

# KATA 2020 3Doodler Create

The World's First 3D Printing Pen

# Supplies

To participate, I use the 3Doodler from Dick Blick (there is a less expensive 3D pen).

Stands of ABS in colors of your choice.

Pattern provided to use or your own art, (marker drawings are easier to use with the hot strands as they pull off the paper easier).

# Quick Start Guide

## 3Doodler Create Quick Start Guide

**WARNING**  
METAL TIP IS HOT and can burn you. Keep hot to away from fingers and objects. Cool before starting.

### How It Works

The 3Doodler Create extrudes heated plastic that cools almost instantly, allowing you to create solid, three-dimensional objects.

Plastic heats and melts.

Motor pushes plastic through hot tip (Nozzle).

You can Doodle!

### Plastic Guide

For optimal Doodling use these temperature settings for your Plastic:

**ABS (MATTE):**  
Temp: HI Temp (Light Blue)  
How to tell: Plastic has white semi-circle ends.

**FLEXY:**  
Temp: HI Temp (Light Blue)  
How to tell: Plastic is flexible.

**PLA (GLOSSY / CLEAR / METALLIC):**  
Temp: LO Temp (Light Green)  
How to tell: Very rigid when laid flat, no white semi-circle ends.

**Button Guide**  
Click either Speed Button:  
• Once to START.  
• Once to STOP.  
Double Click to REVERSE.

### Ready, Set, Doodle!

Make sure you are using the right temperature settings for your Plastic. (See guide to the left)

- Plug in and turn ON - Your control switch to HI or LO.
- Heat up - Light will turn from RED to BLUE (HI) or GREEN (LO) after 10-20 seconds.
- Insert Plastic and click - Push Plastic through loading port in the back of Pen. Click once to start the DRIVE GEAR. You may hear some plastic clacking as you push.
- Wait to see Plastic - Heated plastic will emerge from Nozzle.
- Doodle! - Once you see Plastic emerge, you are ready to go! Push down into your paper or surface to start Doodling.

### Push Down to Prevent Curling

- At the start of extruding, push Nozzle firmly down. Drag Plastic along the paper or surface in a continuous, undulating line, as if you were writing with a pencil.
- Keep your movement slow and steady. Plastic should hold to the surface and not curl up around the Nozzle.

### Doodle in the Air

- Extrude a Plastic blob about the size of a ladybug onto a piece of paper.
- Lift Pen and Plastic up off the paper in a straight line for 1.5 in.
- Click FAST button once to stop extruding. **BUT DO NOT MOVE PEN YET.**
- Wait a few seconds with the Pen still connected to the top of your Plastic line.
- Pull Pen away. The line will remain vertical.

1.5 in

### Changing Plastic Colors & Types

**BEFORE SWITCHING FROM HI TO LO**

When switching from a HI temp Plastic (ABS or FLEXY) to a LO temp Plastic (PLA), run Pen on HI setting until HI Temp Plastic is fully extruded (you'll see the Plastic color change). Then switch Pen to the LO temp setting.

After you have finished using your 3Doodler, reverse or remove any remaining Plastic. Snip the ends now for smoother Doodling later.

### Reversing & Removing Plastic

- Do not pull Plastic from the Pen other than as directed.
- Double click either Speed Button. Light will flash. Drive Gear will push Plastic out from the back of the Pen. Once Plastic stops moving, it is safe to pull and remove.

**Note:** If your Plastic is too short to fully reverse, you will need to run it all the way through the Pen or use the tools to remove the Plastic left in the Pen. Please refer to the User Manual.

DOUBLE CLICK

### Weld Plastic

You can join 3Doodled pieces by touching the Nozzle of the 3Doodler to both parts to melt them together while extruding. Don't worry about rough edges; you can trim those later.

# Extra Quick Start Guide



Easy as 1, 2, 3D!

## 1. Plug in & switch to HI



It will take **60-90 seconds** for your 3Doodler to heat up. The Light will change from **RED** to **BLUE**.

## 2. Insert your ABS Plastic



**Click once** on the FAST button and **push the plastic** into the back of the pen until you feel it grip. Start Doodling. Click any button once to stop Doodling.

## 3. Doodle onto the page



While Doodling, **push down** into the page. This helps the plastic stick to the surface. **Lift up and hold steady to Doodle up in the air.**

For more features, check out the **Quick Start Guide** and **User Manual**.

Need help getting started?

Feel free to contact us at:

- [help@the3Doodler.com](mailto:help@the3Doodler.com)
- (US) 718 618 9904
- [www.the3Doodler.com/getting-started](http://www.the3Doodler.com/getting-started)

Glossy,  
Matte, or  
Metallic ABS.



Always start feeding the plastic and removing the plastic, on the highest heat setting (blue light).



ABS



**META  
META(ABS)  
AB-MIX2**



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Conforms to / Conforme à la norme ASTM D-4236  
Exact colors may vary / Couleurs  
exactes sont sujettes à changement

**WARNING:** Melted plastic burns skin. DO NOT touch the nozzle, the area around the nozzle, including, but not limited to the adjoining rubber area, or the heated plastic or you may be severely burned! The heated nozzle may damage painted surfaces, plastics and cloth if left in direct contact with these materials. **ADULT USE ONLY, KEEP OUT OF REACH OF CHILDREN.**

**AVERTISSEMENT:** NE PAS toucher la buse, ni les éléments près de la buse ainsi que l'embout en caoutchouc ou tout plastique fondu, risques de brûlures graves! Plastique fondu brûle la peau. La buse ou l'embout en caoutchouc chaud peuvent endommager les surfaces peintes, plastifiées et les tissus en contact direct avec ces matériaux. ne pas ingérer. **RÉSERVÉ AUX ADULTES. NE PAS LAISSER À LA PORTÉE DES ENFANTS**

MADE IN THE USA  
FABRIQUÉ AUX ÉTATS-UNIS



Make sure the LED light is GREEN /  
Assurez-vous que la LED lumineuse est VERTE



PLA works best on "LO" temp /  
PLA fonctionne le mieux à basse  
température (LO)

If you are using 3Doodler PRO, PLA works  
best at 180°C-190°C (356°F-374°F), set the speed  
between 3 to 6.

Si vous utilisez 3Doodler PRO, la température optimale  
pour PLA est de 180°C-190°C (356°F-374°F), réglez la  
vitesse de 3 à 6.

\*PLA must not be extruded above 200°C (due to expansion of the  
material at high temperatures). \*PLA ne doit pas être extrudé au-dessus  
de 200°C (due à l'expansion du matériau à fortes températures).

**FOGGY DAY GREY  
(PLA)  
PLZ7-FGGY**



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**ATTENTION:** Brûlures de plastique fondu peau. NE PAS toucher la buse, la zone autour de la buse, y compris, mais pas limité à la zone de contigu ou le plastique chauffé ou vous pouvez être sévèrement brûlé! La buse chauffée peut endommager les surfaces peintes, le plastique et le tissu si on les laisse en contact direct avec ces matériaux. **UTILISATION DES ADULTES SEULEMENT, GARDER HORS DE PORTÉE DES ENFANTS.**

www.the3Doodler.com



Make sure the LED light is BLUE /  
Assurez-vous que la LED lumineuse est BLEUE



ABS works best on "HI" temp /  
ABS fonctionne le mieux à haute  
température (HI)

If you are using 3Doodler PRO,  
ABS works best at 195-200°C (383-392°F),  
set the speed between 3 to 6

Si vous utilisez 3Doodler PRO,  
la température optimale pour  
ABS est de 195-200°C (383-392°F),  
réglez la vitesse de 3 à 6

**WELCOME TO THE JUNGLE (ABS)  
5 GRRREALLY GREEN  
5 EVERGREEN  
5 CHOCO BROWN  
5 SUNNYSIDE YELLOW  
5 SUPER YELLOW  
AB-MIX6**



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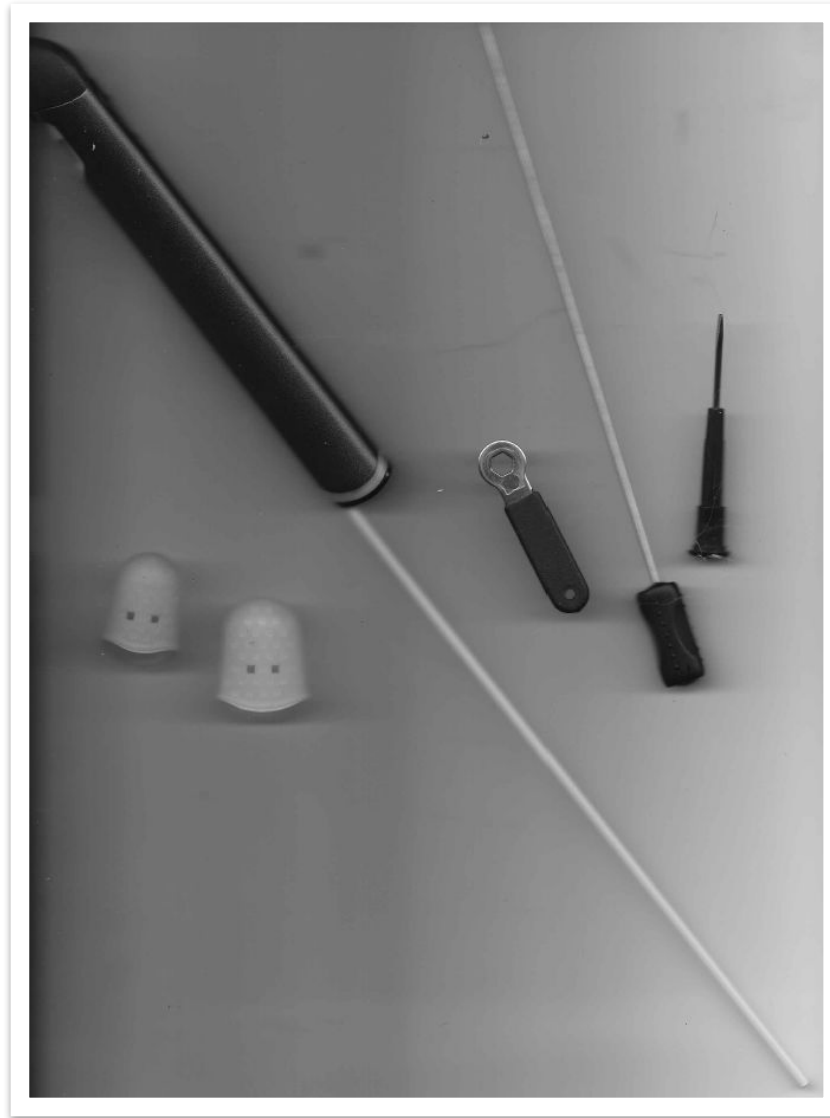
Conforms to / Conforme à la norme ASTM D-4236  
Exact colors may vary /  
Couleurs exactes sont sujettes à changement

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www.the3Doodler.com

Tool for  
removing  
3Doodler  
nozzle tip,  
silicone finger  
protectors,  
extruder and  
screw driver.

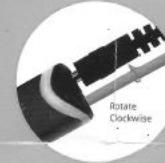


# Trouble Shooting

## If Plastic is not extruding from your 3Doodler:

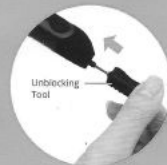
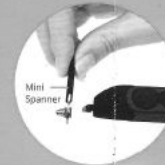
### 1. Plastic not engaging properly with the Drive Gear:

- Firmly push and turn the Plastic clockwise until you feel the strand pulled through the Drive Gear on its own.
- If the above does not work, reverse the Plastic fully from the Pen. Snip ends, then reinsert and try again.
- If Plastic is too short to be gripped by the Drive Gear, move to 2 below.



### 2. Plastic is too short to be gripped by the Drive Gear:

- Try unscrewing the Nozzle and using the Unblocking Tool.
- While Pen is hot (Light is BLUE or GREEN), use Mini Spanner to unscrew and remove Nozzle.
- Insert Unblocking Tool through open front end of Pen and gently push any excess Plastic out through the back of the Pen.



### 3. Plastic may be wrapped around the Drive Gear.

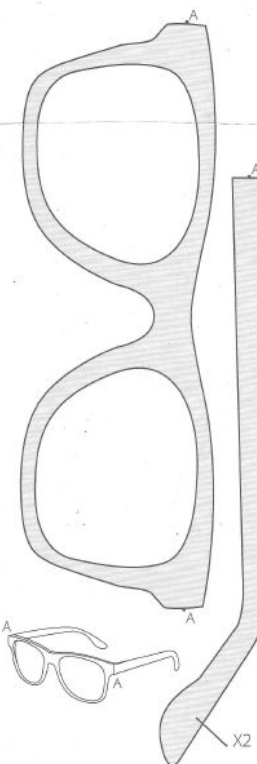
- Remove Maintenance Cover using Mini Screwdriver provided in the box.
- Use the Mini Screwdriver or Unblocking Tool to lift and release Plastic from the Drive Gear and out of the Pen from the Plastic Loading Port or through the open area beneath the Maintenance Cover.





# Patterns

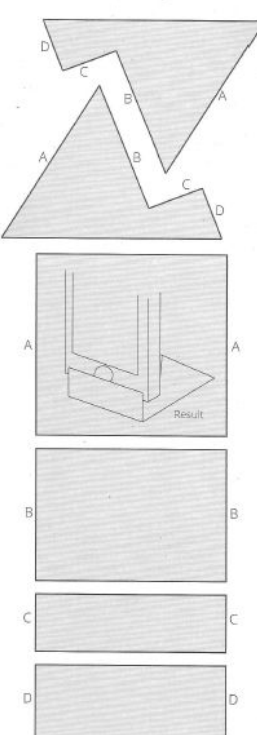
### Hipster Glasses



A large pattern for hipster glasses with two eye lenses and a bridge. A long, thin strip is labeled 'A' and 'X2'. A small inset shows the finished glasses.

Doodle, Snap & Share  
#WhatWillYouCreate?  
f t p i

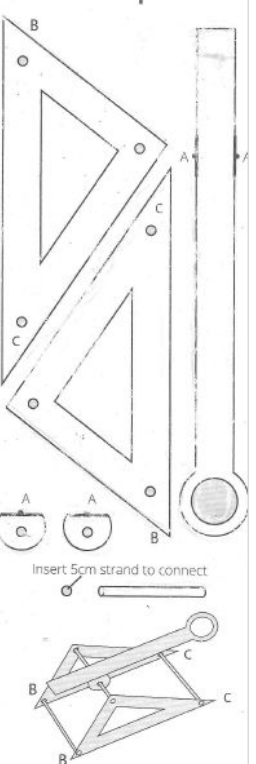
### Phone Holder



A pattern for a phone holder consisting of two interlocking L-shaped pieces labeled A, B, C, and D. A 3D perspective view shows the assembled holder with a phone. Below are four rectangular strips labeled B, C, and D.

Doodle, Snap & Share  
#WhatWillYouCreate?  
f t p i

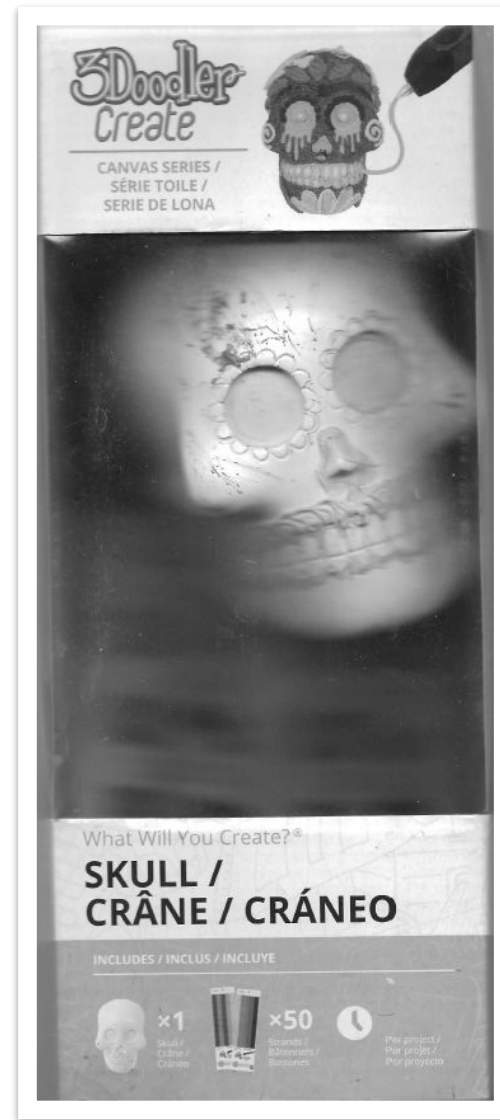
### Desktop Catapult



A pattern for a desktop catapult using two set squares and a long vertical strip. Small circles labeled A and B are shown. A 5cm strand is used to connect parts. A 3D view shows the catapult launching a projectile.

Doodle, Snap & Share  
#WhatWillYouCreate?  
f t p i

# Examples



# Falling Water

