

# Getting the most out of your

# 3Doodler<sup>®</sup> Create

#WhatWillYouCreate?<sup>®</sup>



## Hello

Please do not throw these instructions away.  
(We worked really hard to make sure they were as  
useful and readable as possible!)

**[the3Doodler.com](http://the3Doodler.com)**

Revised: April 20, 2016

## **SECTION 1: WARNINGS**



### **WARNINGS**



- The Nozzle of the 3Doodler can become hot. DO NOT touch the Nozzle, or you may be burned!
- DO NOT allow the Nozzle near or in contact with flammable materials.
- Inform others in the area that the Pen is hot and should not be touched.



Unplug and set the Control Switch to OFF when not in use or before storing.



Allow the Nozzle to cool completely before storing.



The Unblocking Tool can become hot. DO NOT touch the metal part of the Unblocking Tool after using it to clean your 3Doodler, or you may burn yourself!



DO NOT use the 3Doodler near bathtubs, showers, basins or other vessels containing water. This could result in death due to electric shock.



The 3Doodler should only be used with ABS or PLA plastic filament approved by us. Misuse of your 3Doodler, setting your pen to the wrong heating temperature, and/or use of non-approved plastics or other materials may result in damage to your pen or injury to you, and will void your warranty. Injuries to the user may include, but are not limited to, harm sustained from inhaling substances that are not suitable for heating; or burns from flammable materials used in the 3Doodler.

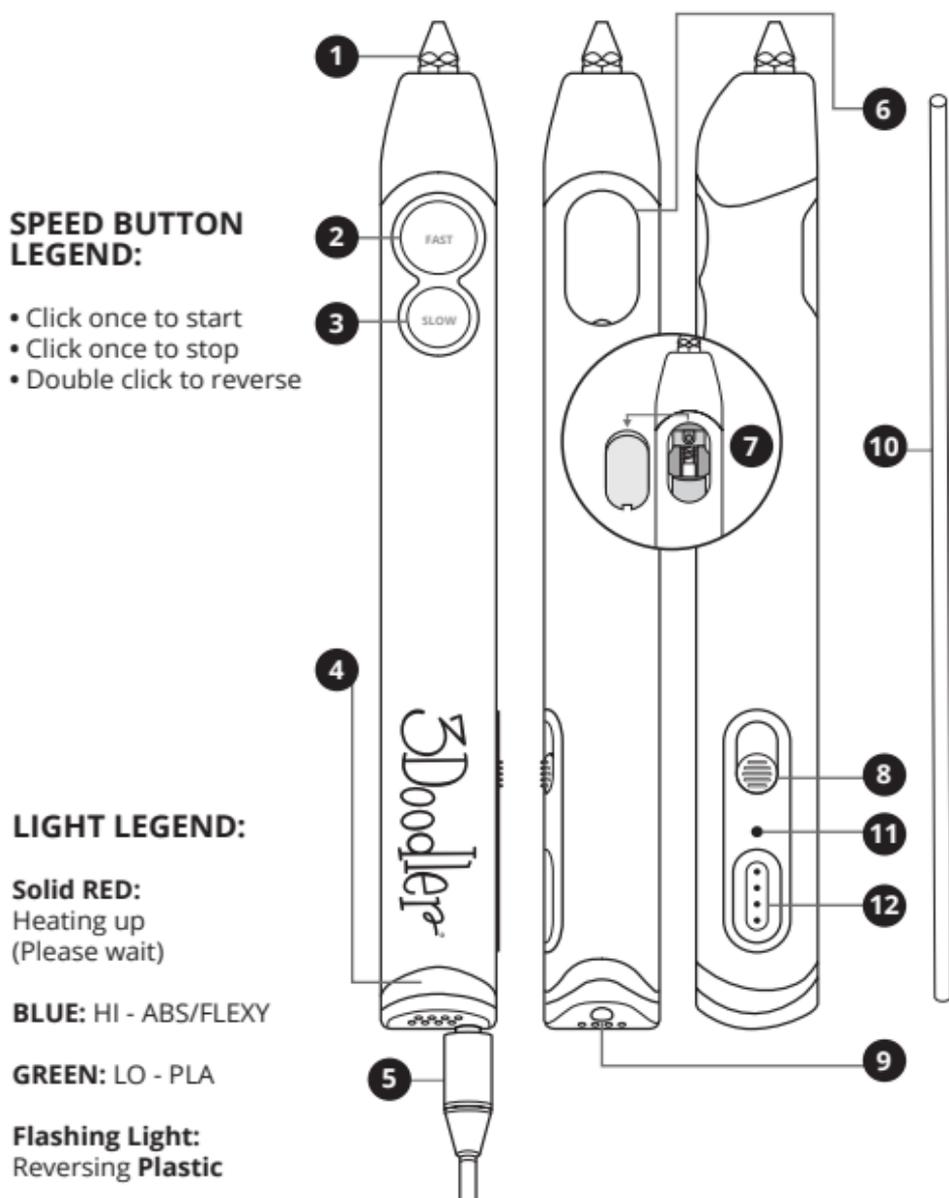
**ADULT USE ONLY.  
KEEP OUT OF REACH OF CHILDREN.**

## **Disposal of this product**

At the end of your 3Doodler's life, please do not dispose of it in your general household waste. In order to prevent possible harm to the environment or human health from uncontrolled waste disposal, please dispose of your 3Doodler separately in accordance with local laws and regulations. For more information on the separate collection systems for waste electrical and electronic equipment, please contact your local municipal authority. You can also contact the retailer from which you purchased your 3Doodler, who may have a recycling service, or be part of a specific recycling scheme that you can use.

## SECTION 2: GETTING STARTED WITH 3DOODLER

We created this User Manual as a step-by-step guide to get you comfortable with your **3Doodler Pen** and its features. Once you are familiar with these steps, you will be able to Doodle with confidence. Skipping steps may result in a less enjoyable time with your **3Doodler**.

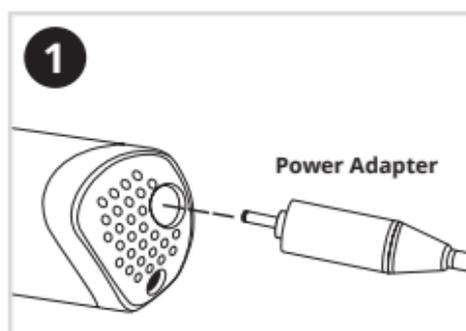


- |   |  |
|---|--|
| <b>1</b> <b>Nozzle</b><br>Hot end where <b>Plastic</b> is extruded for Doodling                       | <b>7</b> <b>Drive Gear</b><br>This pushes the <b>Plastic</b> through the <b>Pen</b>  |
| <b>2</b> <b>FAST Speed Button</b>   | <b>8</b> <b>Control Switch</b><br>For turning the <b>3Doodler ON</b> and <b>OFF</b> , and selecting <b>HI</b> or <b>LO</b> extrusion temperature |
| <b>3</b> <b>SLOW Speed Button</b>   | <b>9</b> <b>Plastic Loading Port</b><br>Hole for inserting <b>Plastic</b> in the back of the <b>3Doodler</b>                                     |
| <b>4</b> <b>Light</b><br>Tells you when your <b>3Doodler</b> is ready for Doodling                    | <b>10</b> <b>Plastic</b>   |
| <b>5</b> <b>Power Adapter</b>   | <b>11</b> <b>Temperature Adjuster</b>  |
| <b>6</b> <b>Maintenance Cover</b><br>Allows you to look inside your <b>Pen</b> to see what's going on | <b>12</b> <b>Control Port</b>  |

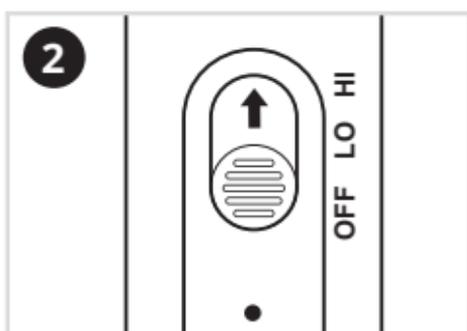
### **How it Works:**

The 3Doodler melts **Plastic** and uses a motor and gears (**Drive Gear**) to push it through the **Pen's** hot end (**Nozzle**) in a thin line. This process is called **extruding** or **extrusion**, and we will refer to it throughout this User Manual. Once extruded, **Plastic** cools and hardens instantly, allowing you to draw on surfaces and in the air. This User Manual will show you how!

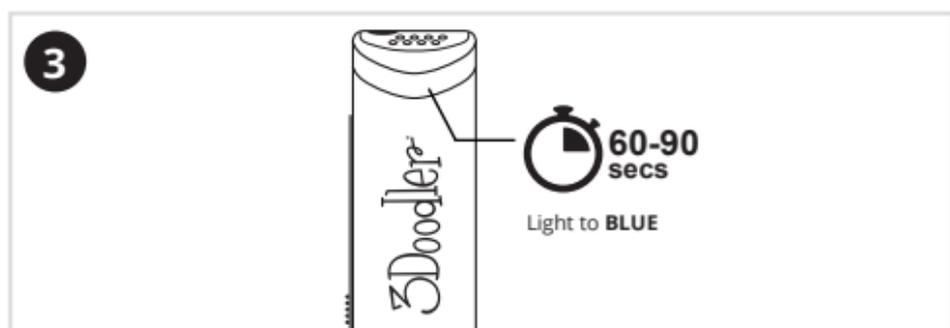
# Step 1: Turn on your 3Doodler and wait for it to heat up



Plug in **3Doodler Pen**.



Slide **Control Switch** to **HI**.

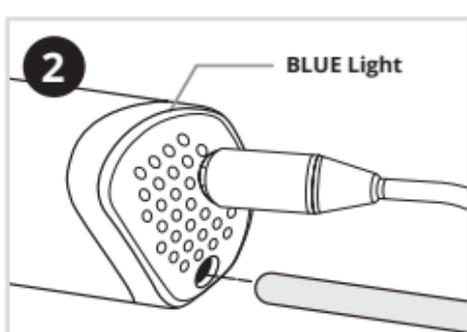


**Light** will glow **RED** while the **Pen** is reaching the temperature required to melt your **Plastic**. Once **Light** has turned **BLUE**, your **Pen** is ready to extrude **Plastic**.

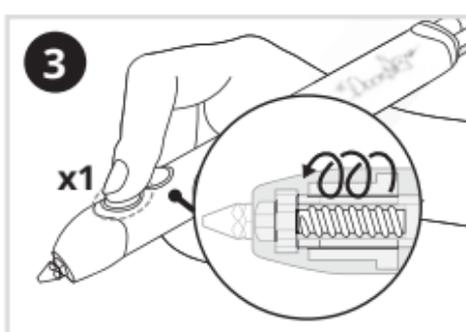
# Step 2: Load and extrude Plastic



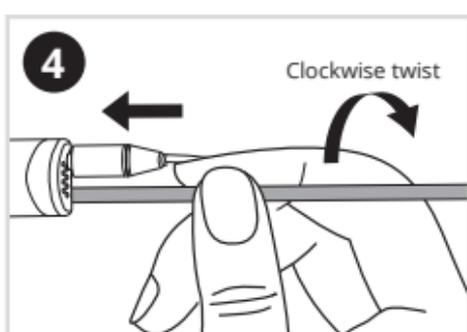
Select one strand of **ABS (MATTE) Plastic** (provided in your **3Doodler** box).



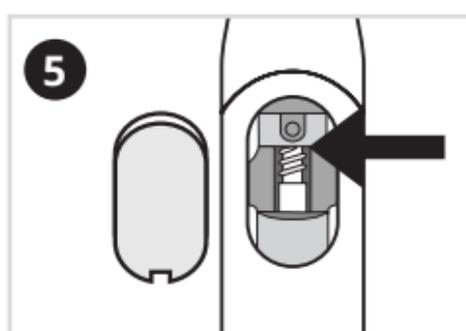
Making sure the **Light** is still **BLUE**, push the **Plastic** through the **Plastic Loading Port**.



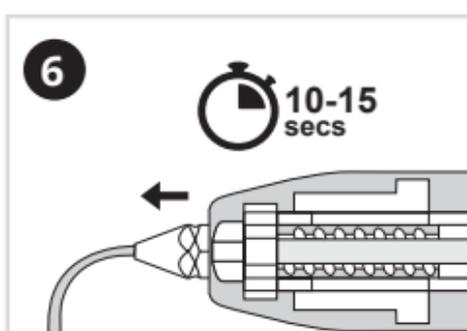
Click **FAST** button once and release. You will hear the **Drive Gear** start.



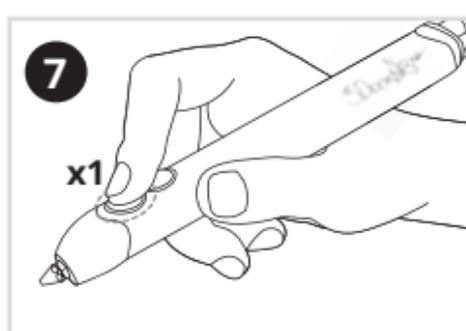
Using your thumb and forefinger, gently grip and turn **Plastic** clockwise while pushing into **Plastic Loading Port** until you feel the strand pulled through the **Drive Gear** on its own.



When loading **Plastic**, ensure it reaches the area towards the end of the **Maintenance Cover** in order to be gripped fully.



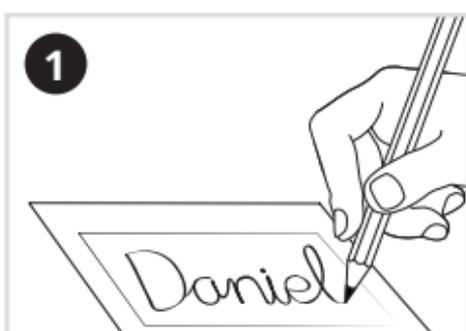
After 10-15 seconds, **Plastic** will begin extruding from the **Nozzle**. Extruded **Plastic** will harden after a few seconds.



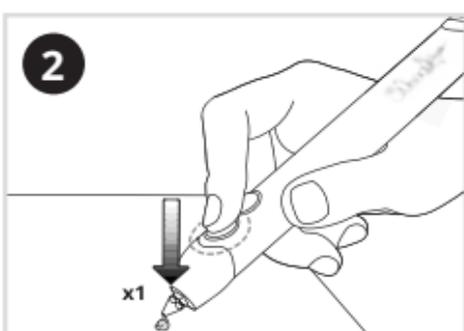
Press the **FAST** button once to stop extruding.

## Step 3: Doodle your name

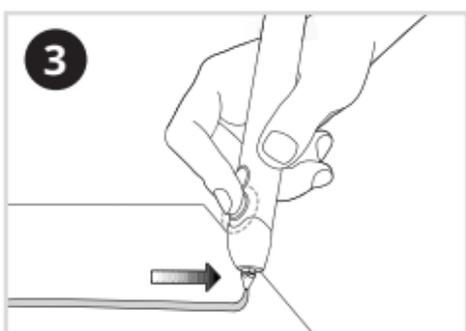
Use box below to create your first Doodle - your name!



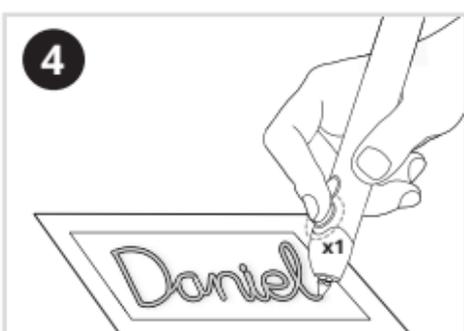
Write your name in the box provided using marker, pen, pencil, or any other writing utensil of your choice. We suggest cursive, or block with the letters connected.



Click **FAST** button once. When **Plastic** starts extruding, push **Nozzle** down into paper to get **Plastic** to stick to surface.



Doodle your name in a continuous unbroken Doodle by dragging the **Plastic** along the paper as if you were writing with a pencil, with all letters connected. Keep your movement slow and steady.



When you reach the end of your name, stop extruding by clicking the **FAST** button once again.



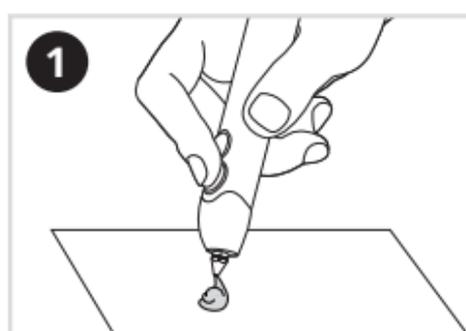
Bend the paper outwards to pop your Doodled name off.

**Your Name:**

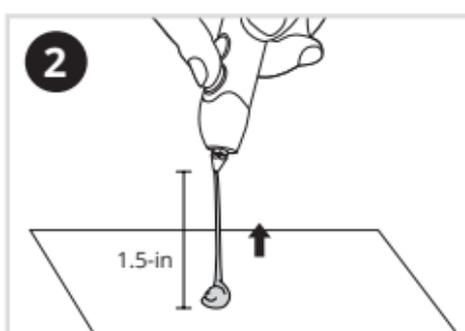
**#MyFirstDoodle**

## Step 4: Doodle in the air!

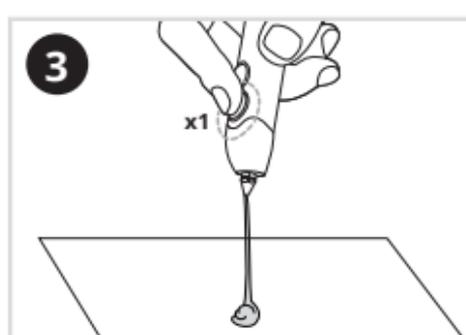
Please read all steps below before you begin this section, which will teach you how to Doodle vertically in the air.



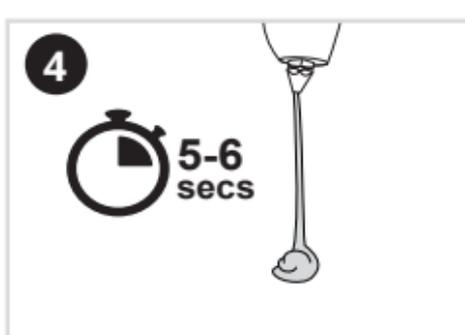
Extrude **Plastic** onto a piece of paper until you have a blob about the size of a ladybug. Make sure it is anchored into the paper.



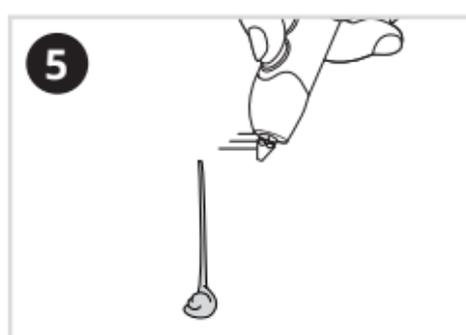
Lift **Pen** and **Plastic** up off the paper in a straight line for 1.5 in.



Click the **FAST** button 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 the **Pen** away. The line will remain vertical.

**Well done! You just Doodled in the air! This is a crucial stepping stone to making all kinds of wonderful three dimensional objects with your 3Doodler.**

## Step 5: Doodle Even More!

 For further guides, projects and inspiration, please refer to:



**YouTube videos: Cube**   
<https://www.youtube.com/3Doodler>



**YouTube videos: Squiggly**   
<https://www.youtube.com/3Doodler>



**Stencils provided at the back of this manual:**  
Eiffel tower - P.13-15

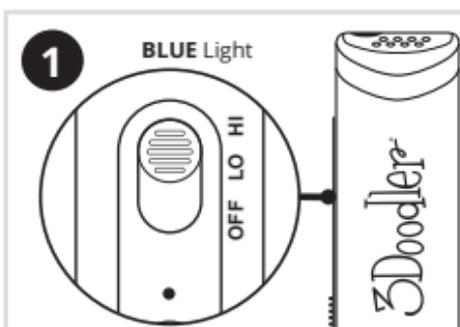


**Stencils provided at the back of this manual:**  
Glasses - P.16-17

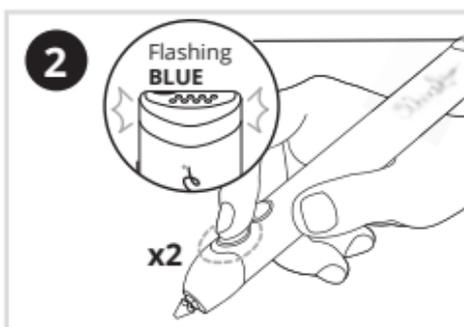
**MORE Community projects for further inspiration and guidance:**  
<http://the3Doodler.com/community>

Now that you've Doodled with ABS Plastic, we want to show you everything you need to know about changing Plastic and introduce you to the different types of Plastic.

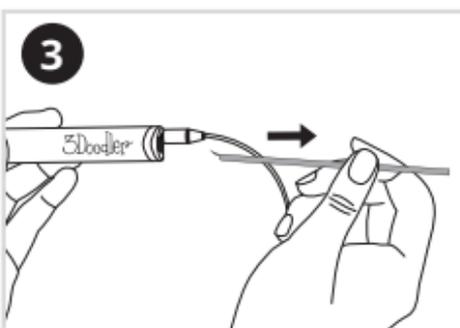
## Step 6: Reverse and Remove Plastic



With **Pen** set to **HI**, wait for **BLUE Light** to come on.



Double click either **Speed Button**. **Light** will start flashing to signal **Plastic** reversing.



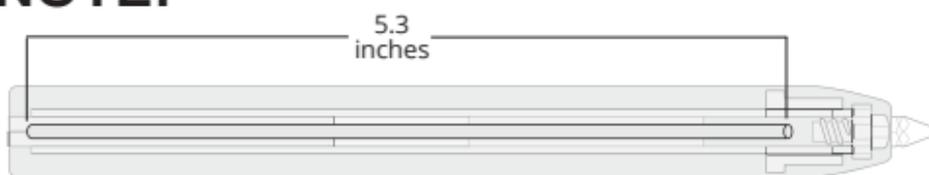
Once **Plastic** stops reversing, it is safe to remove it from the **Pen** by gently pulling on the back of the strand.

### TIP SNIP THOSE ENDS!

After removing a **Plastic** strand from the **3Doodler**, cut and remove any partially melted material at the end of your strand before re-feeding it into the **3Doodler**. This will reduce blockages and clogging issues.



## NOTE:



**Plastic** that is shorter than **5.3 inches** cannot be reversed. You should feed it all the way through your **3Doodler** and use it up. (Alternatively, you can push **Plastic** out the back - see Section 3, Step 3B.)

### TIP PLASTIC TYPES AND SETTINGS.

Before we continue, it's time you learned about the different types of **Plastic** you can use with the **3Doodler** (and which settings to use for each type).

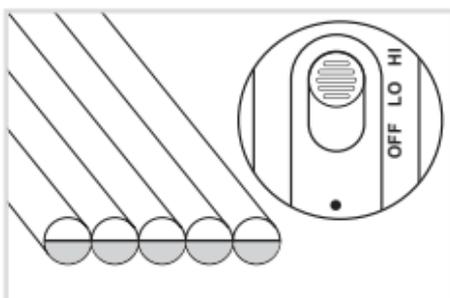
#### ABS (MATTE):

**Temp:** HI Temp

**Light:** BLUE

**Feature:** Great for drawing in the air.

**How to tell:** Plastic has white semi-circle ends.



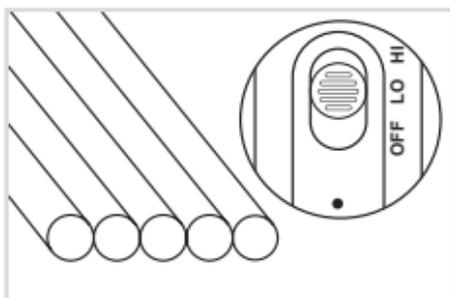
#### PLA (GLOSSY / CLEAR / METALLIC / SPARKLE):

**Temp:** LO Temp

**Light:** GREEN

**Feature:** Eco-friendly and glossy, making it perfect for artistic creations.

**How to tell:** Very rigid, no white semi-circle ends.



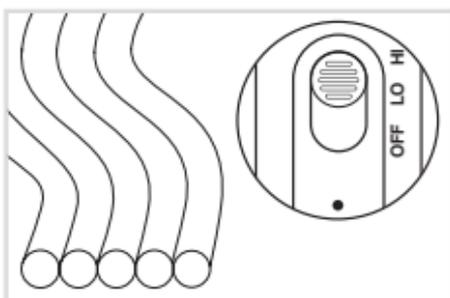
#### FLEXY:

**Temp:** HI Temp

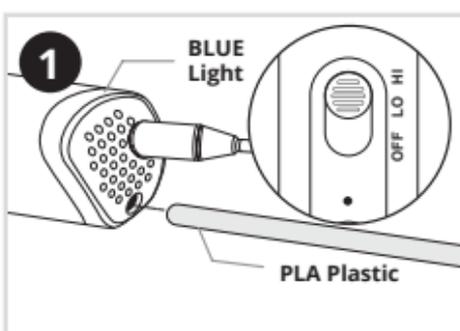
**Light:** BLUE

**Feature:** Make flexible, bendable Doodles.

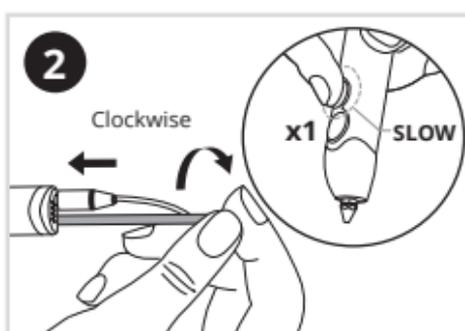
**How to tell:** Plastic is very flexible.



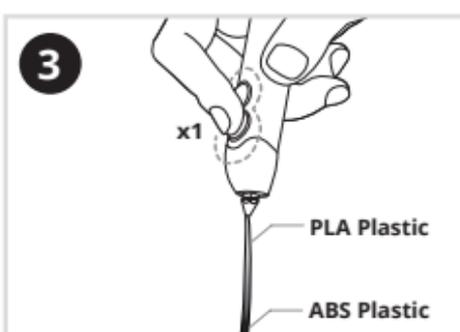
## Step 7: Let's Switch to PLA Plastic!



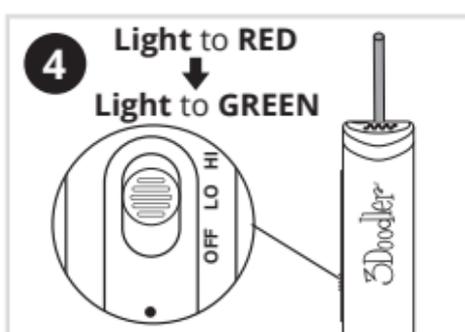
With **Pen** on **HI**, load a new strand of **PLA Plastic** into **Plastic Loading Port**. Use a different color to the **ABS** you were using before.



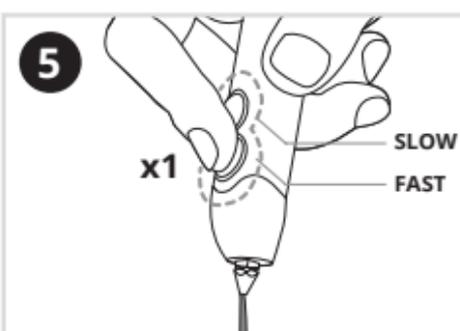
Push the **Plastic** through the back of **Pen** and click the **SLOW** button once. Push and turn the **Plastic** clockwise if needed, until **Plastic** starts to pull through on its own.



The color of the **Plastic** will change once the **PLA** starts extruding. It will appear mixed at first. **STOP** extrusion by pushing either button once.

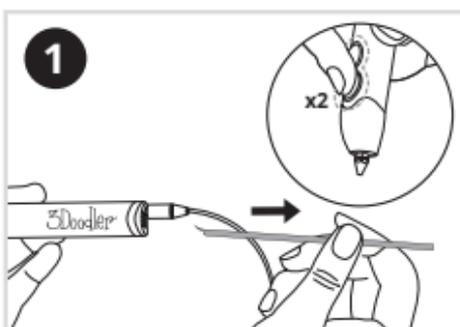


Switch **Pen** to **LO** setting. Wait for **Light** to turn **GREEN**.

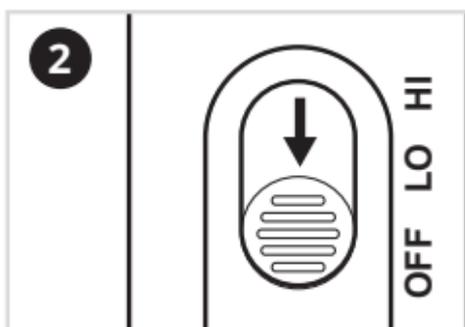


Click **FAST** or **SLOW** once to continue extruding the **PLA Plastic** and Doodle as you wish.

## Step 8: Power Down



Remove all **Plastic** from the **Pen** using the **Reverse** feature (double click any **Speed Button**). Friendly reminder to snip those ends!



Move the **Control Switch** to **OFF**.



Allow your **3Doodler** to cool completely before storing.

### NOTE:

After 5 minutes of inactivity, the **3Doodler's** heating system will automatically power down. You will need to press one of the **Speed Buttons** OR toggle the **Control Switch OFF** and then **ON** again to continue use.

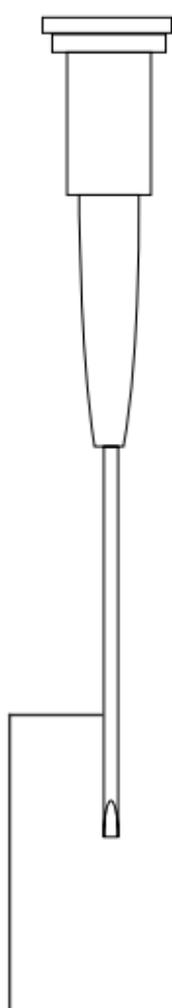
### TAKE A BREAK:

We recommend powering down and giving your **3Doodler** a 30 minutes break after every 2 hours of continuous use.

## SECTION 3: TROUBLESHOOTING

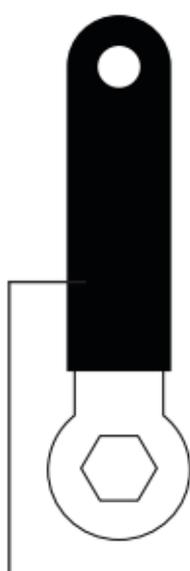
### Tools (Provided in Box)

Before showing you how to troubleshoot issues with your 3Doodler, we want to introduce you to three handy tools provided in your box:



#### Mini Screwdriver

Keep this handy for removing the **Maintenance Cover**.



#### Mini Spanner

Used for tightening and removing the **Nozzle**.

**Do Not Remove Nozzle when Pen is cold.**

**Do not overtighten the Nozzle, as you may break it.**



#### Unblocking Tool

Used for pushing short pieces of **Plastic** down into the **Drive Gear** to help with extrusion from **Pen**.

With those introductions over, it's time to look at the different issues that may arise with your 3Doodler and steps to get back to Doodling.

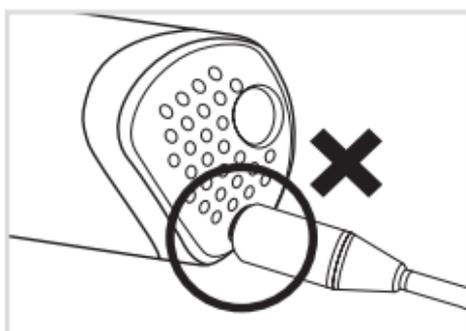
# 1. My Pen won't turn on! (Light doesn't turn on)

Let's double check the following:

**A.** Is the **Power Adapter** plugged into a working power outlet?

## NOTE:

If you have a spare power adapter around the house please use it to test your **3Doodler**. This will help determine if the problem is with your **3Doodler** or with the **Power Adapter** provided in the box.



**B.** Is the end of the **Power Adapter** connected to the correct part of the **Pen**?



**C.** Make sure the **Control Switch** on your **3Doodler** is not set to **OFF**.

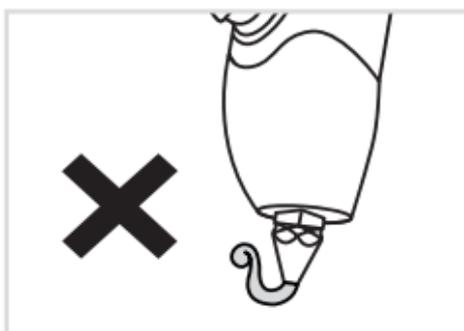
# 2. My Plastic is extruding but it won't stick to the paper, or is curling up around the Nozzle.

**Stop extruding and start again using the following instructions:**

When the **Plastic** resumes extruding, push the **Nozzle** firmly down into the paper, allowing **Plastic** to stick to the surface.

Drag the **Plastic** along the paper or surface in a continuous unbroken line as if you were writing with a pencil.

Keep your movement slow and steady. The **Plastic** should hold to the paper and not curl up around the **Nozzle**.



# 3. My Plastic is not extruding from my 3Doodler.

**3A. Plastic not engaging properly with the Drive Gear:**

Gently push and turn the **Plastic** clockwise until you feel the strand pulled through the **Drive Gear** on its own.

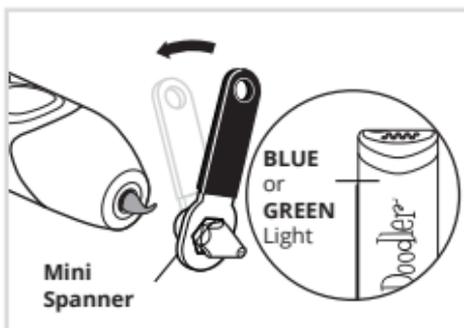
If the above does not work, reverse the **Plastic** fully from the **Pen**. (See Section 2, Step 6) Snip ends, then reinsert and try again.

If **Plastic** is too short to be removed from the **Pen**, move to 3B.

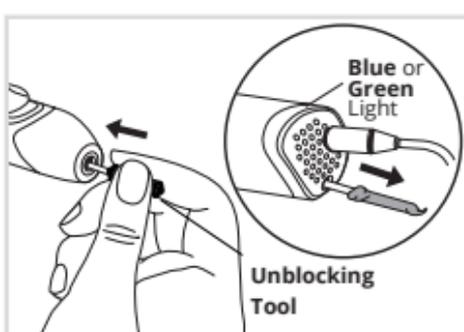
**3B. Plastic is too short to be removed from the Pen:**

Try unscrewing the **Nozzle** and using the **Unblocking Tool**.

While **Pen** is hot (**BLUE** or **GREEN** Light on), use **Mini Spanner** to unscrew and remove **Nozzle** anti-clockwise.



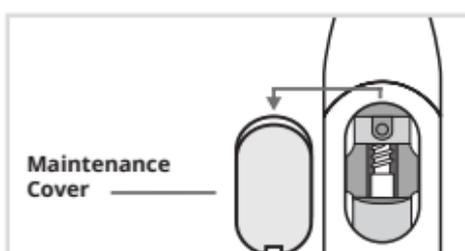
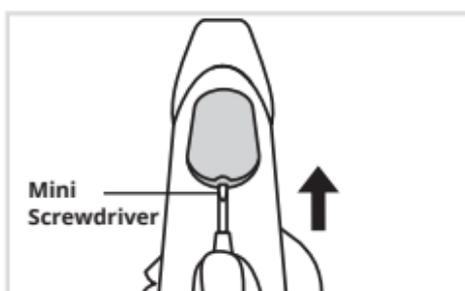
Insert **Unblocking Tool** through open front end of **Pen** and gently push any excess **Plastic** out through the back of the **Pen**.



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

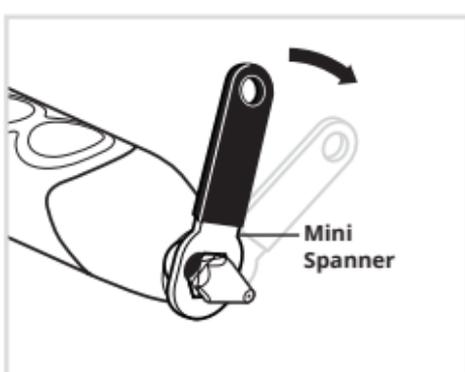
Remove **Maintenance Cover** using **Mini Screwdriver** provided in the box.

Use the **Mini Screwdriver** or **Unblocking Tool** to lift and release **Plastic** from the **Drive Gear** and out of the **Pen** through the open area beneath the **Maintenance Cover** or from the **Plastic Loading Port**.



## 4. My Plastic is leaking from around the Nozzle.

**Nozzle** may loosen with continued usage (or in transit). While **Pen** is hot (**BLUE** or **GREEN Light** on), gently turn **Nozzle** clockwise to tighten it using the **Mini Spanner** provided. Stop tightening once you first feel resistance so as to avoid over-tightening the **Nozzle** and breaking it.



## 5. My Plastic won't stop extruding.

- A. Click either the **FAST** or **SLOW** button once.
- B. If Step A does not solve this problem, please unplug your **3Doodler** and then plug it in and try again.

## 6. How do I reverse my unused Plastic?

While the **Pen** is on and hot (**BLUE** or **GREEN Light**), **double click** either the **FAST** or **SLOW** button. **Light** will start flashing to signal the **Plastic** is reversing. Once the **Plastic** stops reversing, it is safe to remove it from the **Pen** by gently pulling on the back of the strand.

If **Plastic** is too short to reverse, see Section 3, Step 3B.

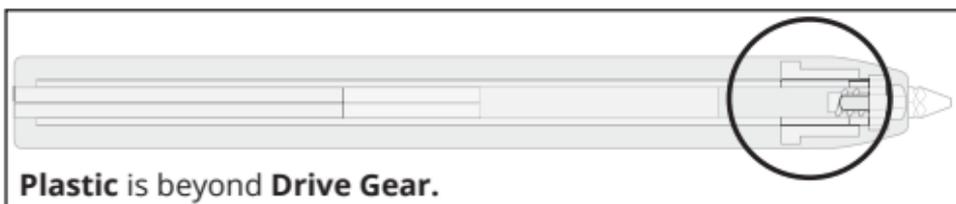
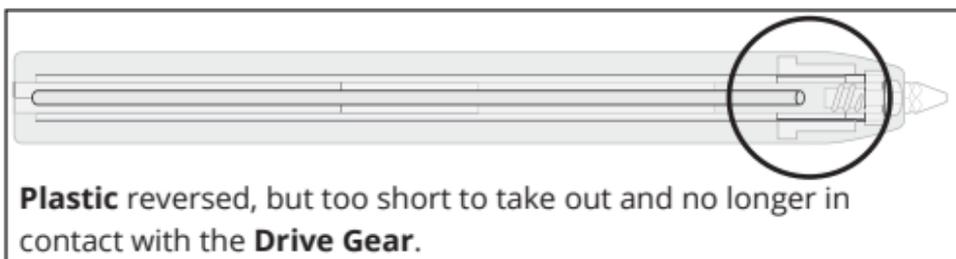
**TIP**

Snip the ends of your **Plastic** now for easier loading and Doodling later.

## 7. I have reversed my Plastic but cannot get it out.

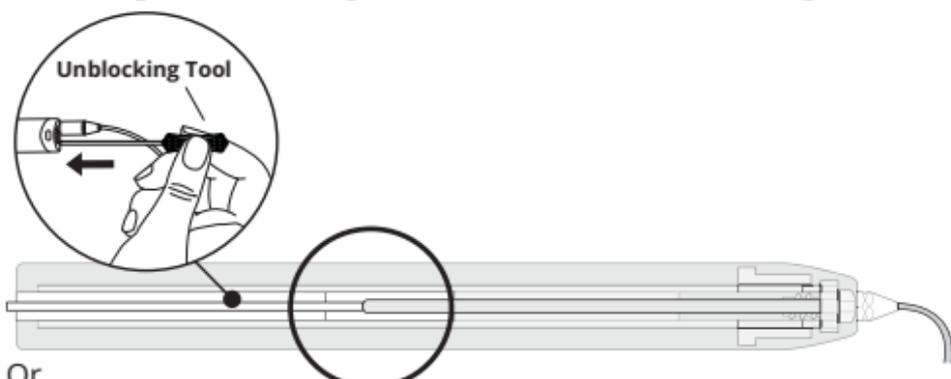
It is possible that the **Plastic** is either too short to reverse all the way out of your **3Doodler**, or that the **Plastic** has moved past the **Pen's Drive Gear** system.

You will be able to check for these issues by looking through the **Maintenance Cover**.



For both of these issues, you can try the following options:

- Insert a new strand of **Plastic** or **Unblocking Tool** to push the remaining **Plastic** through while **Pen** is **ON** and extruding.



- Or
- Remove **Nozzle** and use **Unblocking Tool** to push **Plastic** out the back of the **Pen**. (See Section 3, Step 3B).

## 8. My Pen won't heat up! (light stays red).

It takes around 60-90 seconds for your **Pen** to heat up. If, after that time, the **Pen** still does not heat up and the **Light** remains **RED**, turn the **Pen ON** and **OFF** and try again. If that still does not work, please contact us at [help@the3Doodler.com](mailto:help@the3Doodler.com) and we will assist further.

## SECTION 4: TIPS AND BEST PRACTICES

### Pay attention to Plastic types and settings

- For optimal Doodling, we suggest using the correct temperature settings for your **Plastic**.
- DO double check which type of **Plastic** you are using before you turn on the **3Doodler** and insert a **Plastic** strand. If your **Plastic** strands get mixed up, here is a handy table for sorting and identifying what you're working with.

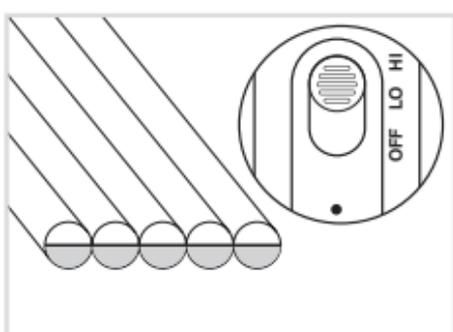
#### **ABS (MATTE):**

**Temp:** HI Temp

**Light:** BLUE

**Feature:** Great for drawing in the air.

**How to tell:** Plastic has white semi-circle ends.



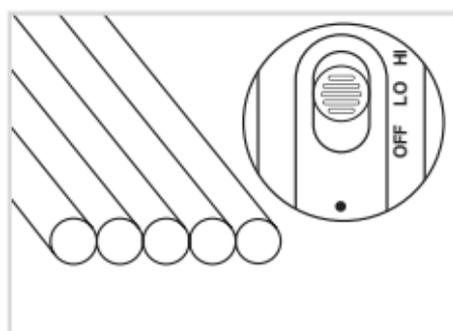
#### **PLA (GLOSSY / CLEAR / METALLIC / SPARKLE):**

**Temp:** LO Temp

**Light:** GREEN

**Feature:** Eco-friendly and glossy, making it perfect for artistic creations.

**How to tell:** Very rigid, no white semi-circle ends.



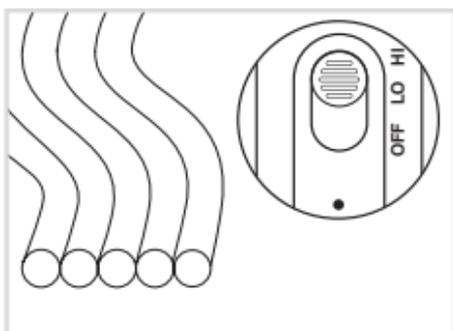
#### **FLEXY:**

**Temp:** HI Temp

**Light:** BLUE

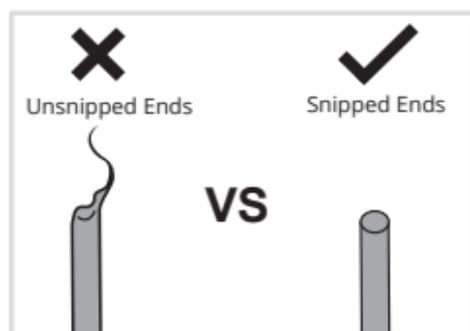
**Feature:** Make flexible, bendable Doodles.

**How to tell:** Plastic is very flexible.



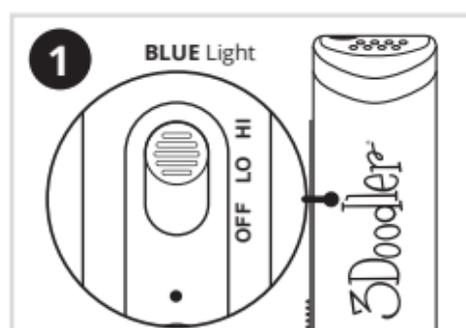
## Do not forget to snip your Plastic ends

- After removing a **Plastic** strand from the **3Doodler**, cut and remove any partially melted material at the end of your strand before re-feeding it into the **3Doodler**. This will reduce blockages or clogging issues.

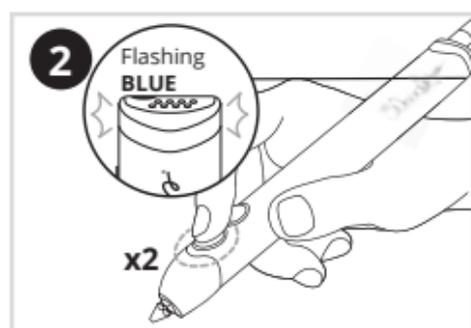


## Reverse and remove Plastic correctly

- DO NOT pull **Plastic** from the back of the **3Doodler** other than as directed.



With the **Pen** set to **HI**, wait for the **BLUE Light** to come on.



Double click either **Speed Button** and the **Light** will start flashing to signal the **Plastic** is reversing.



Once the **Plastic** stops reversing, it is safe to remove it from the **Pen** by gently pulling on the back of the strand.

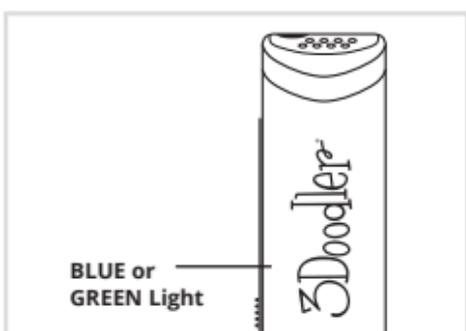
## Take a break

- DO give your **3Doodler** a rest after every 2 hours of continuous Doodling. 30 minutes of down time should be plenty.

## Treat your Nozzle right

- If you ever remove your **Nozzle**, DO NOT remove it when your **3Doodler** is cold. **Light** should be **BLUE** or **GREEN**.

- If you ever need to tighten your **Nozzle**, DO NOT force the **Nozzle** or overtighten it, as you could break the **Nozzle** and permanently damage your **3Doodler**.



### SPECIFICATIONS

Output Power: 6W  
Output Voltage: 5V  
Input Voltage: 5V

Specifications are subject to change and improvement without notice.

### CARE & MAINTENANCE

For care and maintenance information, and more advice on how to use your 3Doodler, please refer to our website: [the3Doodler.com](http://the3Doodler.com)

To troubleshoot, please visit: [the3Doodler.com/troubleshooting](http://the3Doodler.com/troubleshooting)



### LIMITED WARRANTY

For more details on your limited warranty, please visit:

[the3Doodler.com/warranty](http://the3Doodler.com/warranty)

For 3Doodler's Terms and Conditions and other notices please refer to our website: [the3Doodler.com/terms-and-conditions](http://the3Doodler.com/terms-and-conditions)



This marking indicates that this product should not be disposed of with other household wastes. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

**Warning:** Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**NOTE:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/ TV technician for help.

CAN ICES-3 (B)/NMB-3(B)

# SECTION 5: STENCILS

## Eiffel Tower



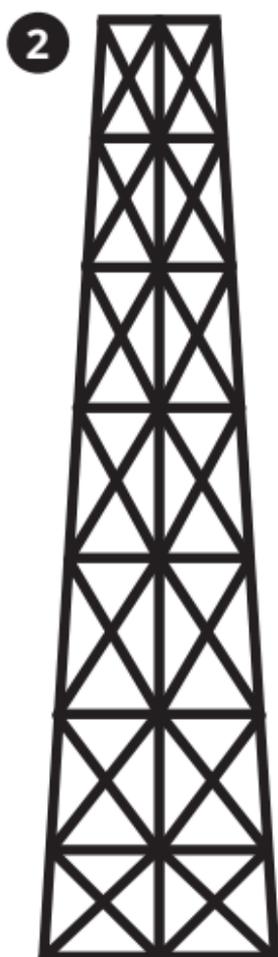
x4



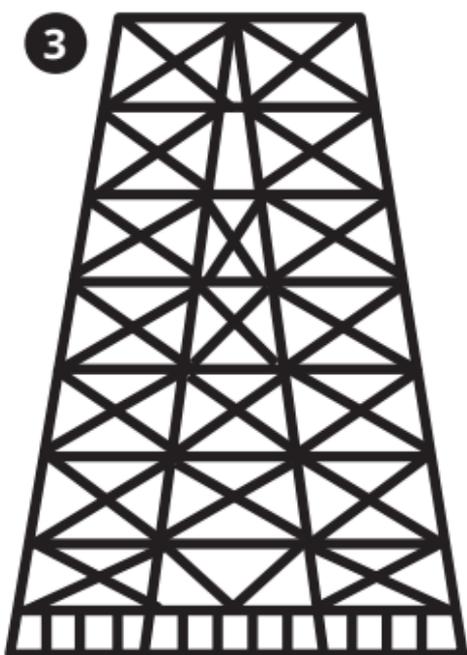
x4



x4

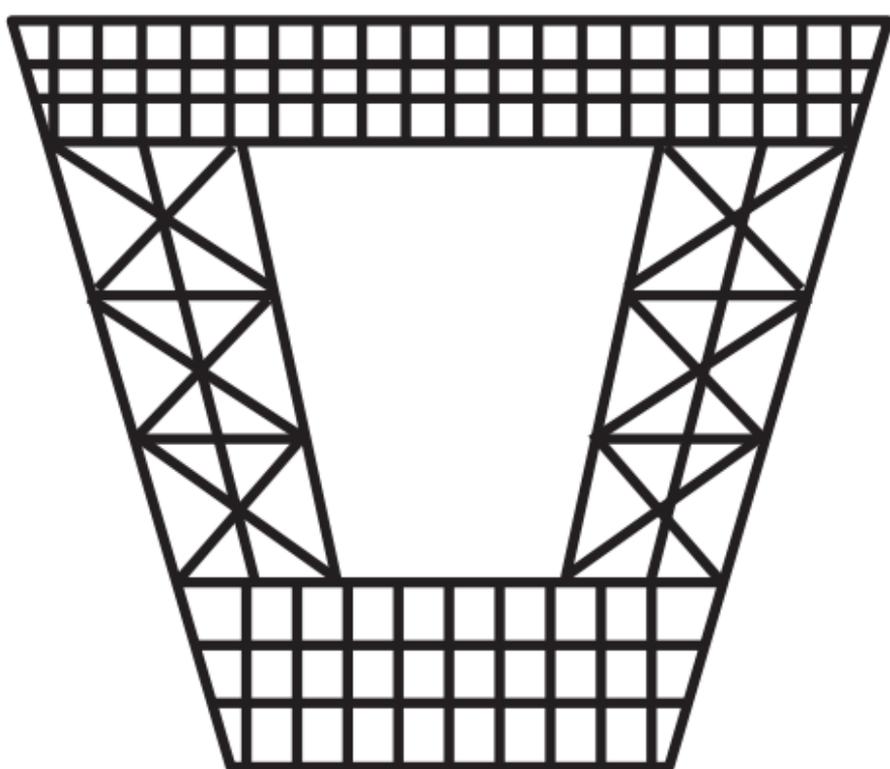


x4



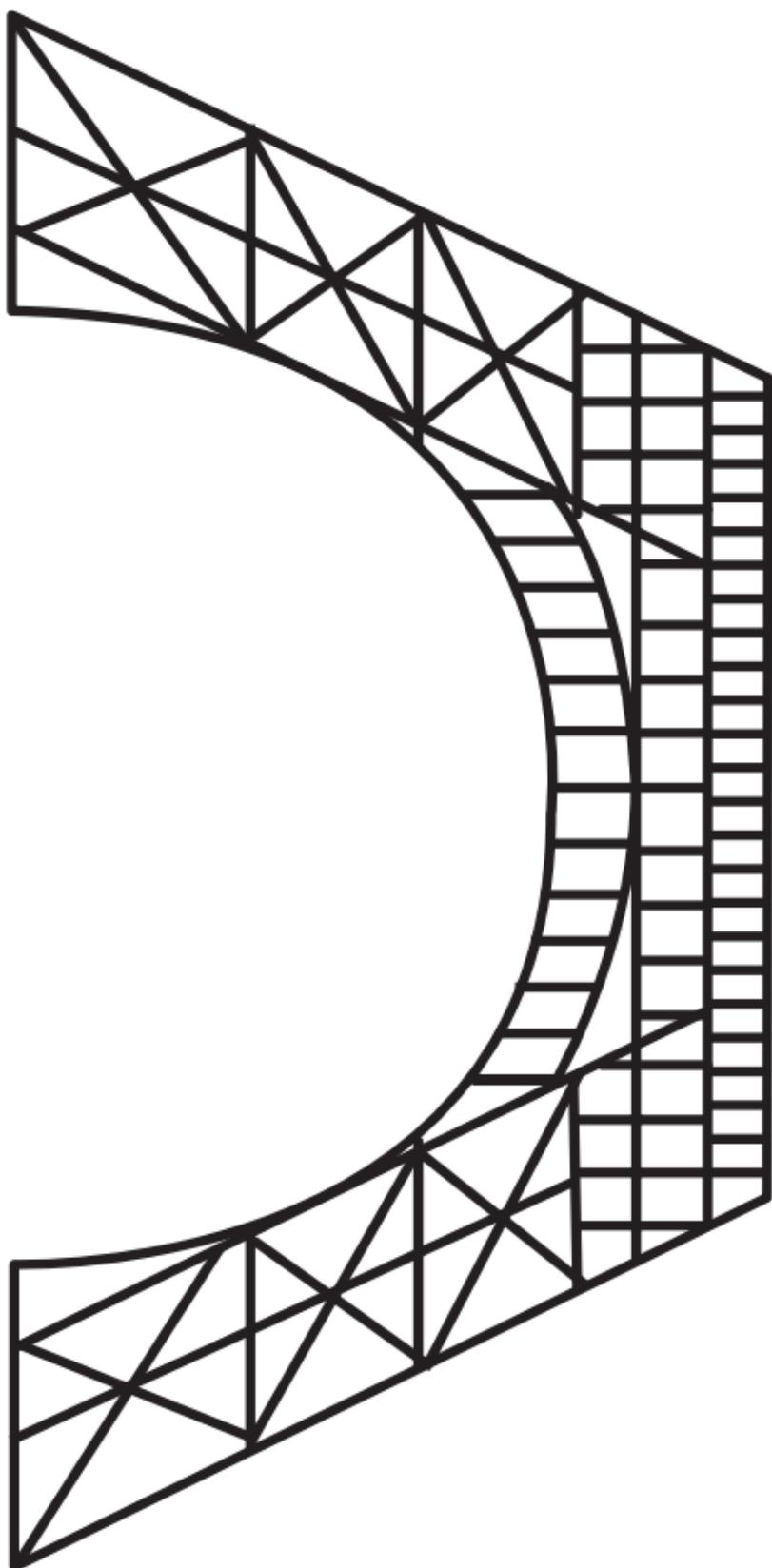
x4

6

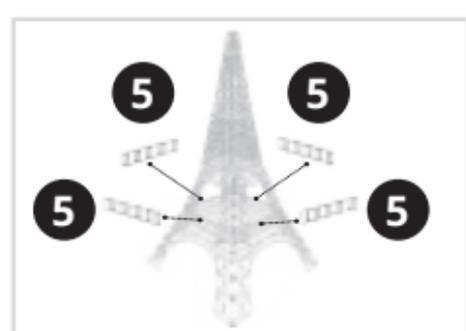
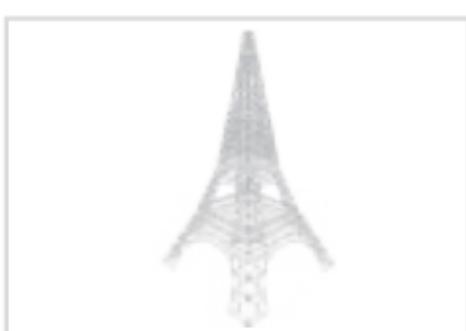
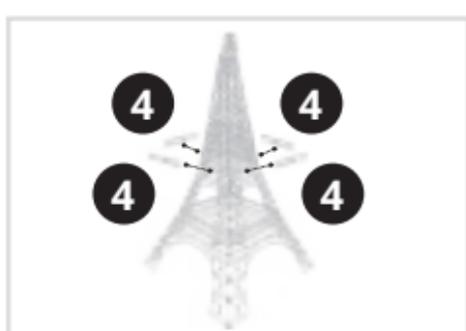
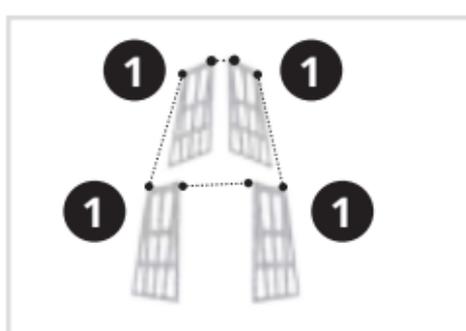
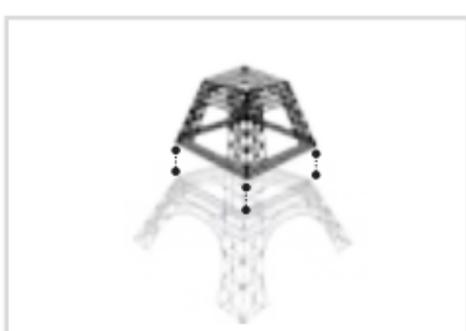
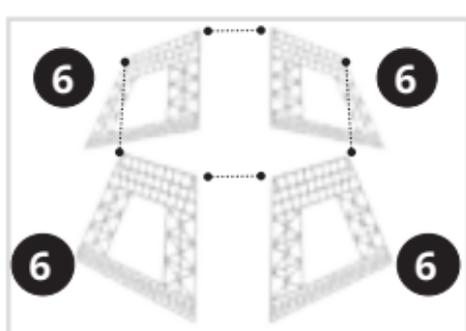
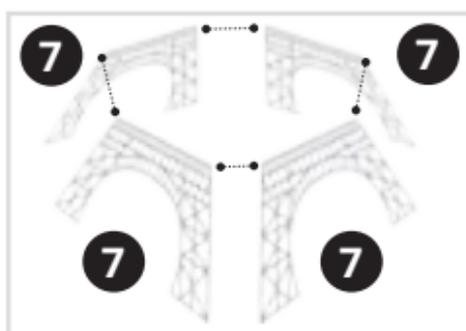


x4

7



x4



# Glasses



