

NASA International Space Apps Challenge 2019 UBE

“Color your Planet”

Team: Astroid Dreamers

"To know the universe is to know ourselves"

The changing earth. It is part of the universe.
Even if we understand it, we feel a little distant ...



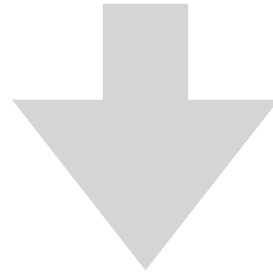
[Source] <https://solarsystem.nasa.gov/planets/earth/overview/>

“Emotion” is the common language across countries and generations

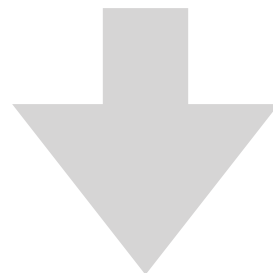


It is important to bring out active curiosity from **positive emotions**.....

..... by Prototyping!



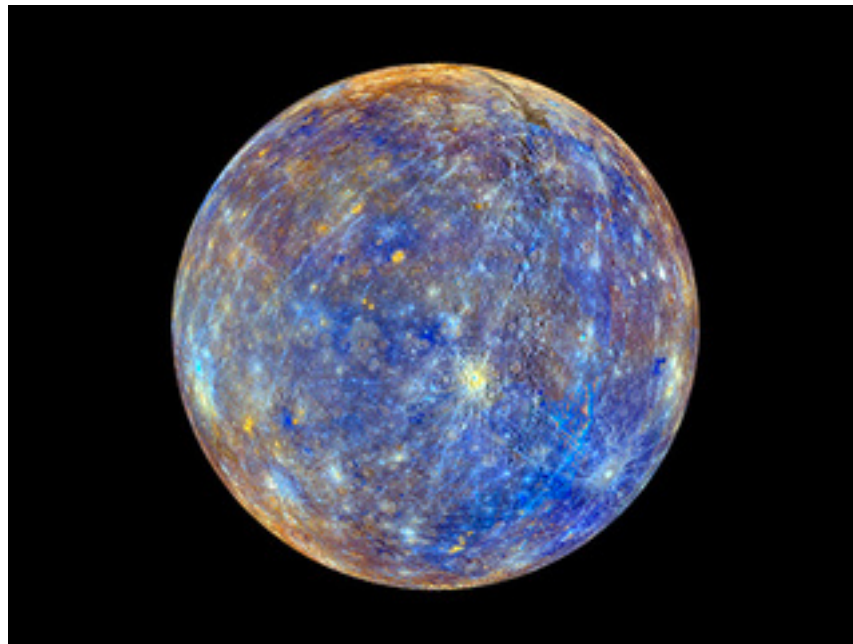
Try it and share it with everyone



Bring out Curiosity

The core idea is
“Everyone” can imagine the original planet

FACT



physical matrix of planetary
colors and phenomenon

- Characteristic color of planets
- Astronomical phenomena in the solar system

FUN



Mix of electronic and paper craft

- Items you can buy at a general store
 - ex) Target, 100yen Store

Details of “Color your Planet”

Concept

- Let's make a new family of planets in the solar system

Items offered at workshops, etc .

- **Physical matrix** for each planet (material collection and function table)

example) Characteristic color of planets

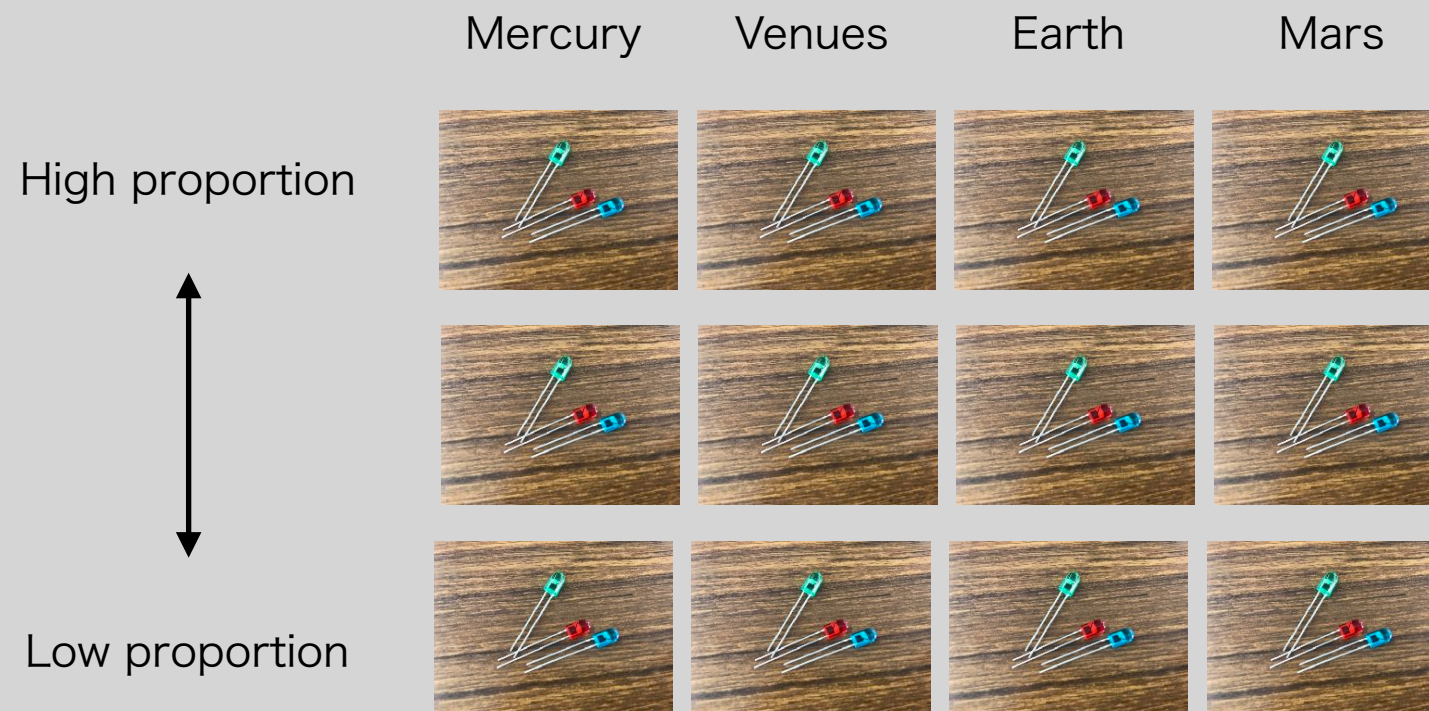
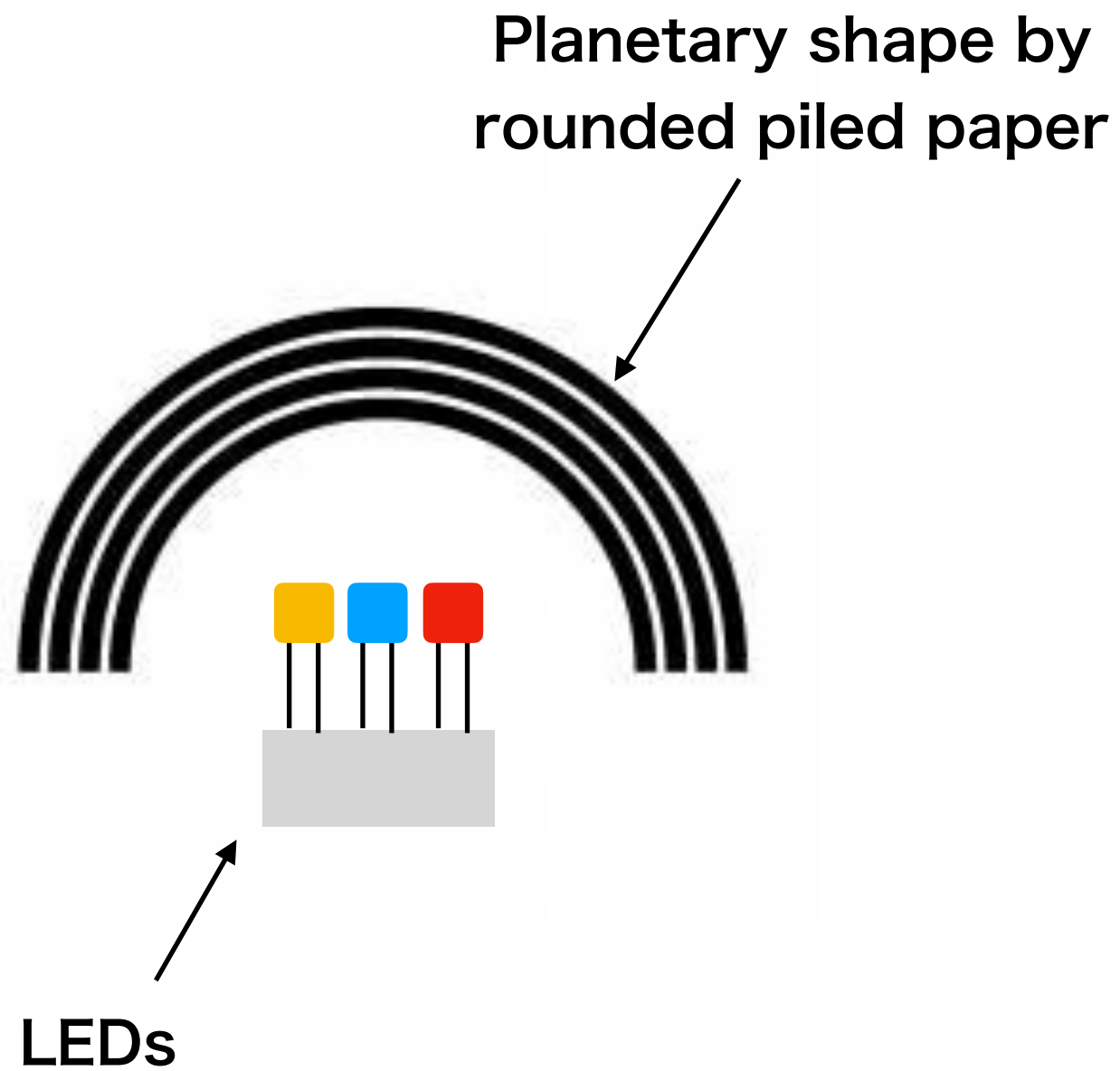


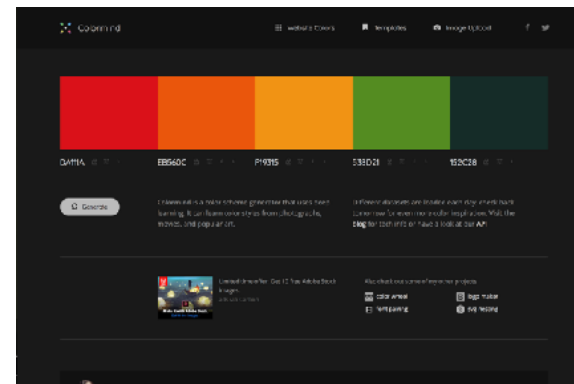
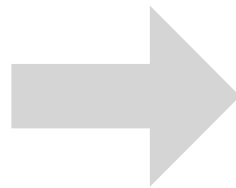
Image of how to create a planet



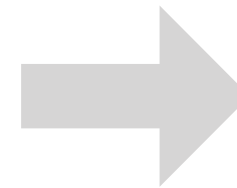
Physical Matrix

Use NASA Solar System Exploration data to create your own matrix

(1) Characteristic color of planets

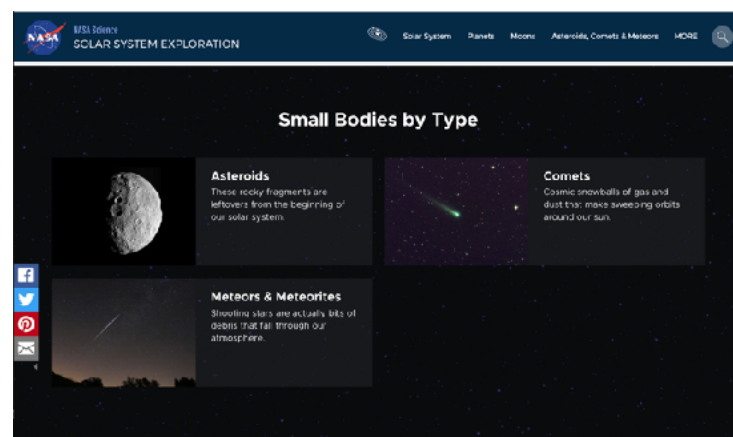


Colormind

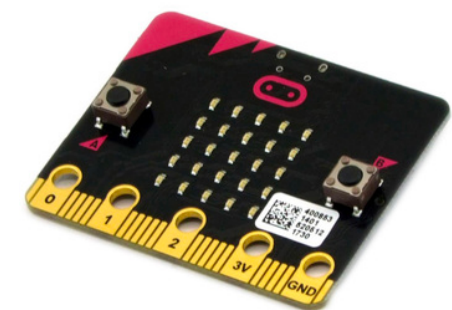
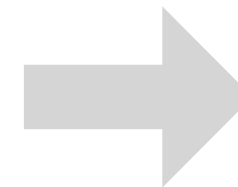


LEDs

(2) Astronomical phenomena in the solar system



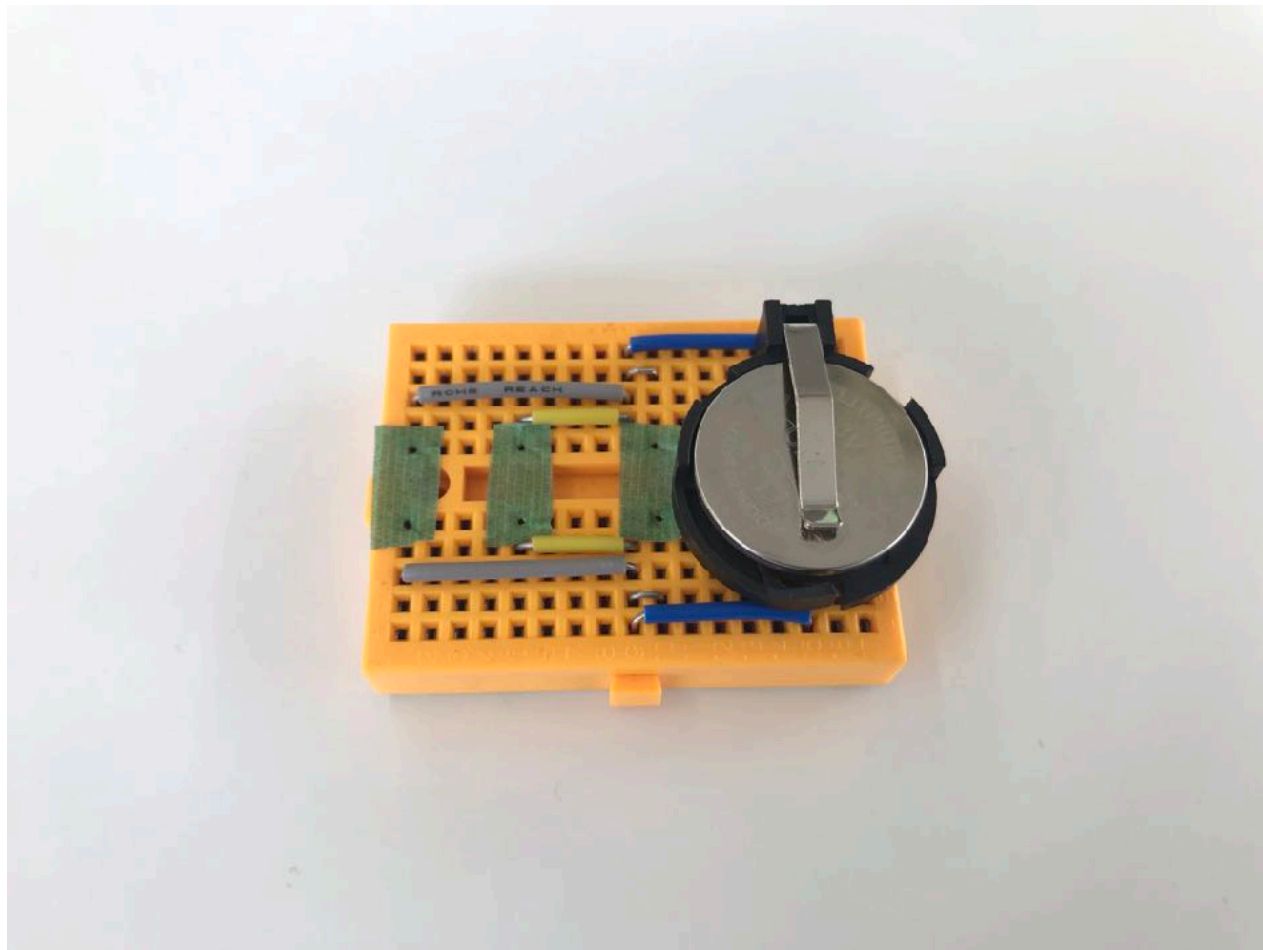
ex) Satellite "Enceladus"
The light spills violently



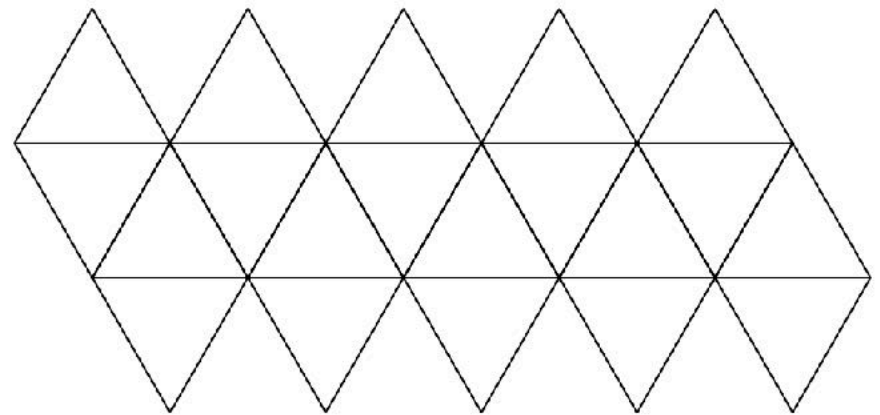
Color changes due to
vibration, rotation, etc.

Simplifies prototyping

Easy kit without soldering



Paper craft data



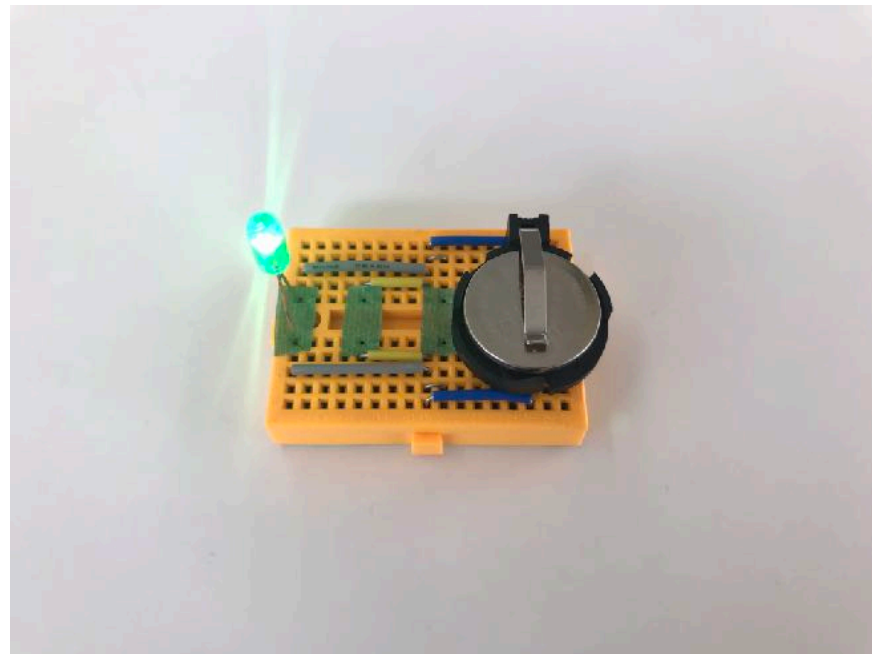
Any ideas are welcome!

It may be fun to shine stones of materials related to the universe.



Future Plan

Workshop with after school



Distribution of Physical Matrix

