

Newton Primary Microbits

Housing project

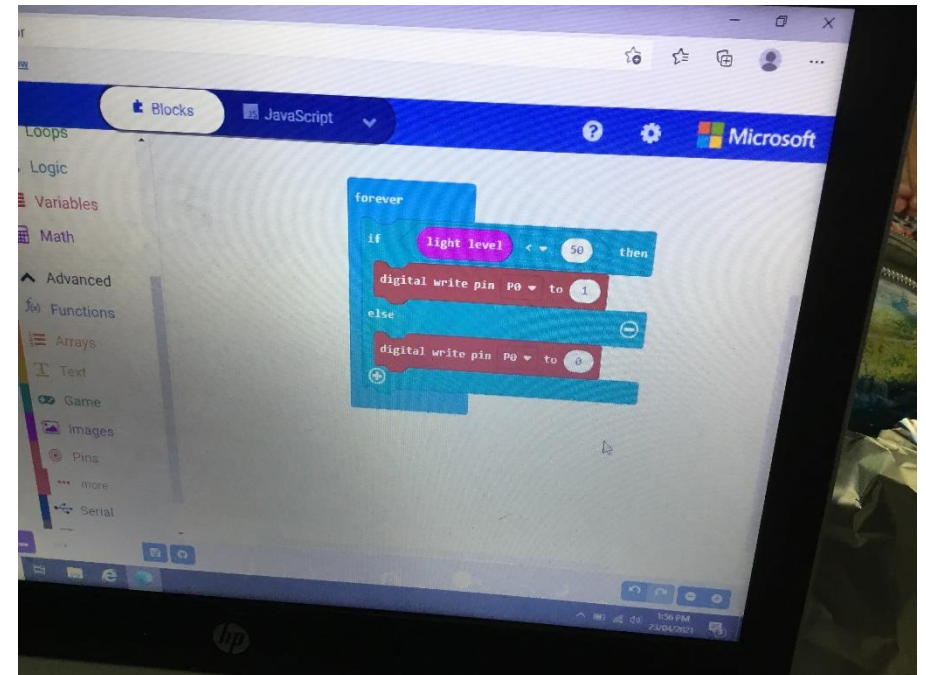
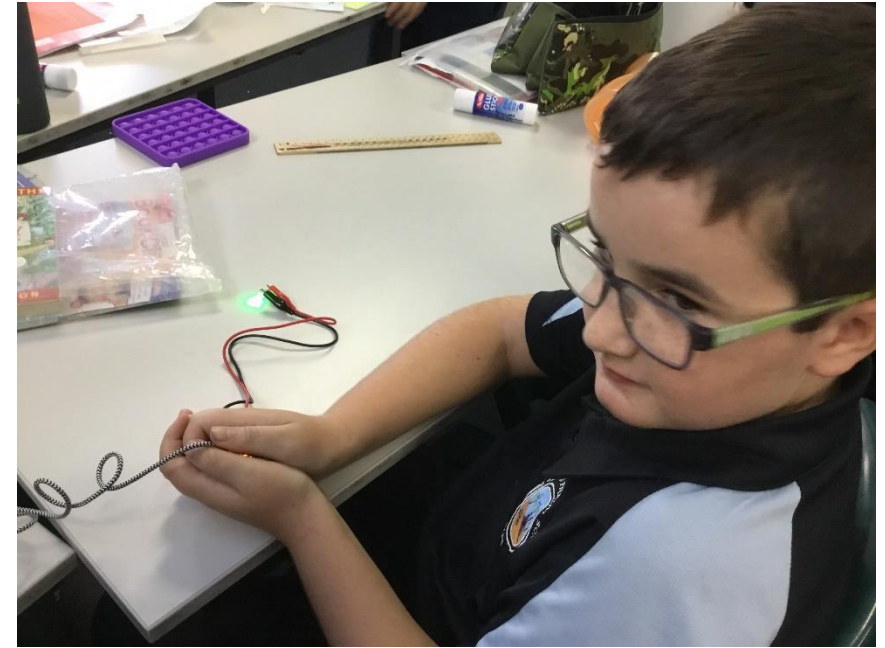
What we have learned about electricity and Western Power from Mike

- Western Power controls nearly all of the power infrastructure in WA.
- Electricity works by using insulators and conductors.
- Electricity works in a circuit – for example if we all join hands and two people hold the giggle stick then we are creating a circuit and the stick works.
- Fires can cause a lot of damage to our powerlines and our electricity supply.
- Lots and lots of things use electricity.
- Some of our students went to Scitect over the holidays and they checked out the electricity display.

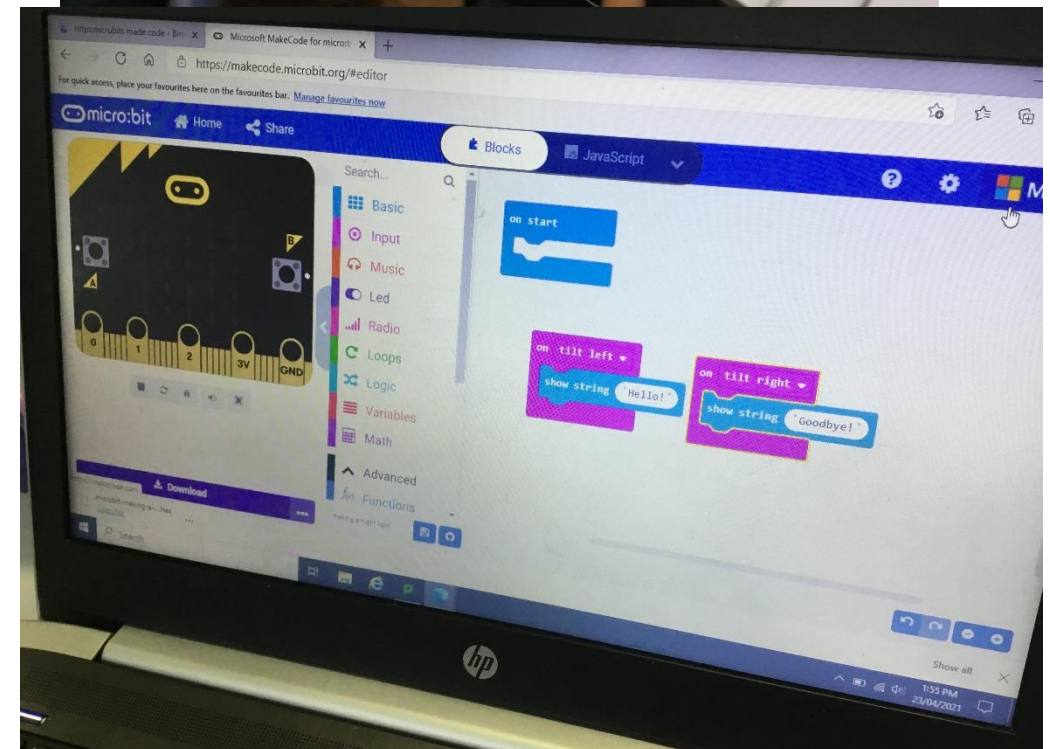
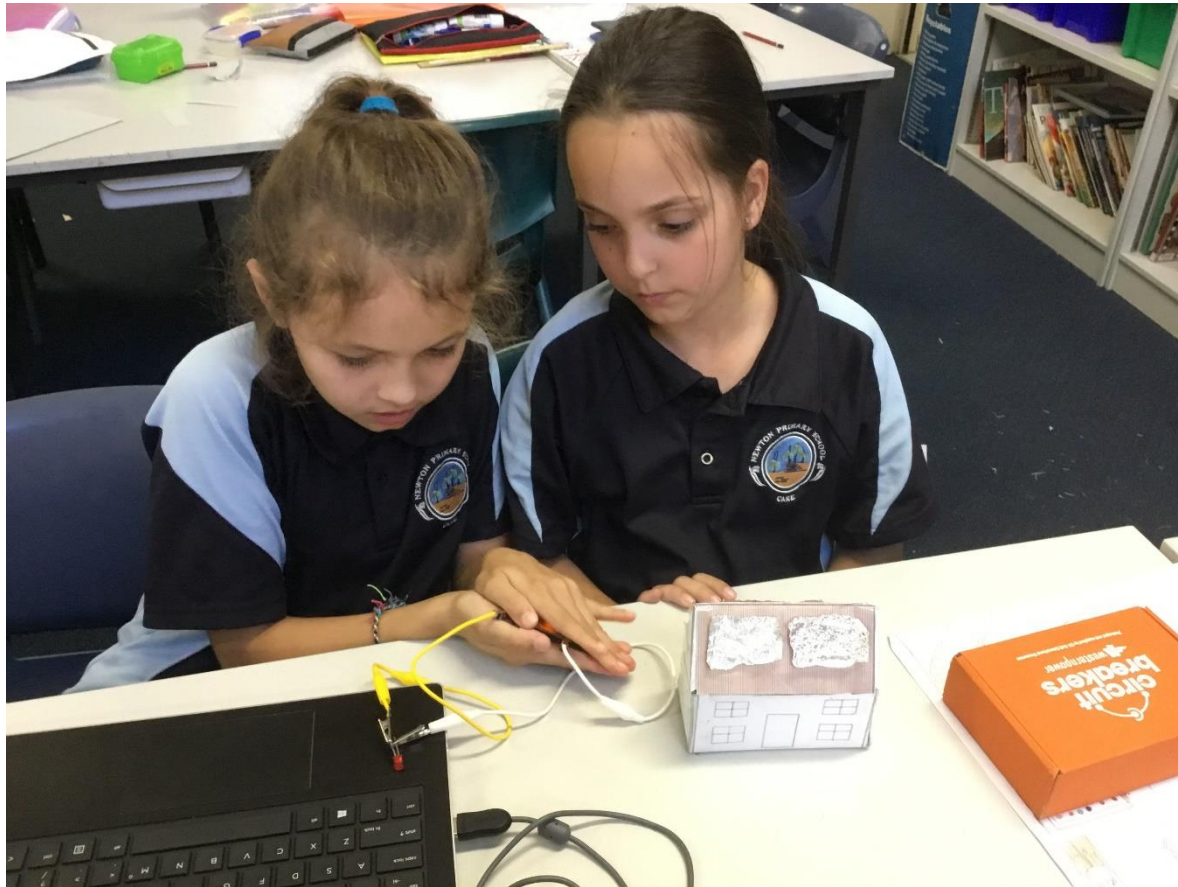
What we have learned about electricity and Western Power from Mike

- We learnt from Mike that you don't always need powerlines to have power. HE showed us a portable power supply which you connect to a solar panel. He showed us the Invertor which changes the solar power to power/electricity which can then be used to charge computers, ipads, phones, tvs, kettles and other electrical things. The setup is good when you are on the go like camping – you can still have your home stuff far away from power.
- Battery's also make electrical things portable.
- We enjoyed listening and learning from Mike, except for when he tried to trick us and pretend that he had a spider in his tool box.

Our learning



Our learning



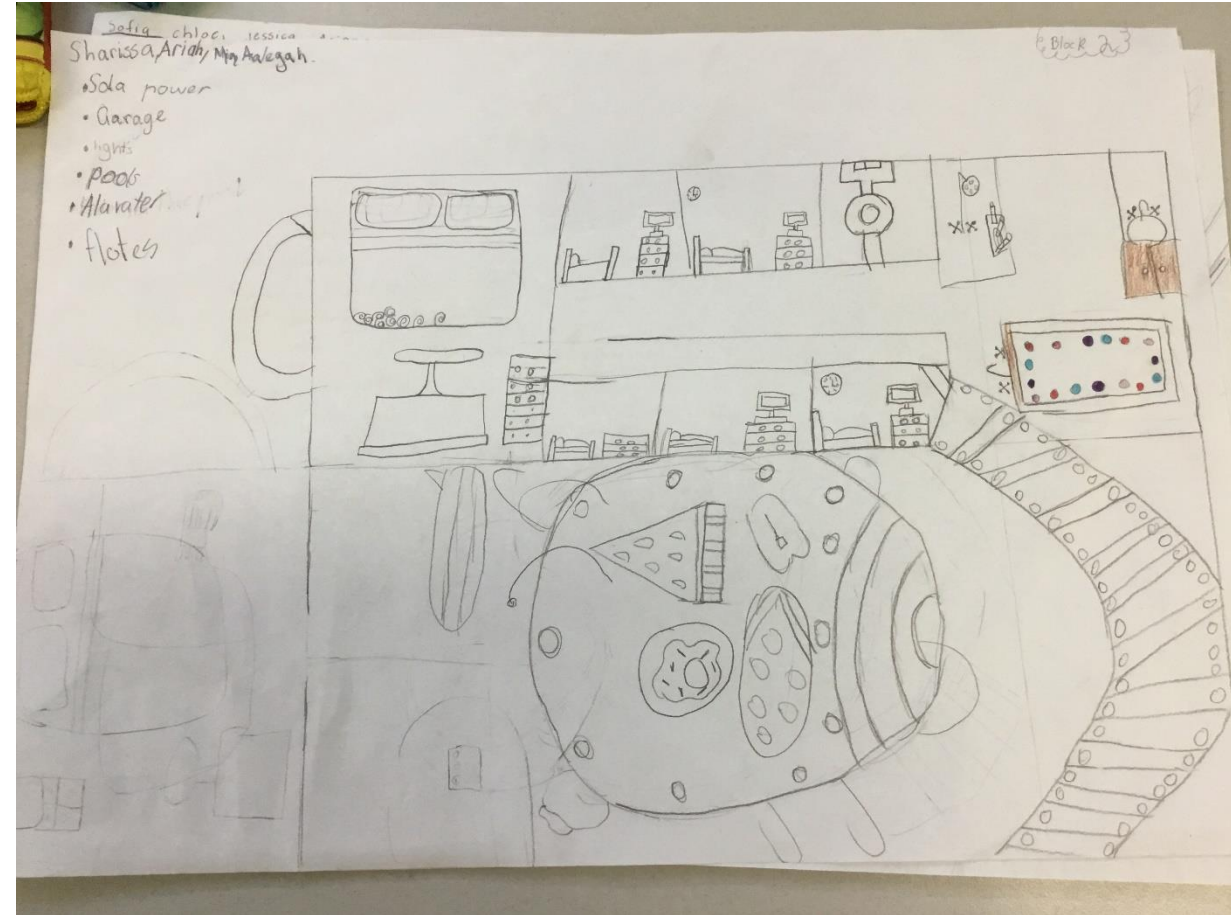
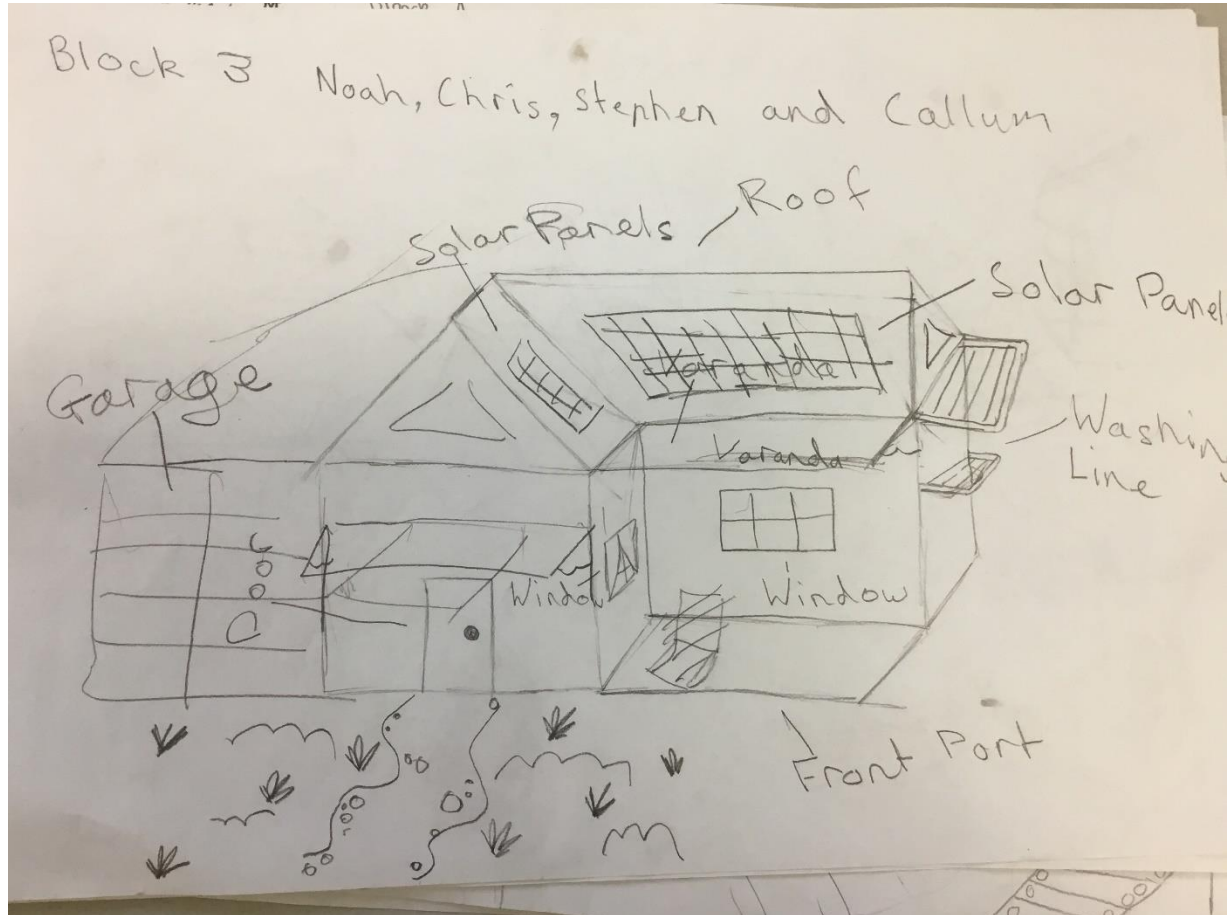
What we have learned by coding the microbits

- We have learned that you can make loops.
- We learned how to make the microbits talk to each other by programming some of the microbits to be sensors.
- We programmed the microbits to play messages and display different shapes. We learned that you have to download and drag the program onto the microbit.
- When we were using the copper to create a circuit with the LED we found this very challenging and we learnt that it was important to make good connections.

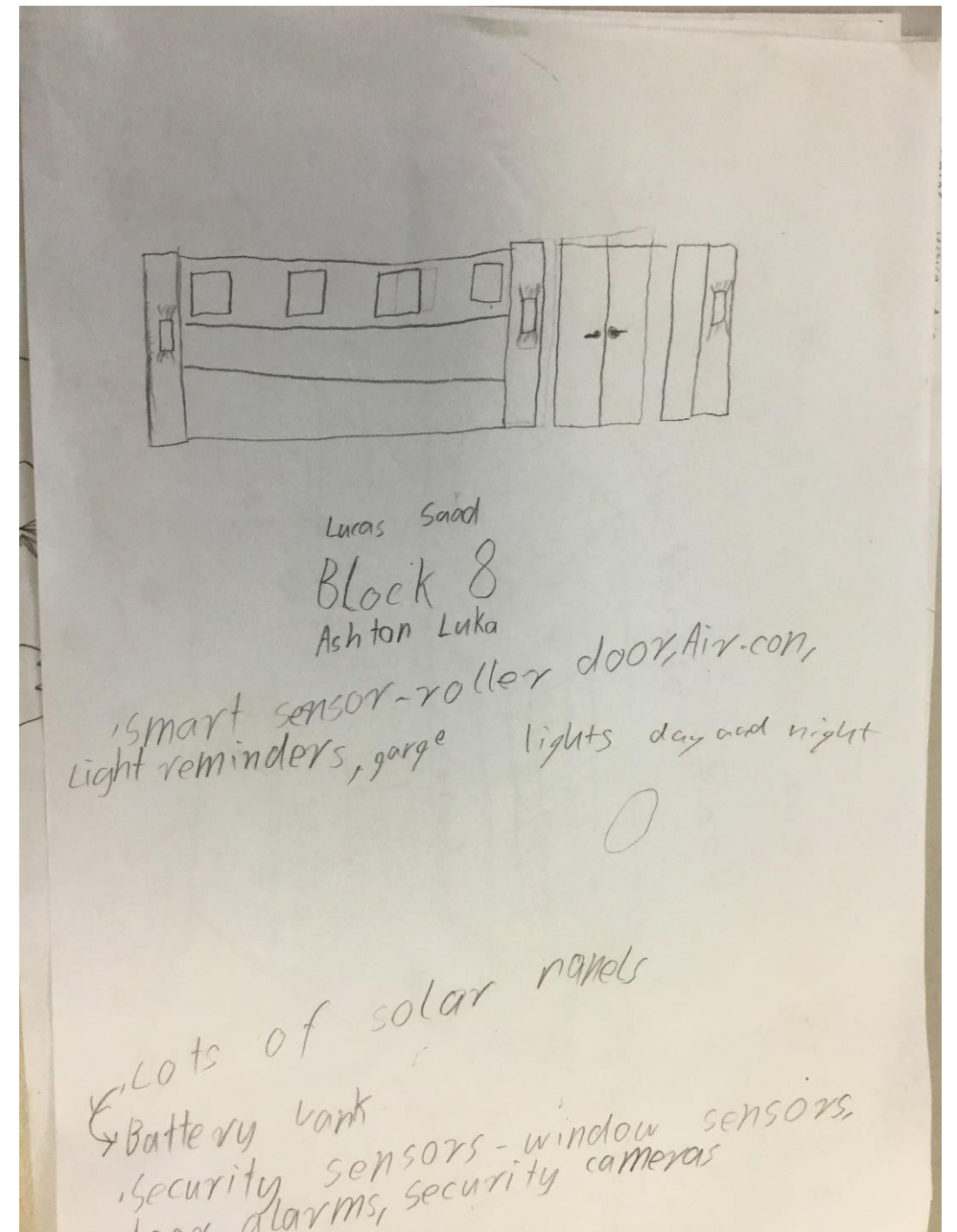
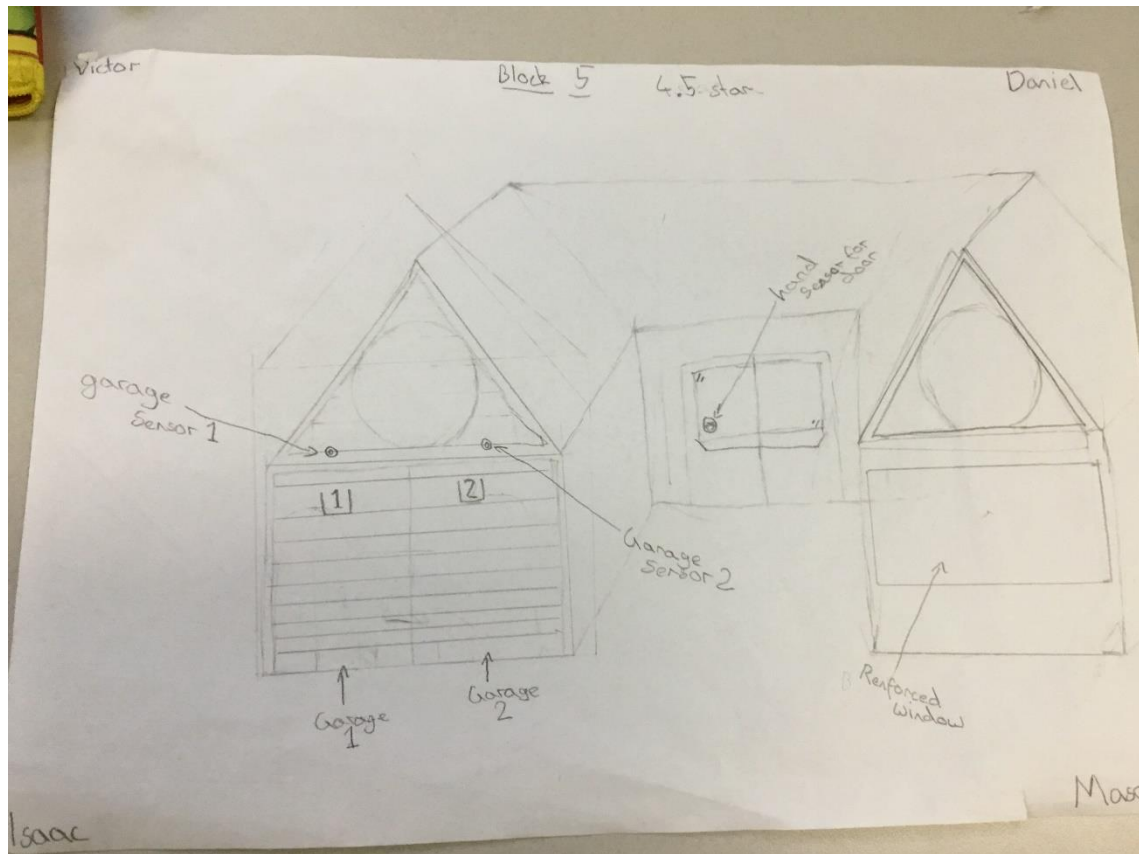
What we have learned by coding the microbits

- Coding can be quite challenging – we learned that putting in spaces in code, stops the code from working. If we didn't use the right block code, the program also didn't work.

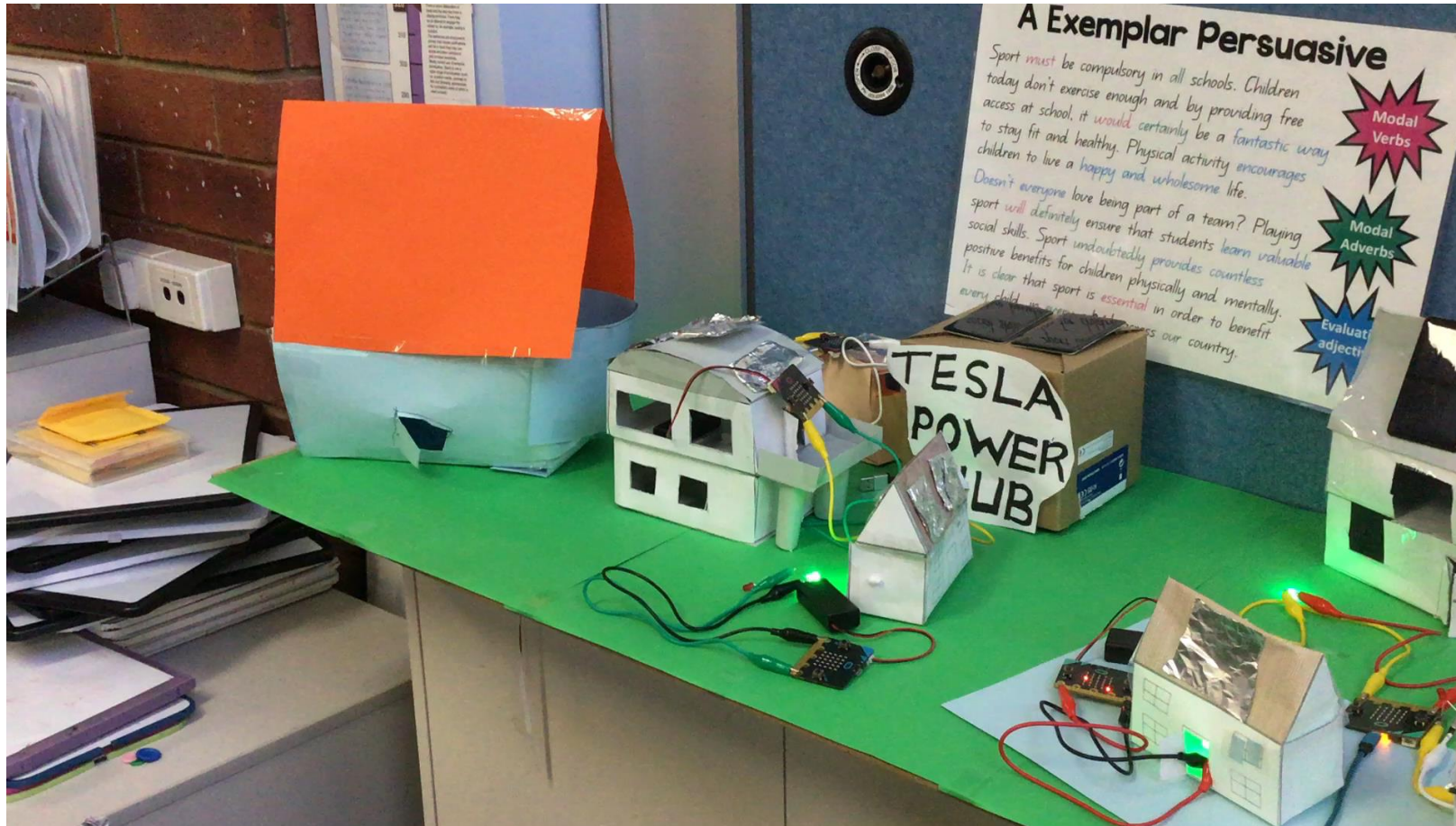
Some of our designs



Some more of our designs



Our final village



What we have enjoyed the most

- We enjoyed designing and building our houses and coming up with ideas for using power.
- We enjoyed using and learning how to program the microbits.
- We enjoyed playing a lot of different programs
- We enjoyed using the microbits to send messages.
- We really enjoyed using the computers to code
- We enjoyed the challenges of things like the nightlights, because it involved the coding plus using other components to make the program work.
- Thank you to Scitect and the Microbits program.