

## PLASTIC BEADS



Plastic beads is a really easy material to use for pixelart. It takes very little effort, no artistic skill and can be used for so many things. One of the first things I did with beads was beer coasters. Given your friends are nerdy enough, they are going to love this. So for this guide, I'm going to do a coaster in beads, just like the Goomba above.

### Materials

First things first though. Let's gather up the material we'll need:

#### -Beads

You can find plastic beads in most hobbyshops or toystores. However, if you're unfortunate enough not to have a local bead vendor close to where you live, you can always order online. Below you'll find two of the larger sites for ordering beads.

<http://www.thebeadery.com/>

<http://www.hamabeads.com/>

I've always used Hama beads but I'm sure the Photo pearl beads at the beadery works just as great. A tip here is not buying the mixed color bags. Trust me on this. You'll spend the better part of eternity sorting the beads and end up with 10 neat piles of different colored beads that you don't even need (man, I will never get that part of my life back...). Some bead brands offer beads in different size, mostly small, medium large. Of course it's important that you buy beads and pegboard of the same size. I have mostly used the medium size (5mm diameter) and for a Goomba beer coaster this size will fit perfectly.

#### -Pegboard

You can find various pegboards at the same places you buy beads. The things to keep in mind when buying a pegboard is to make sure it's the same size as the beads you're going to use and that the area will fit your motif. Most boards will fit our Goomba coaster though. However, if you'd like to create something really big, there are boards that can be connected to form a bigger

board. A while back, I saw this crazy bead work where someone had recreated a boss from one of the R-type games I think. That thing was just as huge as it was awesome and covered the greater part of a kitchen table. I'll try to find that picture...

#### -Ironing paper

You can find Ironing paper or waxed paper on a super market. It's actually the same thing you use to make sure that cookies won't stick to the plate when baking them in the oven.

#### -Iron

No, not iron – the metal. Iron – the tool. You know, for making creases on a shirt go away. Making this bead art was actually the first time I handled an iron. Never was into shirts much... But I digress. Any type of iron will do. As long as it has a flat surface and the ability to get really warm.

### **Steps**

#### **1. Picking a motif**

Of course you can do basically any motif you can think of but I'm gonna stick to videogames here. And there are a couple ways to get what you want in that area. First and best would probably be to pay a visit to the many spriteripping sites out there. Below are two very good sites worthy of a visit:

<http://sdb.drshnaps.com/> - Sprite Database

<http://tsgk.captainn.net/> - The ShyGuy Kingdom

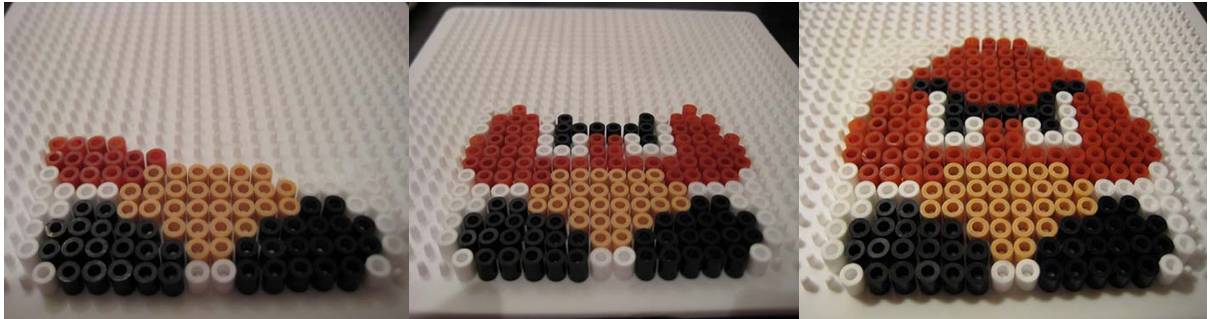
On these you'll find most retro games. In worst case though, you can always fire up the emulator of your choice and do a printscreen of your motif. These pictures will often get fuzzy when you zoom though, but with a bit of squinting, you'll get by. An important thing to think about when choosing a picture is the width and height measured in pixels. Depending on what you will use the resulting bead plate for, you might have to limit your choices. For example, the beer coasters I've made are all 16x16 pixels (you'll be surprised how many small enemies and powerups share these measurements). When doing a whole series, like coasters, it's always nice if they are symmetric so check this before starting. Something that can be a bit deceiving when viewing sprites is that eventhough characters seem to be roughly the same size in the games, the higher the bitcount, the larger the actual picture. Below is a comparison of Mega Man on Playstation (32bit), SNES (16bit) and NES (8bit) while using the same pixel size. I've also included their actual size when transformed to a bead plate. Now you see that even doing Mega Man (NES) as a coaster would be a bit too large, not evening mentioning Mega Man X (PSX).



	Height (cm)	Width (cm)
MMX4 (PSX)	22.5	17.5
MMX (SNES)	17	15
MM (NES)	12	10.5

## 2. Placing the beads

This step hardly requires an explanation. Below you'll see how I've placed the beads on the pegboard.



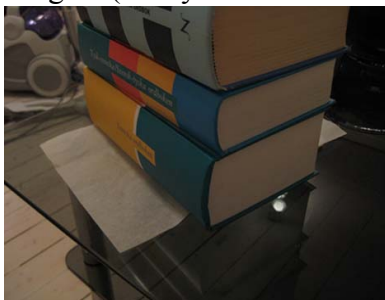
An important note should be made though, that before even putting the first bead on the board, check the size of the picture so that it fits on the board. I would recommend getting an audiobook or some chiptunes playing if you're in for a long session. After all of the beads are placed, it's time for the last step.

## 3. Ironing

Finally it's time for all the beads to become art! First cover the pegboard with the waxed paper. Then let the iron heat up. Now it's ironing time! Apply moderate pressure to the picture and keep the iron moving slowly over the waxed paper.



After a while you'll see that the beads begin to melt together. Now the following choice comes down to taste. For some reason, all of the bead art I've seen people produce still have the holes, or at least signs of holes still left in the beads. In my highly personal opinion that spoils some of that pixel look to it. I mean real pixels are solid colored squares, right? Never seen a pixel with a hole in the middle of it. Still, if you like to keep those holes, this is where your finished. In order to get rid of the holes though, we have to do some extra work. When all of the beads have melted together nicely (holes still visible though), remove the iron and quickly place all the weights (heavy books will do nicely) on the waxed paper.



Now let the weights work for oh five minutes or so. Then remove the weights and waxed paper.



Now peel off the melted peice of art from the pegboard. Place the bead plate with the upside down on a flat surface.



Place the waxed paper on the side facing up and start ironing again. This time around, don't be afraid to let the beads really melt under the pressure. Just make sure that the iron is moving so that the beads don't get burnt. When the holes have just about disappeared, remove the iron again and put the weights back on. Finally, after another five minutes, flip the bead plate over again and place the waxed paper on it. Do a last run with the iron, this time making sure that all of the holes disappear.



Finished! You are now the proud owner of some nice looking pixel art!

### **Inspiration/Uses**

There are so many things you can do with plastic beads. Here are just a few examples to get your imagination going.

#### *Beer Coasters*



*Fridge Magnets (just apply some magnets on the back with glue)*



*Christmas (or Winter-Een-Mas) Decorations*



*Bead Guide - Nerdcraft*