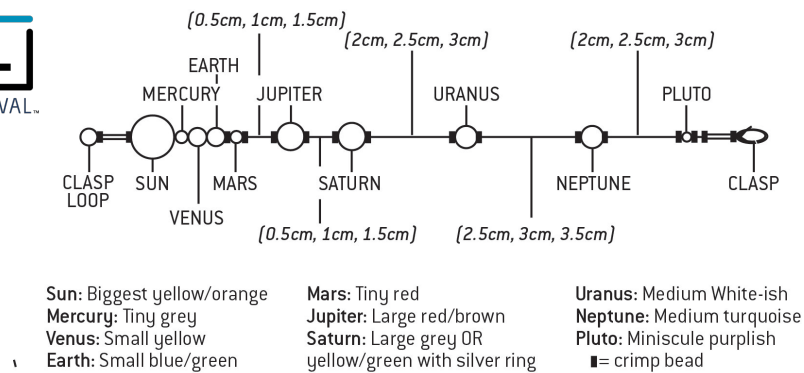


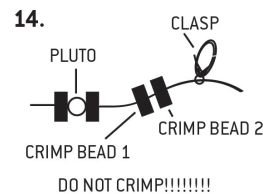
SOLAR SYSTEM BRACELETS



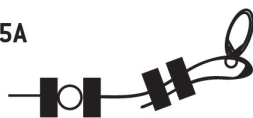
Before you start:

- You'll need a pair of small needle nose pliers, scissors and a ruler with cm markings. We recommend dumping your beads into a shallow bowl so you don't lose them.
- Do not cut the wire in advance**, but keep in mind the overall wire length of the whole bracelet should be about 15.5cm (kid), 17.5cm (woman), and 20cm (man). You will cut the wire appropriately at the end.
- "Crimp" means to squeeze down on the tiny silver bead with the pliers. It will clamp the wire down so the bead above/below it cannot move.
- Note: because they are so tiny, you have been given extra crimp beads and Plutos in case you lose sight of them. You will have some left over.

- Select your size bracelet (kid, woman, man)
- String the Sun, Mercury, Venus, and Earth. CRIMP.
- String on Mars. CRIMP.
- Measure out space depending on bracelet size: 0.5cm (kids), 1cm(women), 1.5cm (men). CRIMP after this space.
- String on Jupiter. CRIMP.
- Measure out space depending on bracelet size: 0.5cm (kids), 1cm(women), 1.5cm (men). CRIMP after this space.
- String on Saturn. CRIMP.
- Measure out space depending on bracelet size: 2cm (kids), 2.5cm(women), 3cm (men). CRIMP after this space.
- String on Uranus. CRIMP.
- Measure out space depending on bracelet size: 2.5cm (kids), 3cm (women), 3.5cm (men). CRIMP after this space.
- String on Neptune. CRIMP.
- Measure out space depending on bracelet size: 2cm (kids), 2.5cm (women), 3cm (men). CRIMP after this space.
- String on Pluto. CRIMP.
- String on 2 crimp beads and the final clasp. DO NOT crimp yet. (See Detail)
- This step is a bit tricky. Loop the wire so it re-enters the 2 crimp beads (Detail 15A). Adjust the clasp on the wire so the bracelet (not including the clasp) is roughly your desired length [15.5cm (kid), 17.5cm (woman), and 20cm (man)] (Detail 15B). Crimp down on the double wire so one crimp is right up against the clasp and the other is covering up the end of the wire (Detail 15C).



15A



15B

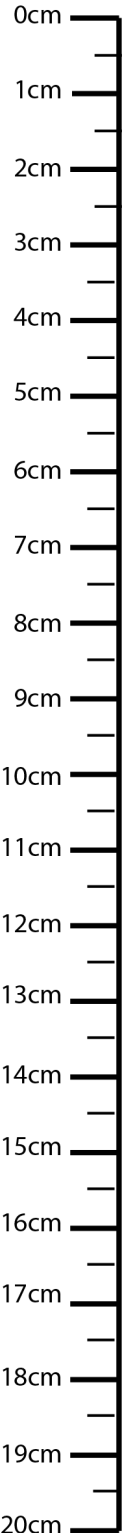


Adjust length and cut wire

15C



Crimp down



THE SOLAR SYSTEM... FOR REAL

The bracelet you have made is simply a model of our own solar system. We got some things pretty close to right in terms of color and scale, and some things way off (especially the relative size of the sun!)– just so that it would still be wearable.

Let's just start by saying we KNOW Pluto is no longer a planet. But we love this little guy, and thought it was pretty enlightening to see how teeny tiny it was compared to the other planets. Helps you understand why scientists reclassified it as a dwarf planet. So we kept it in there.

Here's a table of actual diameters and distance from the sun.

	Diameter	Distance from Sun
SUN	1,392,000 km	--
MERCURY	4,800 km	~60 million km
VENUS	12,100 km	~110 million km
EARTH	12,750 km	~150 million km
MARS	6,800 km	~230 million km
JUPITER	142,800 km	~780 million km
SATURN	120,660 km	~1.4 billion km
URANUS	51,800 km	~2.8 billion km
NEPTUNE	49,500 km	~4.5 billion km
PLUTO	3,300 km	~6 billion km

Source: NASA



Science ATL brings people together through the wonder of science. Our mission is to cultivate an equitable community of lifelong learners across metro Atlanta who are connected and inspired by the wonder of science. We achieve this by:

- **fostering a love of science**
- **building community around science**
- **enabling equitable access to science learning opportunities.**

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