



SARTS-Scouts Intro Day

Sam 9VIBX



Sam 9V1BX



Why?

What inspires you?

What aspect of scouting gets you excited?



How?

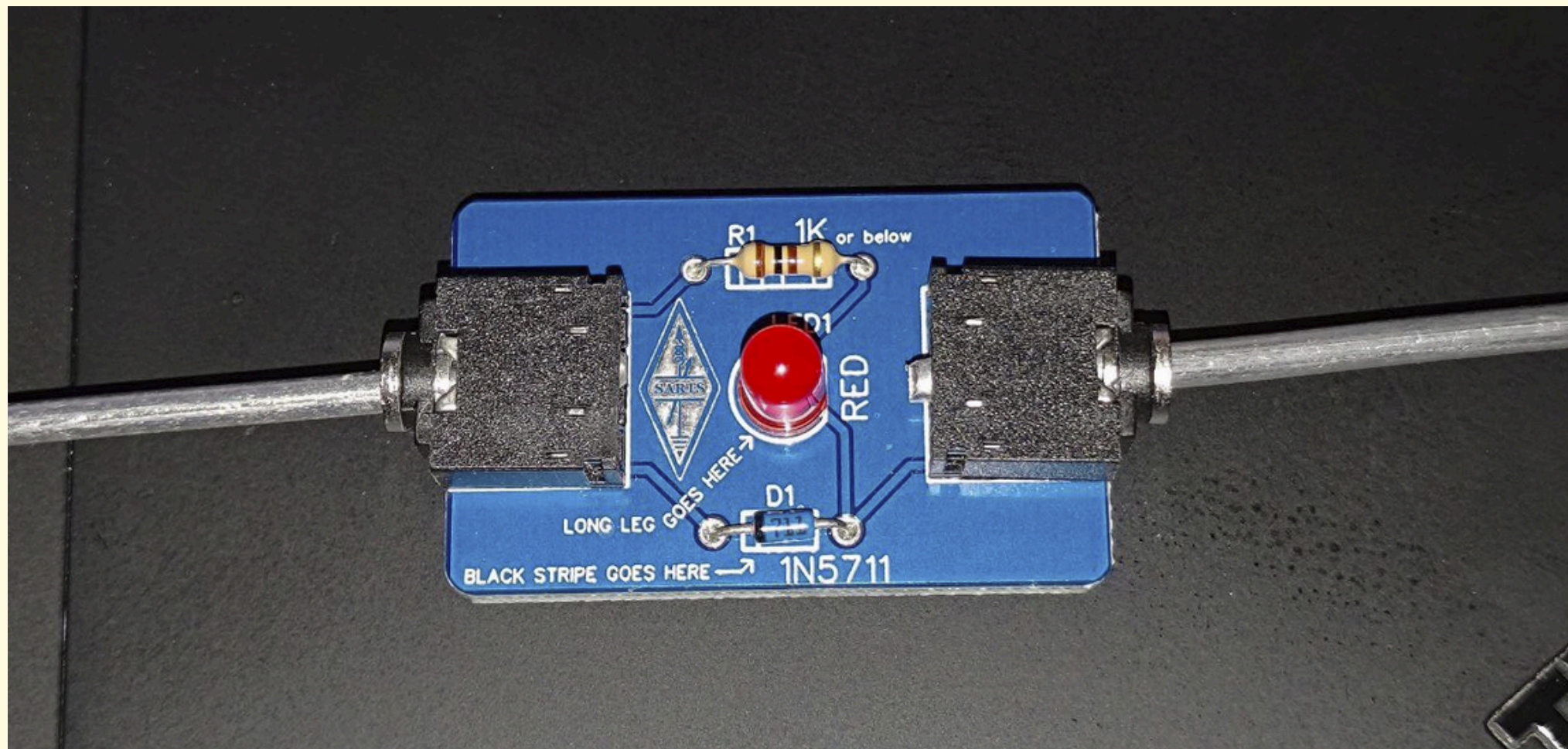
How does ham radio work?





Kitbuilding

Time to build a radio wave detector! Use the soldering stations to connect the components.



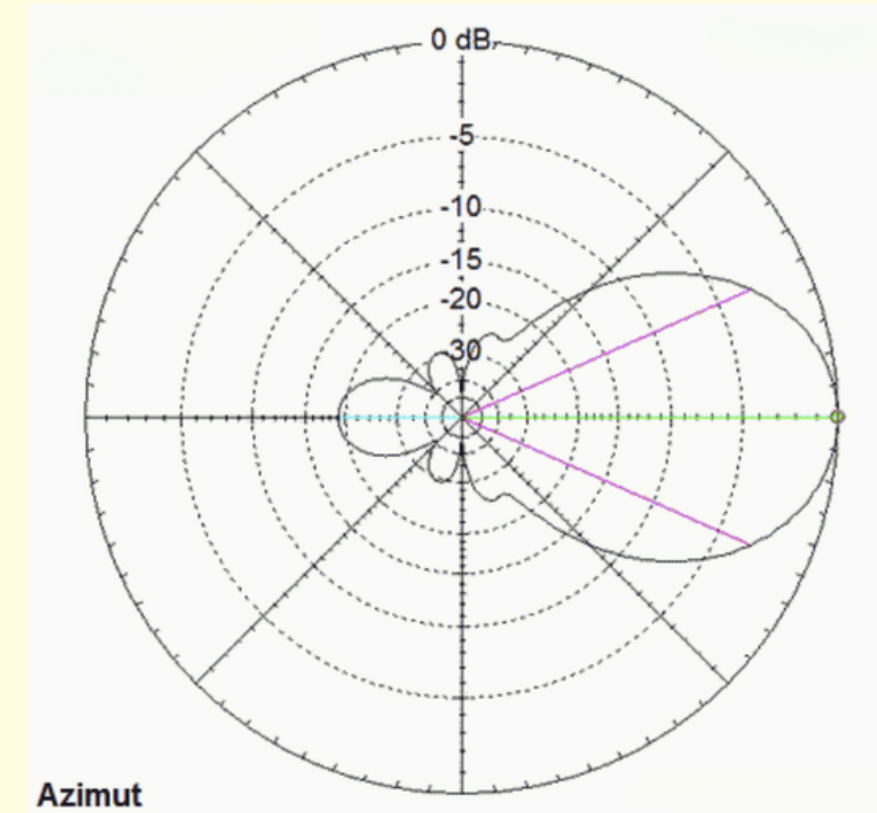
Example

Yagi Antenna

- Directional
- “Lobes” & “Nulls”
- Point towards = strong signal
- Point away = weaker signal
- Point 135 degrees away = weakest signal

Attenuator

- When too close to the source, radio gets overloaded
- Attenuator reduces the signal
- Push more buttons = weaker signal



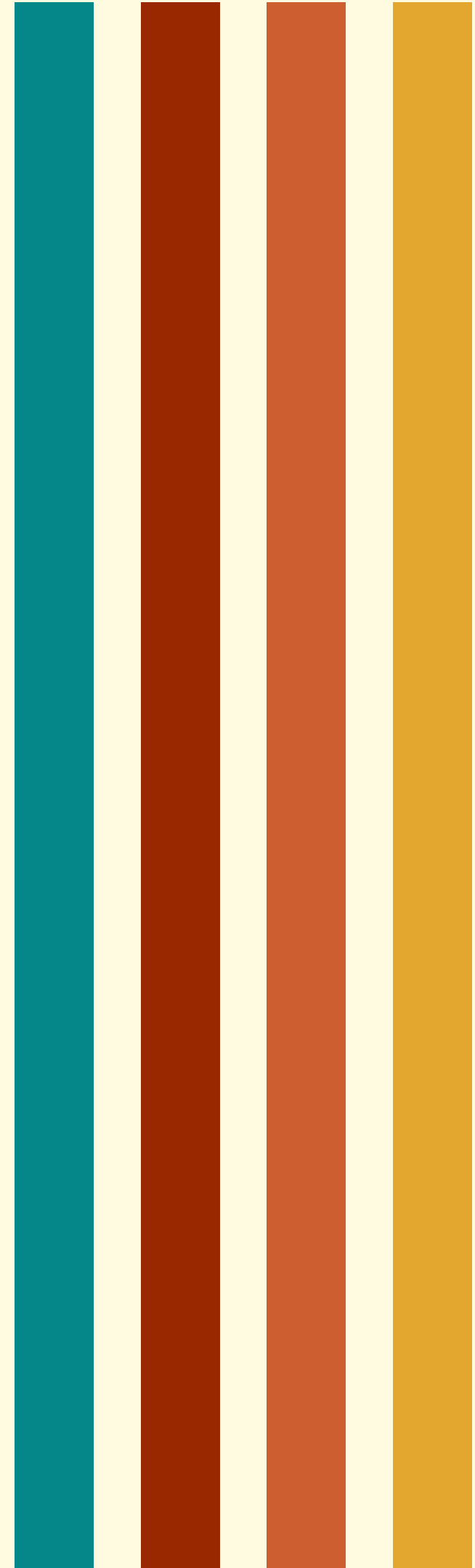
Pattern looking from the top

Disaster!

A solar storm has knocked out communications infrastructure! Use your scouting and radio skills to retrieve important supplies for your troop.

HQ has given you 2 clues to uncover the location of the supply cache and the password to unlock it.

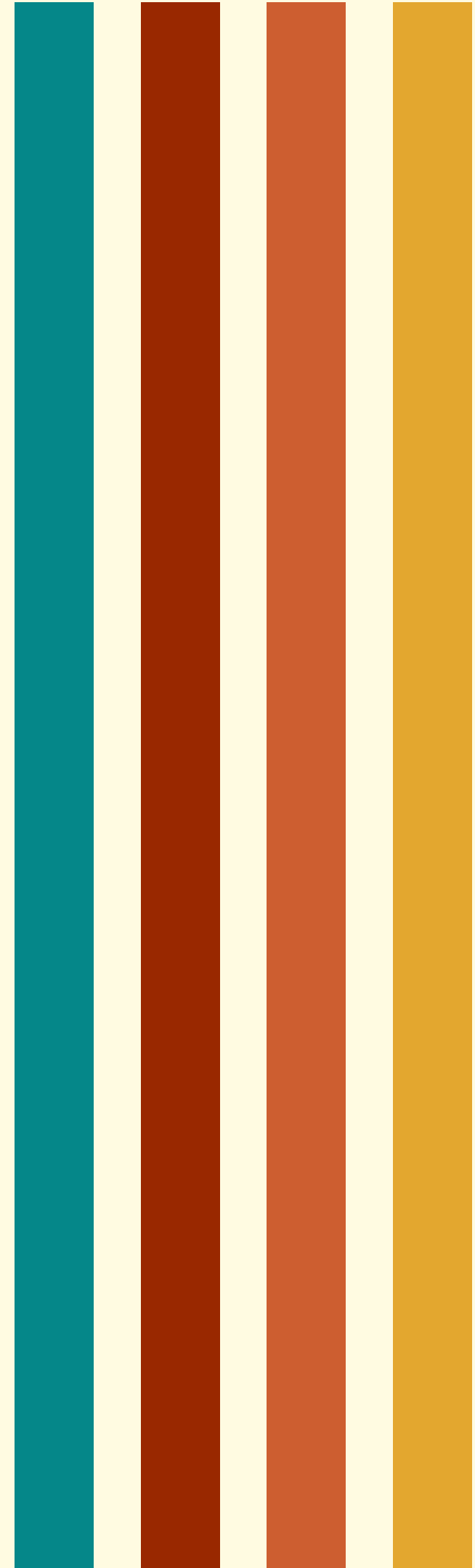
1. **Use a Yagi antenna to locate 2 foxes and their info**
2. **Decode a mysterious signal from HQ**



Decode

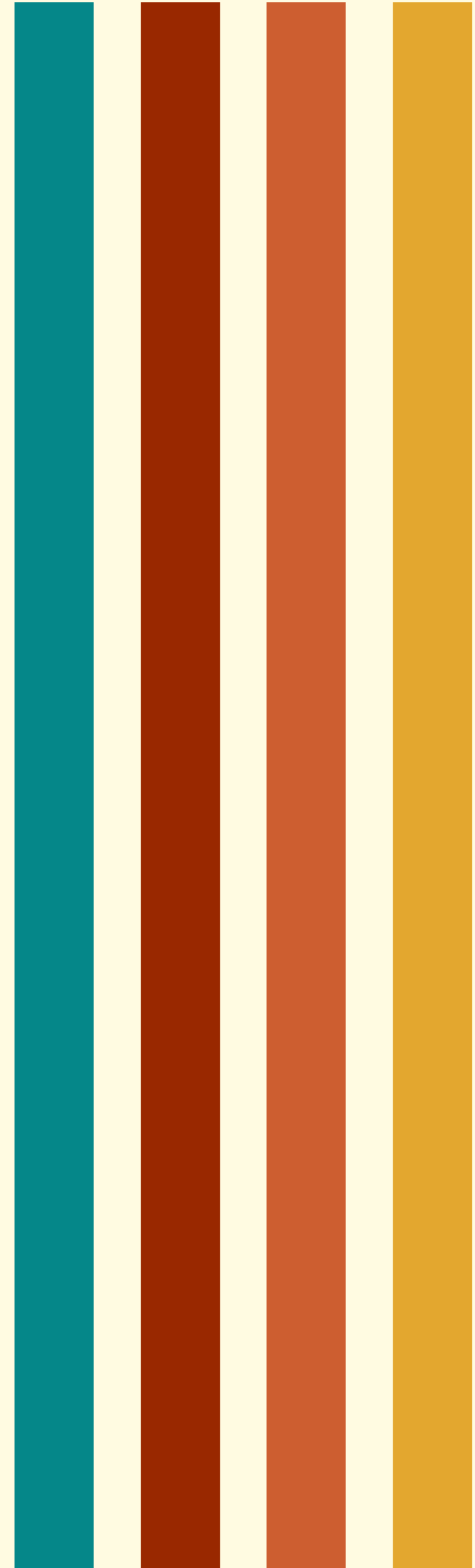
You hear a strange signal on 145.525MHz coming from HQ..
Use this signal and the provided hint to figure out the
passcode for the supply cache!

(Hint: You can use Google)



ARDF

There are 2 hidden beacons in the nearby park. Find all the beacons with your antenna to reveal the latitude and longitude of the supply cache.

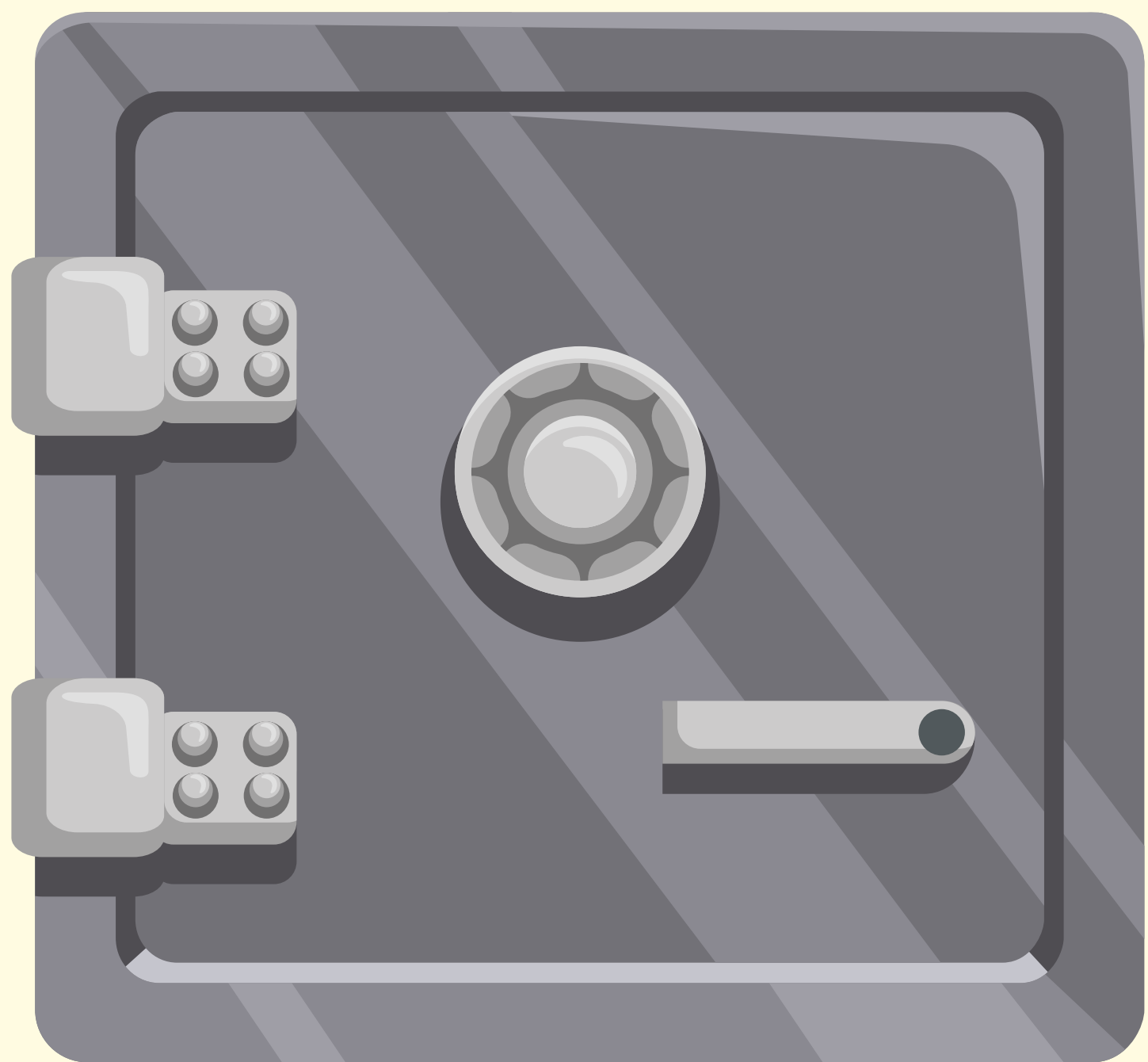


Congratulations!

You've found the supply cache! Its a heavy metal safe.

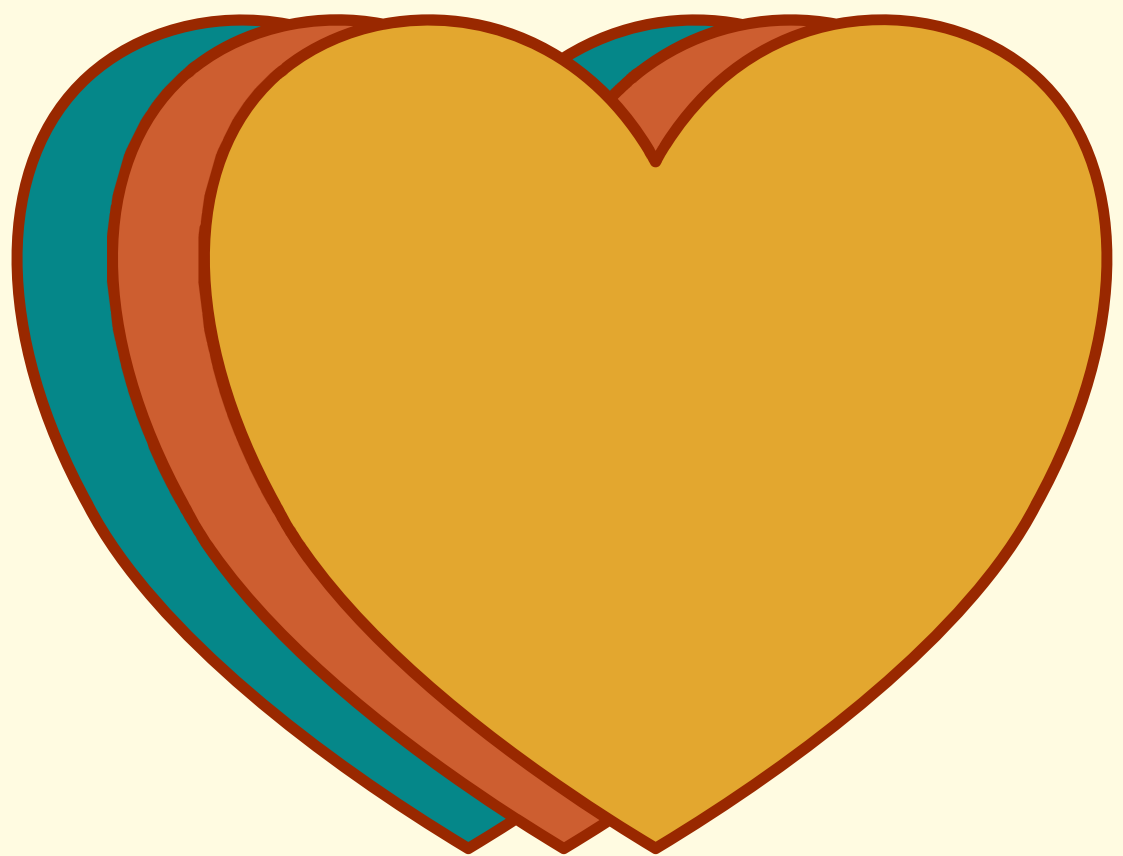
You unlock the safe with "202" and...











Thank you!

Photos



Photos



Venue

11 May 2024, Yuhua CC #03-08

I will be there at 12pm. Program by SARTS starts at 1:30

Schedule

- 1300-1330: Intro to JOTA/JOTI by Scouts West Area Commissioner
- 1330-1400: Intro to Ham radio & what it can offer to scouts by SARTS
- 1400-1445: RF Detector Kitbuidling
- 1445-1500: Break time
- 1500-1520: How to Use Antenna
- 1520-1620: Game Time
- 1620-1700: Sharing of plan for JOTA-JOTI 2024

Packing List

- Spare phone & audio cable
- rt95, lipo, Tripod, Antenna, misc cables
- kits
- foxes
- antenna & quansheng & attenuator
- microusb cable x3
- Power socket cube
- Laptop + power supply + HDMI
- Wire cutter, Heat shrink, lighter
- RF detector example
- Masking Tape, Marker
- Soldering station x4 (HT)
- Power bank x2 (DE)
- Extension cord (DE)
- All to bring 1 HT radio each