Makerspace Kits lending collection

Yes, Kits are for loan and can be taken home!

ALIA online conference
14 February 2019
City of Sydney Library

9 Libraries + 2 Library links
- Customs House
- Glebe
- Green Square (new)
- Haymarket
- Kings Cross
- Newtown
- Surry Hills
- Ultimo
- Waterloo

Library links
- Town Hall (library link)
- Pyrmont (library link)
Launch collection

- Edison robot
- Ozobot
- Sphero
- MaKey MaKey
- Circuit Scribe
- Snap circuit
Additional kits

• BBC Micro:bit Go
• Honeycomb music kit
• Little Bits Synth
218 maker space kits

1611 loans

6 kits launched

3 new kits added

9 types of kits

lost damaged faulty 39

countless possibilities
Why?

• To encourage and inspire the community to experiment / explore / play with a range of items that focus on learning Science, Technology, Engineering, Arts and Mathematics (STEAM)

• Equitable access to items

• Re-use, recycle and share
Makerspace kits

- Edison robot
- Ozobot
- Sphero
- MaKey MaKey
- Circuit Scribe
- Snap circuit
- Micro:bit Go
- Honeycomb
- Little Bits Synth

**Robotic kits**

**Edison Robot v2.0**

Learn about robots and programming with this Lego compatible robot. When Edison drives over a special barcode, pre-programmed functions like 'avoid obstacles' or 'follow a line' are activated, perfect for beginners. You can use your computer or tablet to program Edison in one of 3 programming languages. For ages 5+

**Ozobot Bit 2.0**

This small robot is simple and intuitive for beginners and also has highly programmable and versatile functions to satisfy the most experienced tinker. Ozobot can be controlled by drawing lines and colour segments or using a block-based programming editor available free online. You’ll be able to create and send the Ozobot through an endless array of mazes, maps and racetracks in no time. For ages 6+

**Sphero SPRK+ edition**

The Sphero robotic ball is designed to inspire curiosity, creativity and invention through connected play and coding. Learn simple programming using a free app to control the ball via Bluetooth and complete hands-on activities and games. For ages 8+
Ozobot

- Small smart line following robot
- Controlled by drawing lines and colour segments
- Intuitive for beginners, easy to use
- Limited number of pieces
Sphero

- Robotic ball
- Learn simple programming and code through play
- Download a free app
MaKey MaKey

• Turn every day objects into touchpads
Honeycomb music

• Turn any conductive objects into music instruments
• No computer required
Circuit Scribe
Little Bits Synth
Library Lending

- Kits available for loan (standard loan period, 3 weeks)
- Kits have a “fixed location”
- Kits are catalogued and searchable on OPAC
- Kits can be reserved
- 1 makerspace kit loan per library card

- Loans & returns conducted through library staff
- Loans only at staffed library branches
Packaging
**Circuit Scribe Kit**

**Contents**
- 2 x Red Blue LED
- 1 x Switch on-off
- 1 x NPN transistor
- 1 x Potentiometer
- 1 x Blinker
- 1 x Buzzer
- 1 x 2x2 Pin adapter
- 1 x 9V Adapter module
- 1 x Red Green Blue LED

**You will need**
- 9V Battery
- Paper

[Further information](http://www.circuitscribe.com)

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**MaKey MaKey Kit**

**Contents**
- 1 x MaKey MaKey board
- 1 x 9 pin USB cable
- 7 x alligator clips
- 6 x connector wires (white)
- 1 x instructions
- 1 x MaKey MaKey rod box (base and lid)

**You will need**
- Computer
- Internet access
- Conductive materials
- Imagination and fun

[Further information](http://www.makeymakey.com)
Checklists

- Brief description
- Lending and return conversation points
- Taking care of the item
- Important to return all pieces
- Replacement costs

### Lending conversation

<table>
<thead>
<tr>
<th>Lending conversation</th>
<th>We covered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welcome to the Makerspace collection – MaKey MaKey. The MaKey MaKey kit turns</td>
<td></td>
</tr>
<tr>
<td>everyday objects into touchpads. It's a simple invention kit for beginners and</td>
<td></td>
</tr>
<tr>
<td>experts doing art, engineering and everything between.</td>
<td></td>
</tr>
<tr>
<td>1 Please return the MaKey MaKey Kit to a staffed library branch.</td>
<td></td>
</tr>
<tr>
<td>2 You will need to hand the item directly to friendly library staff. Please do not</td>
<td></td>
</tr>
<tr>
<td>return the item in the after-hours return chute or the self-service return shelf.</td>
<td></td>
</tr>
<tr>
<td>3 Please take care of the MaKey MaKey so it will be available for the next person</td>
<td></td>
</tr>
<tr>
<td>to use – that means handling all the bits and pieces with care and returning</td>
<td></td>
</tr>
<tr>
<td>everything in the kit.</td>
<td></td>
</tr>
<tr>
<td>4 Please note – just as with our books and DVDs if the MaKey Makeys are lost or</td>
<td></td>
</tr>
<tr>
<td>damaged replacement costs are incurred by borrowers. MaKey Makeys cost $60 each plus</td>
<td></td>
</tr>
<tr>
<td>$15 admin fee</td>
<td></td>
</tr>
<tr>
<td>5 We look forward to hearing about your experiences.</td>
<td></td>
</tr>
</tbody>
</table>

### Returning conversation

<table>
<thead>
<tr>
<th>Returning conversation</th>
<th>We covered</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 How did you go? Bananas or Leaves?</td>
<td></td>
</tr>
<tr>
<td>2 Could you get everything to work?</td>
<td></td>
</tr>
<tr>
<td>3 If it did not work was it because it was a bit hard to use or do you think some</td>
<td></td>
</tr>
<tr>
<td>parts were faulty or worn out?</td>
<td></td>
</tr>
<tr>
<td>4 What didn't work? Note on list below.</td>
<td></td>
</tr>
<tr>
<td>5 What would you like to borrow next? Another Makerspace item?</td>
<td></td>
</tr>
</tbody>
</table>
MaKey MaKey kit checklist

Staff name: ____________________________

Date: ____________________________

Borrower number: ____________________________

Lending conversation | We covered
--- | ---
1. Welcome to the Makerspace collection – MaKey MaKey. The MaKey MaKey kit turns everyday objects into touchpads. It's a simple invention kit for beginners and experts doing art, engineering and everything between.

2. Please return the MaKey MaKey Kit to a staffed library branch.

3. You will need to hand the item directly to friendly library staff. Please do not return the item in the after-hours return chute or the self-service return shelf.

4. Please take care of the MaKey MaKey so it will be available for the next person to use – that means handling all the bits and pieces with care and returning everything in the kit.

5. Please note – just as with our books and DVDs, if the MaKey MaKeys are lost or damaged replacement costs are incurred by borrowers. MaKey MaKeys cost $80 each plus $1.5 admin fee.

6. We look forward to hearing about your experiences.

Returning conversation | We covered
--- | ---
1. How did you go? Bananas or Leaves?

2. Could you get everything to work?

3. If it did not work was it because it was a bit hard to use or do you think some parts were faulty or worn out?

4. What didn't work? Note on list below.

5. What would you like to borrow next? Another Makerspace item?

### MaKey MaKey Kit Item checklist

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Thing</th>
<th>Image</th>
<th>Loaned</th>
<th>Returned</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>MaKey MaKey Board</td>
<td><img src="image" alt="MaKey MaKey Board Image" /></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Red USB cable</td>
<td><img src="image" alt="Red USB cable Image" /></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Alligator clips</td>
<td><img src="image" alt="Alligator clips Image" /></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Red alligator clip</td>
<td><img src="image" alt="Red alligator clip Image" /></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Yellow alligator clip</td>
<td><img src="image" alt="Yellow alligator clip Image" /></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>White alligator clip</td>
<td><img src="image" alt="White alligator clip Image" /></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Grey alligator clip</td>
<td><img src="image" alt="Grey alligator clip Image" /></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Fluoro green alligator clip</td>
<td><img src="image" alt="Fluoro green alligator clip Image" /></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Light green alligator clip</td>
<td><img src="image" alt="Light green alligator clip Image" /></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Orange alligator clip</td>
<td><img src="image" alt="Orange alligator clip Image" /></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6. Connector wires

7. Instructions

8. 1 x MaKey MaKey red box (base and lid)

User will need:

1. Computer

1. Internet access

Bunch of Conductive material (e.g. banana)

1,000,000 Imagination and fun
Staff development

- Presentations and learning sessions
- Learning through play in small groups
- Maker and Creator
- 1:1 sessions with staff
- Demonstrations and play to key staff
- Staff development day (session)
- Follow-up branch roadshow / refresher
- Product testing
Staff benefits
Staff benefits

- Collaboration with teams (programs, media, marketing, procurement, collections staff and library staff)
- Staff development and learning
- Adaptability and flexibility
- Engaging with community
Challenges

- Ongoing training
- Damaged parts
- Developing collection
- Costs
- Time
Lessons learnt

• Experiment, test and play with the items
• Look closely at the details
• Collaborate with all staff
• Listen, watch and learn
• Trial collections
• Learning Journey
Thank you!

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