OurKidsCode
FAMILY CODING CLUBS

1. Setup
2. Warm up
3. Create
4. Share
5. Reflect
6. Plan

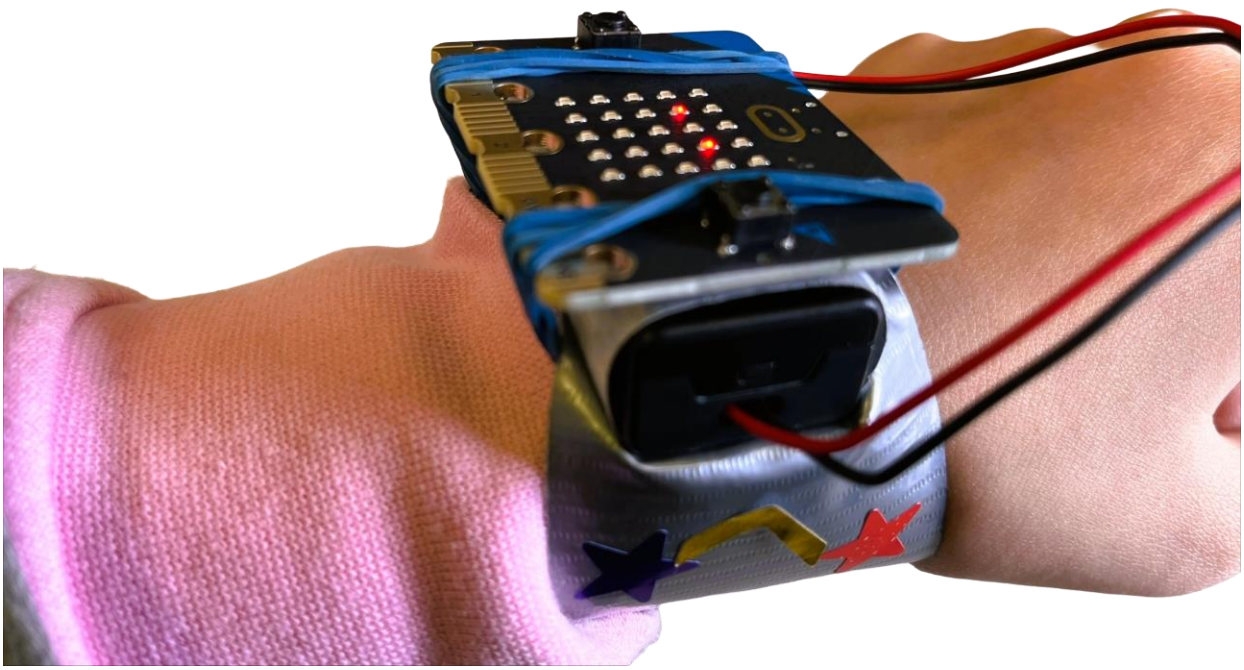
Workshop Guide

MICRO:BIT

COLLECT A BIG STICKER HERE

When you complete the Project!

ROCK PAPER SCISSORS



Trinity College Dublin
Coláiste na Tríonóide, Baile Átha Cliath
The University of Dublin

Rialtas na hÉireann
Government of Ireland

Taighde Éireann
Research Ireland

BEFORE WE START

Be positive & read the words below together as a family.



BE POLITE AND SAFE

Use kind words, be patient and respectful of others.



BE FRIENDLY

Make friends, ask questions and share learning.



BE CURIOUS

Show interest, share ideas, there's no such thing as "bad questions or wrong answers."



TAKE ACTION

Make decisions, note results and enjoy the activity.



RECOGNISE EFFORT & ACHIEVEMENT

Cheer your own and other's successes alike.

Write or draw your answers to these questions:

Write some kind words or draw pictures.

Write or draw one good thing each of you has done recently.

Write or draw what each of you is most interested in.

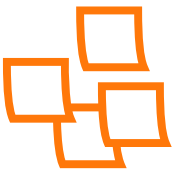
1 SETUP

SELECT YOUR ROLE IN YOUR TEAM:



ORGANISER

- ❑ Write a simple plan with the team
- ❑ Check if the team is on track
- ❑ Make sure the team starts and stops on time



DESIGNER

- ❑ Turn ideas into a picture for the team
- ❑ Show what the project will look like



CODER

- ❑ Build the brain of the project
- ❑ Operate the laptop/tablet/phone
- ❑ Connect the coding blocks on MakeCode website
- ❑ Test the code and fix mistakes



MAKER

- ❑ Build the body of the project
- ❑ Cut and prepare material
- ❑ Partner with the designer on how to decorate it



REVIEWER

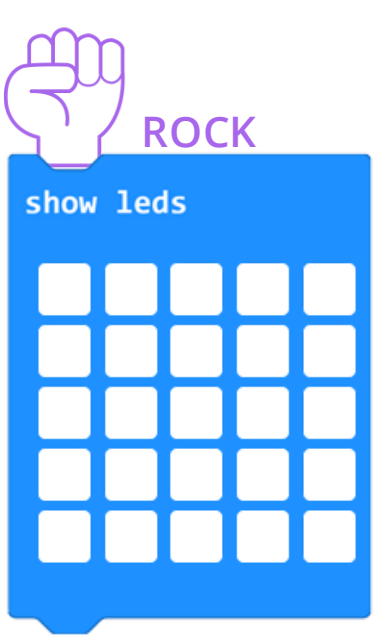
- ❑ In the end, check and review the project
- ❑ Is it working?
- ❑ Does it look right?
- ❑ Any steps missing?

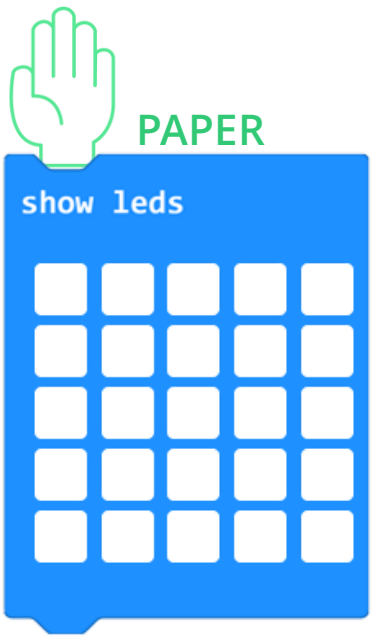
Collect the following for this project:

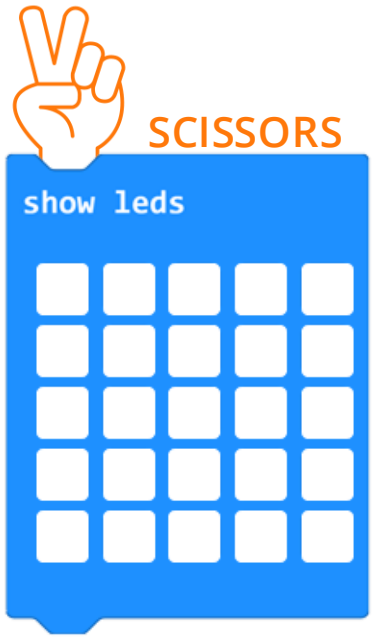
- ❑ Micro:bit
- ❑ Elastics
- ❑ Duct Tape
- ❑ Stickers and Pens
- ❑ Velcro
- ❑ Scissors

DESIGNER JOB

Designers refer to this page once team reaches Step 3. Create.
Fill the Micro:bit grid to show how Rock, Paper and Scissors should look. The Coder will copy your design onto the Micro:bit screen.





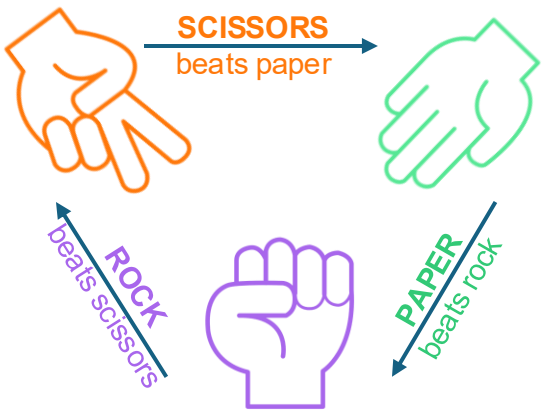


Notes

COLLECT sticker

2 WARM UP

ORGANISER JOB



HAVE A COMPETITION

Before you start coding with the Micro:bit, get everyone moving and have a quick game of **Rock–Paper–Scissors!**

THINGS TO DECIDE

01. Tournament Format

- ❑ What words do you use?
- ❑ How many shakes before you reveal your hand?
- ❑ What happens when you win or lose a round?

02. Winning a Match

- ❑ Is it sudden death? Or best 2 out of 3?

03. Choosing the Winner

- ❑ How will you track progress?
- ❑ How will you decide the final champion?

WHY DO THIS FIRST?

Playing rock-paper-scissors makes sure everyone knows the rules clearly, making it easier to spot mistakes when coding it later.

It gets everyone active and relaxed, creating a positive, fun atmosphere before starting the project.

It builds a warm-up routine, helping families ease into future STEAM activities with confidence.



3 CREATE: Make

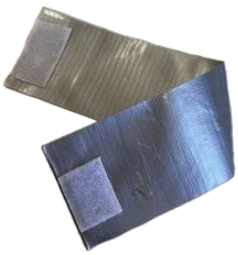
MAKER + DESIGNER JOB

1



Measure & Cut a piece of duct tape twice the length of your wrist, with a little extra to overlap. Fold it in half (sticky sides together) to make a wristband.

2



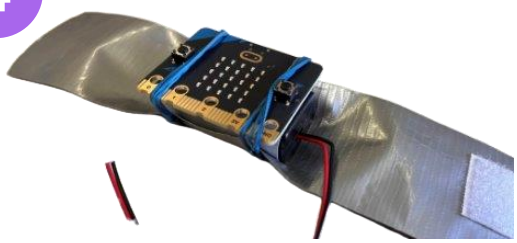
Add Velcro on each end of the tape wristband, so they face each other and close when you overlap the ends.

3



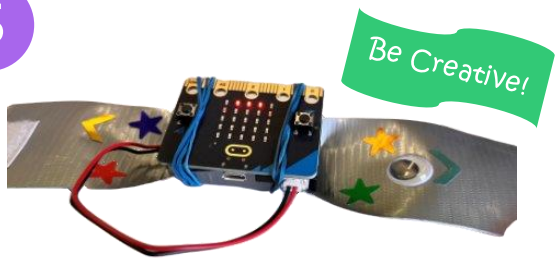
Wrap the Battery Pack in duct tape with sticky side facing out. Press it onto the middle of the wristband so it sticks firmly.

4



Stick the Micro:bit onto the tape on top of the battery pack and secure with rubber bands.

5



Plug the battery pack into the Micro:bit and **Decorate!**

REVIEWER JOB

Test the finished wristband:
Try it on your team members to see if it fits everyone's wrist comfortably. Then try shaking it to make sure that the battery pack and Micro:bit don't fall off.

COLLECT sticker

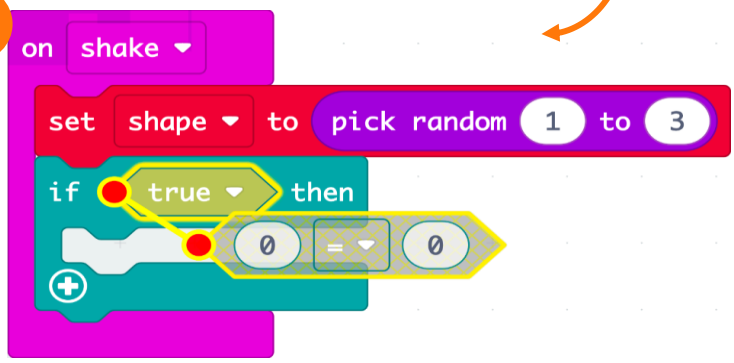
3 CREATE: Code

https://ourkidscode.ie/club-projects-rps/

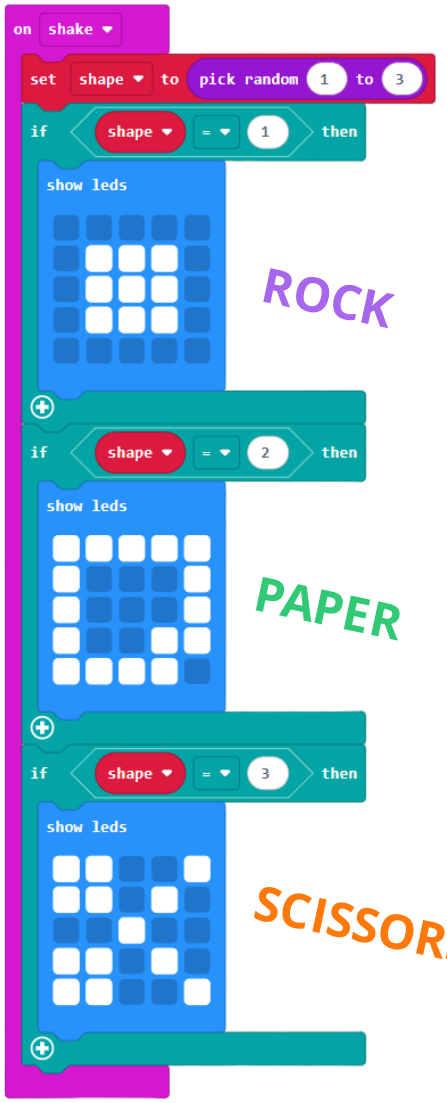
CODER + DESIGNER JOB

- ❑ **Coder**, go to makecode.microbit.org.
- ❑ Click New Project and name it RPS.
- ❑ Let's begin coding. Follow the code as shown in step 1 and step 2

1



2



- ❑ Use the blocks to build a program that looks exactly like the one shown here.
- ❑ **Designer** helps design what rock, paper and scissors would look like (refer to the Designer Micro:bit grid page).

REVIEWER JOB

Test the Program
Click the white button called “Shake” on the on-screen Micro:bit. Do all 3 shapes appear? Should the shapes always appear in the same sequence or randomly?

Download
Connect your device and click download, then test the code on the real Micro:bit wristband.

COLLECT sticker

4 SHARE



CONGRATULATIONS!
You made your first MICRO:BIT RPS!

Shake it and play with what you have made!
Show it off to everyone else!
Look at everyone else's work and ask how it went for them

5 REFLECT

Discuss with everyone in the room **what you felt and what could you do in the future**.

- ❑ Did you have fun? Did you help someone?
- ❑ What was your favourite part? Least favourite?
- ❑ Learn anything? Feel more confident?
- ❑ Think you and your family would like to do more?

6 PLAN

At the end of every OurKidsCode Club MeetUp, families organise the next one, so the fun never stops!

If you're interested in being part of a family-led creative coding club, talk to your facilitator about our Start-a-Club programme.

You'll find lots of useful documents on our website, including more projects and resources for family-led coding clubs at: https://ourkidscode.ie/club-hub

Acknowledgements and copyright
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