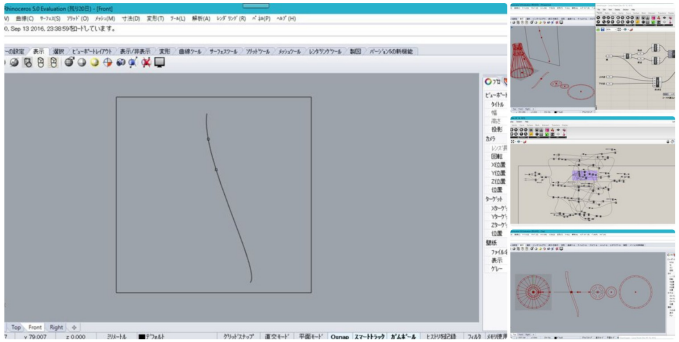
This is a lamp shade.

Material:MDF2.5mm

Tool:Rhinoceros,Grasshopper,Illustrator

Add Tip Ask Question Comment Download

Step 1: Data



Make the data by Rhinoceros and Grasshopper.

1. Write a shape seen from the side by front indication of the Rhinoceros.
2. Place the component with a Grasshopper, write a circle and size.
3. Write the parts in the position seen from the top.
4. Save with *.ai or *.dwg extension.

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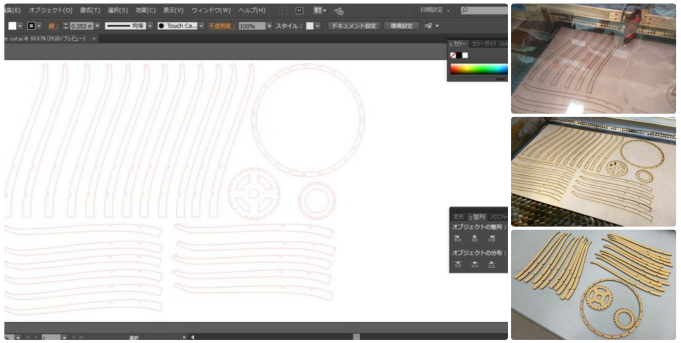
Step 2: Cut



Copy and place as many parts as you need in the illustrator.

Cut the MDF with a laser cutter.

Lamp shade.pdf Download

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Step 3: Assemble

Temporarily assembling parts.

Assemble with bonds if there is no problem.

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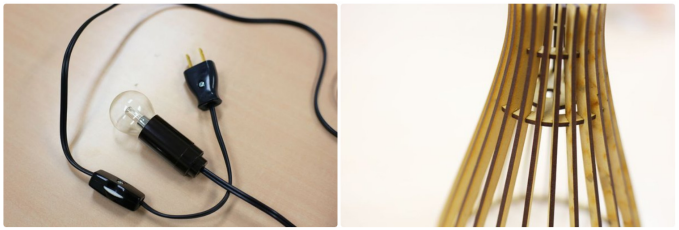
Step 4: Attach a Light



A cord, a socket and the plug use the thing which does not become one.

Pass the cord through the lamp shade before attaching the light bulb.

Attach a socket and plug to the cord.

Add Tip Ask Question Comment Download

2 Discussions

sazer1 1 year ago

Reply Upvote

THIS IS GREAT...
CAN U PROVIDE THE GH SCRIPT FILE
THANKS

Modern Rustic Workshop 1 year ago

Reply Upvote

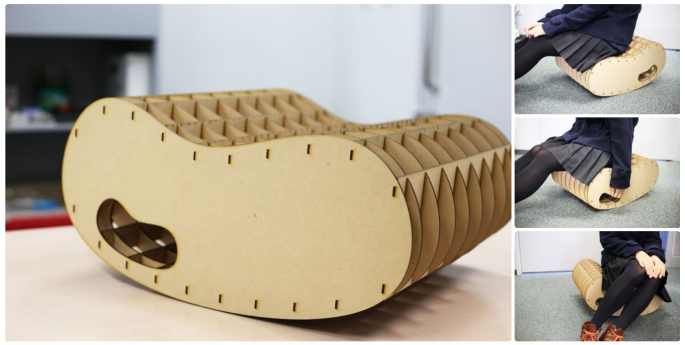
Very cool unique design!

Post Comment

Instructables Lamp Shade https://www.instructables.com/id/Lamp-Shade-1/

SORAMAME Stool

Craft > Art 1,941 36 1 Featured



This is a SORAMAME stool.

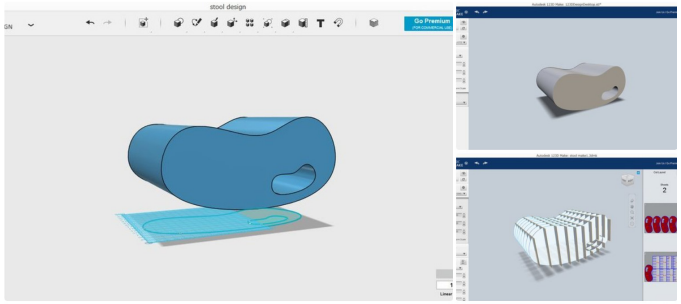
Material:MDF 2.5mm only

W:516mm,D:390mm,H:245mm

You can sit any direction.

Add Tip Ask Question Comment Download

Step 1: Image



1. Make the shape of the image by 123D Design.
2. Think about the structure by 123D Make.

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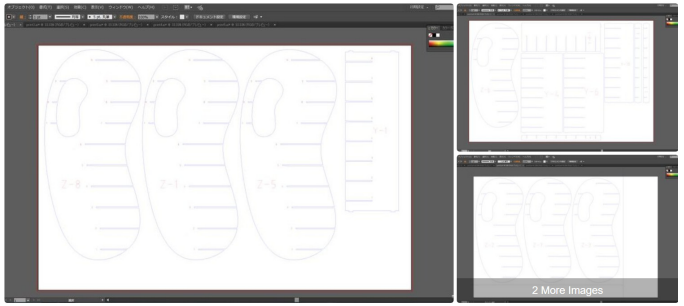
Step 2: Data



Make the data by illustrator.

Line:0.001mm

art board size : 915×600mm

print1.pdf Download

print2.pdf Download

print3.pdf Download

print4.pdf Download

print5.pdf Download

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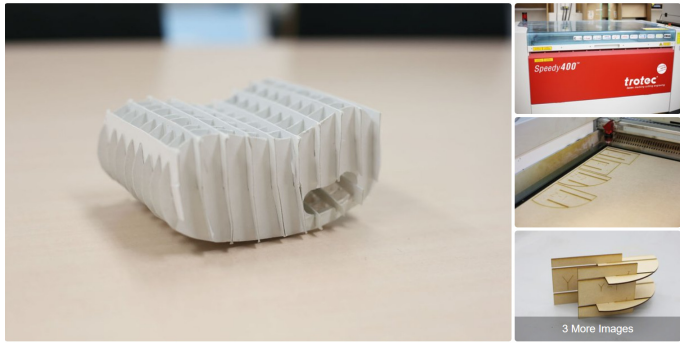
Step 3: Test



To check the shape and size.

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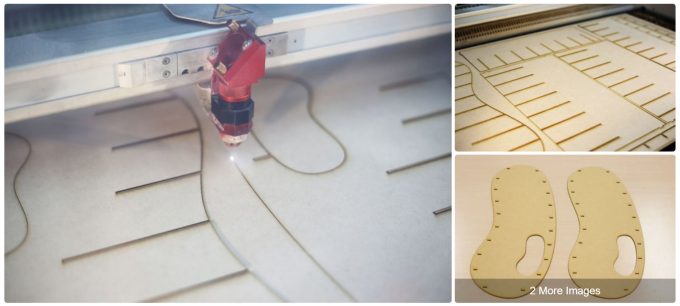
Step 4: Cut



Cut MDF by laser cutter.

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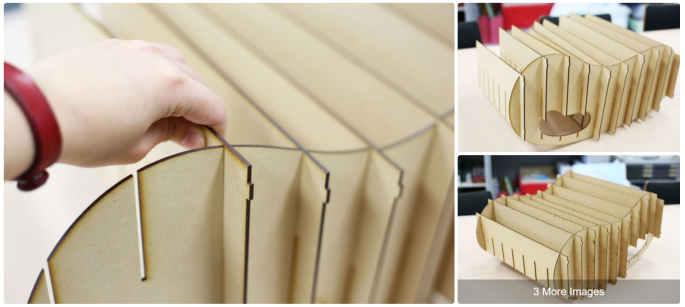
Step 5: Assemble



Assemble parts.

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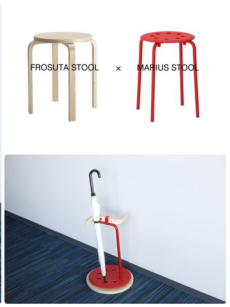
Instructables SORAMAME Stool https://www.instructables.com/id/SORAMAME-Stool/

IKEA HACK:Stool→Umbrella Stand

Workshop > Furniture 83 1



This is an umbrella stand combining two stool from IKEA with using 3D printer.

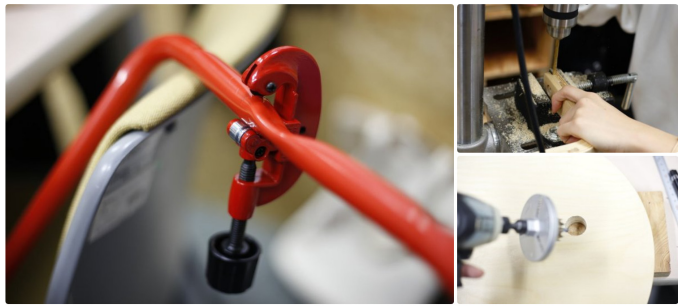
MATERIAL:

- FOSUTA STOOL (from IKEA)
- MARIUS STOOL (from IKEA)
- screw
- ABS

TOOL:

- 3D Printer (Up mini2)
- Impact driver
- Hole-saw
- Pipe cutter

Step 1: CUT



1.Cut the pipe leg in half.

2.Cut the wood leg.

3.Make a hole to guide where to screw.

4.Cut the seat of FROSUTA STOOL in circle with the radius of 15mm by using hole-saw.

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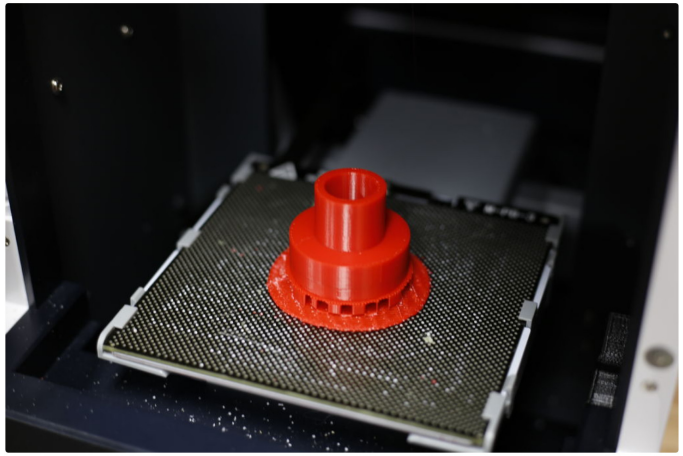
Step 2: 3D PRINT



5.Output the part to joint the stool leg and the seat part.

umb stand.stl View in 3D Download

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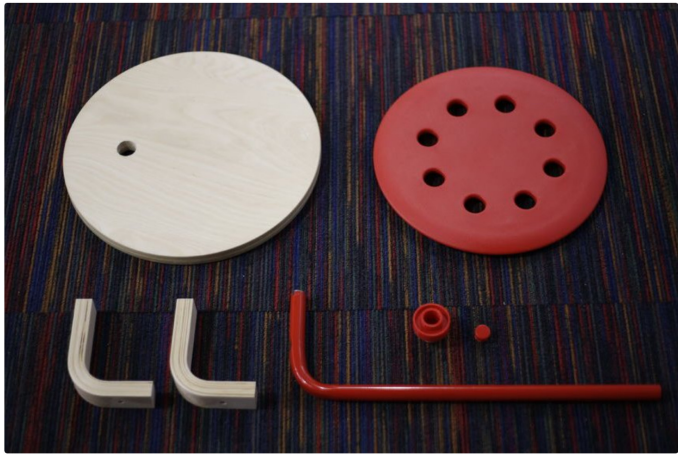
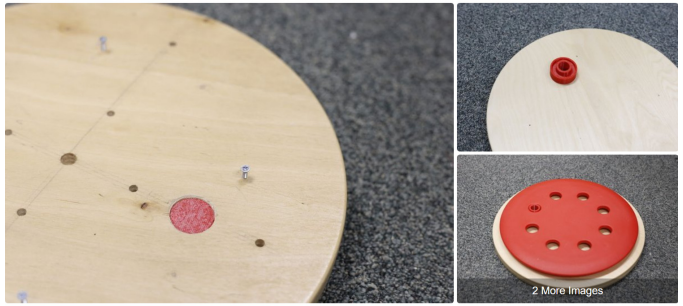
Step 3: Now You Have All the Materials to Build.



Step 4: PUT IT IN



6.Put the joint into a hole.

7.Plate the MARIUS STOOL to the joint.

8.Screw.

9.Insert the pipe leg to the joint.

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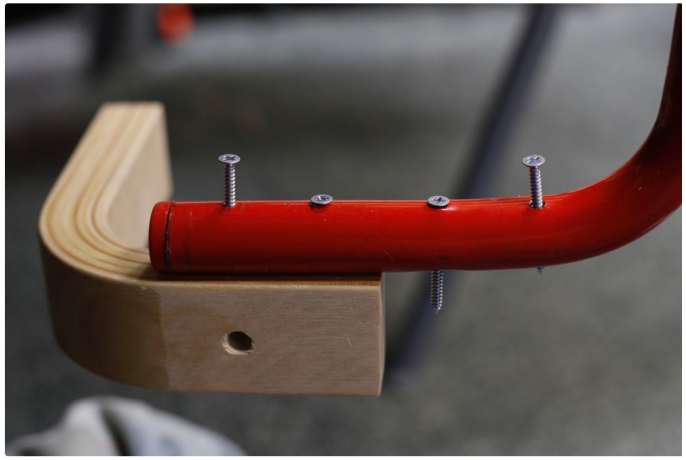
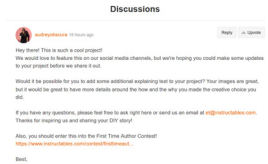
Step 5: SCREW



10.Screw the wood leg to the pipe leg.

Add Tip Ask Question Comment



IKEA HACK:Stool→Umbrella Stand

https://www.instructables.com/id/IKEA-HACKStoolUmbrella-Stand/

改変

STOOL KIND OF DESK

Workshop > Furniture 126 1 Featured

this can be used as stool or desk either way you want.

MATERIAL:

- OSB 12mm
- MDF 5.5mm
- Round wood bar()
- Screw(4*16)
- ABS

TOOL:

- Laser cutter (Tortec speedy 400)
- 3D Printer (Up mini2)

This idea is from yamashitaken.(https://www.instructables.com/id/KUMU-Stool/)

Step 1: DATA

1.Make data by Rhinoceros.

3.Save plan as .ai(Adobe illustrator).

stool kinda desk.pdf Download

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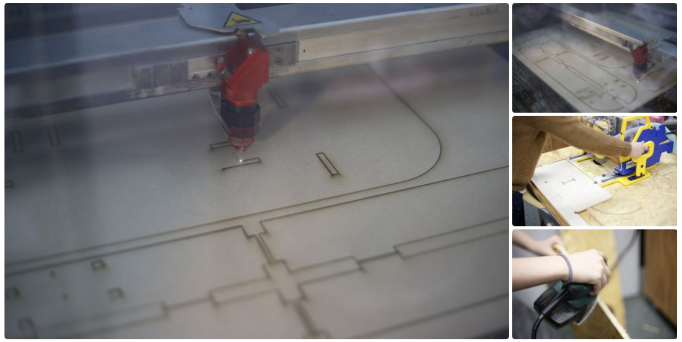
Step 2: CUT



4.Cut MDF by using Laser cutter.

5.Cut OSB by CNC.

6.Sander the OSB.

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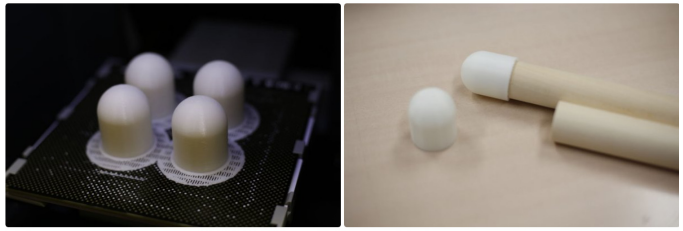
Step 3: 3D PRINT



7.Output cap part of the leg.

stool cap.stl View in 3D Download

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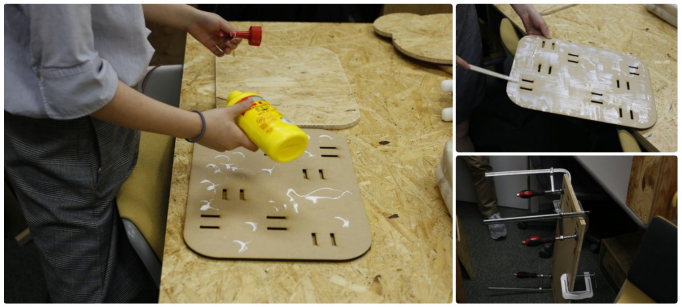
Step 4: This Is the Materials You Will Need.

Step 5: TOP



8.Bond MDF and OSB.

9.Cramp tight.

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Step 6: LEG

10.Put together the leg part.

11.Cramp.

12.Screw.

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Step 7: DONE!

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Instructables STOOL KIND OF DESK https://www.instructables.com/id/STOOL-KIND-OF-DESK/

Temari Earrings

Craft > Fashion 25

It is old in Japan,and this is a certain toy.I lowered it and had earrings.

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Step 1: Materials

Prepare
cotton,thread,metal fittings.The color I choose is black,white,red,gold.

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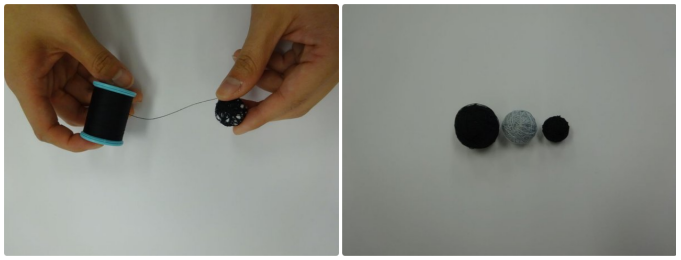
Step 2: Winding Thread



Winding thread on rolled cotton.

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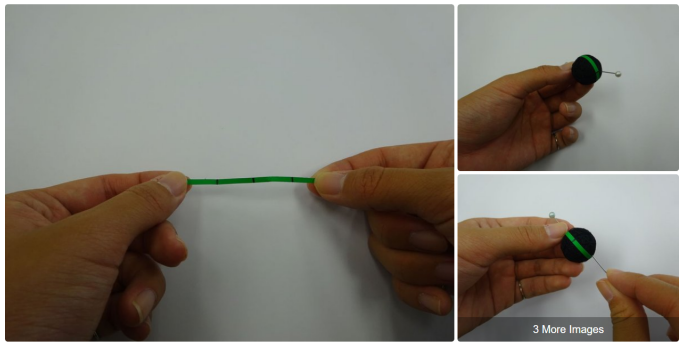
Step 3: Make the Axis



Mark with a pin first.Cut the paper tape
from the pin to the length of one turn.It folds the paper tape quarterly.Win a paper tape on a sqher and put a pin at the fold.

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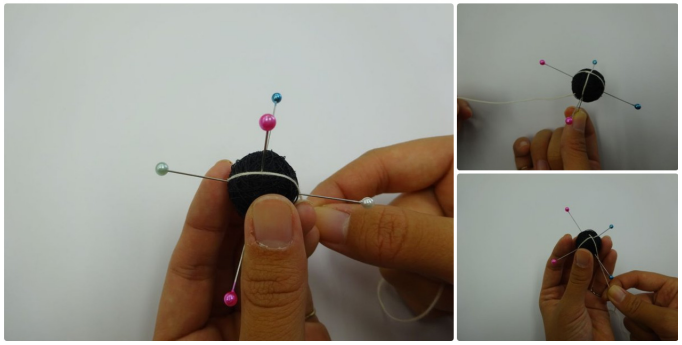
Step 4: Saw the Baseline



To divide a ball into four equal parts.

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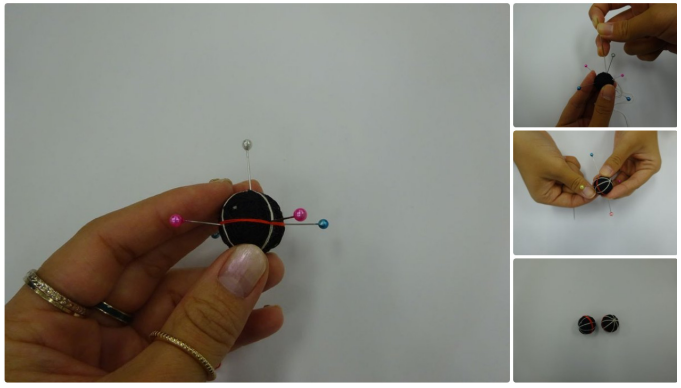
Step 5: Divide Into Eight Equal Parts



Put a pin in between and divide it into 8 equal parts.Sew with thread.

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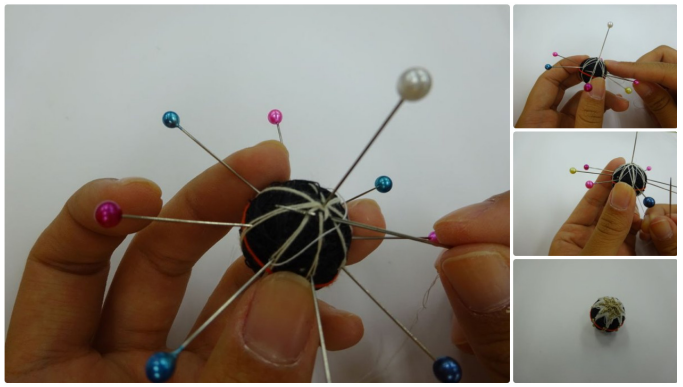
Step 6: Begin in Stitch a Pattern



I made the design that wants to made guide lines in a mark.

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Instructables Temari Earrings https://www.instructables.com/id/Temari-Earrings/

Tsumami Accessory

Craft > Sewing 22

tsumami accessory is Japanese traditional accessories.

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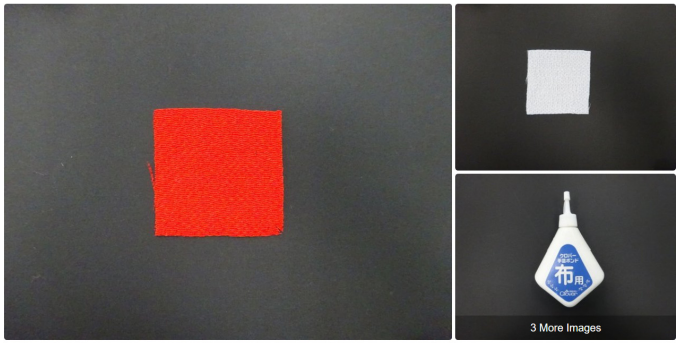
Step 1: Materials



There is materials.

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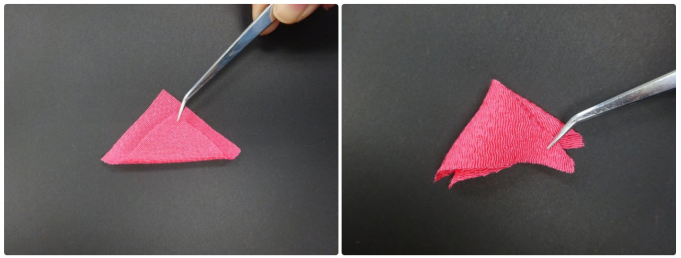
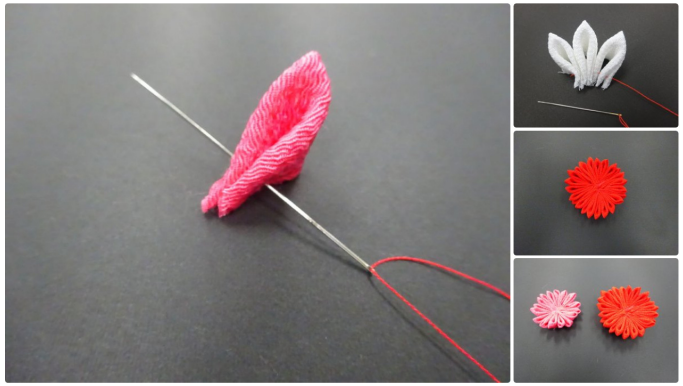
Step 2: How to Make



Fold cloth into a triangle.

Fold it further in half.

Step 3: How to Make



Pass a needle through one part.

It repeated hull of round it.

It repeat there two times of work.

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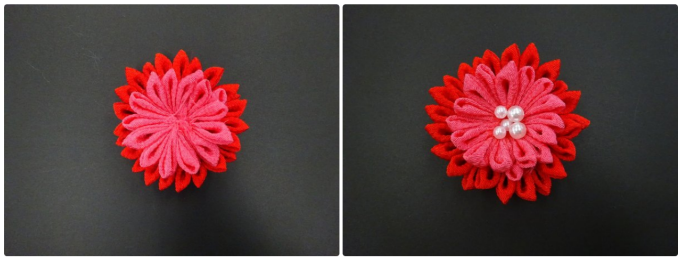
Step 4: How to Make



It ride small one on a big things and add a pearl in the center.

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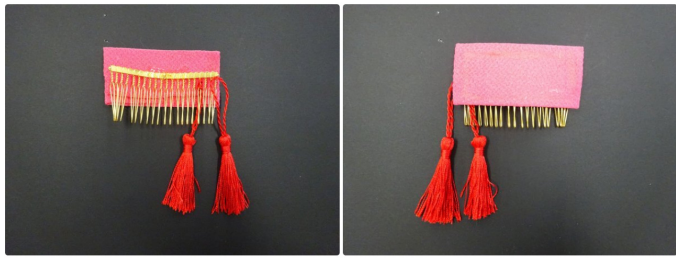
Step 5: How to Make



Put cloth on the cardboard.

Attach cardboard and comb.

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Step 6: Last Work

Attach tumami to the comb.

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Instructables Tsumami Accessory https://www.instructables.com/id/Tsumami-Accessory/

How to Dress in a Yukata

Costumes > Funny 137 2 Featured

Yukata is a traditional Japanese outfit, which is often worn during the summertime.

Step 2: Step2

Put on a slip called the "hadagi".

Step 5: Step 5

Cross the koshihimo in the back and tie it in the front.

Step 8: Step 8:How to Tie an Obi for Yukata

Take about 16 or an arm's length from one obi end and fold it in half. Hold this end on your left.

Fold the right end to make a triangle shape.

Step 11: Step 11

Bring left to the upper center and bring vertical line.

Open up the right. Bring the right from the center to the right and fold to the front.

Decide the ribbon length and fold.

Step 13: Step 13

Move the ribbon the back.

Instructables How to Dress in a Yukata https://www.instructables.com/id/How-to-Dress-in-a-Yukata/

Animal Pom Pon

Craft > Art 156 3 3 Featured

It's an animals brooch made from yarns.

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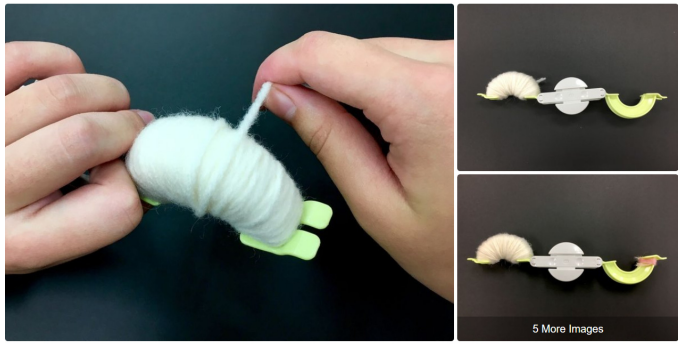
Step 2:



Wind a yarn onto the Pom pon maker.

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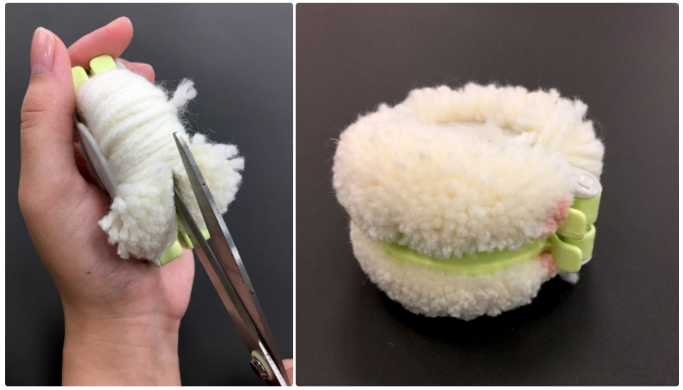
Step 3:



Cut with scissors.

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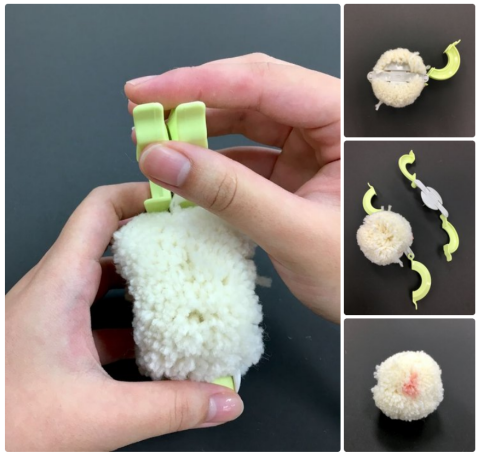
Step 5:



Remove the pom pon from pom pon maker.

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Step 7:

Cut yarn into small pieces with scissors.

Disentangle a yarn.

Gather into one bundle and shape into ear.

Unite ear with pom pon.

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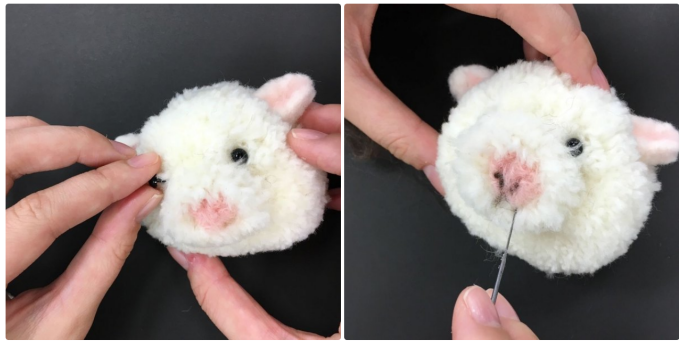
Step 8:



Put eyes in the face.

Put the line of nose and mouth with wool.

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Instructables Animal Pom Pon https://www.instructables.com/id/Animal-Pom-Pon/

まとめ

・人に伝えることを意識したまとめ方

・制作時に写真等の記録をとる習慣

・似た取り組みとの比較

・授業で同じようなものを作り、公開する場合は注意が必要

・外部からの意見