



# Brookman

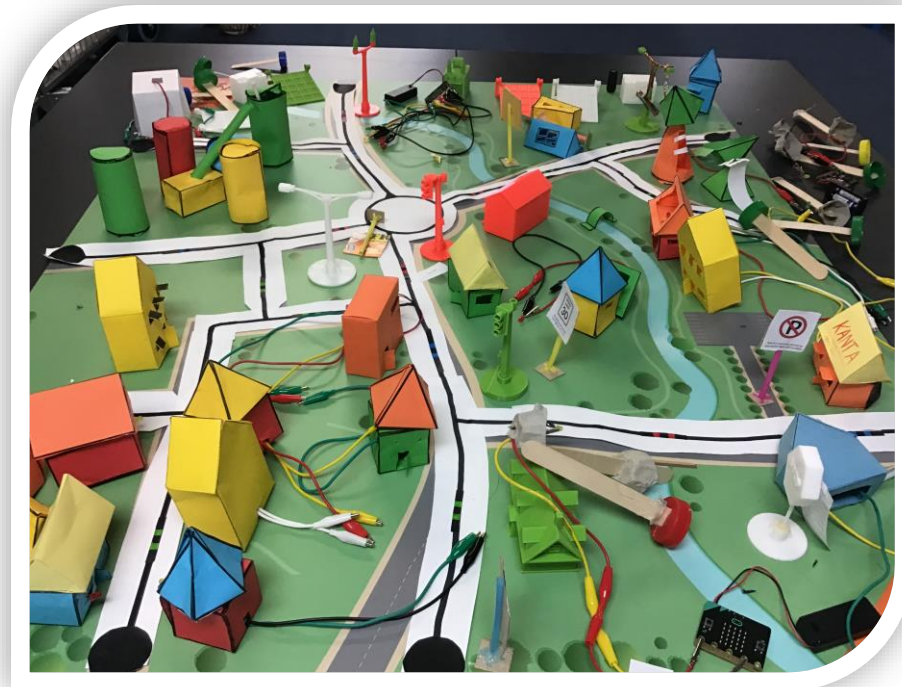
PRIMARY SCHOOL

Western Power Circuit Breakers 2020

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*Brookman's learning environment focusses on developing student risk taking and problem-solving skills through tackling contextual problems.*

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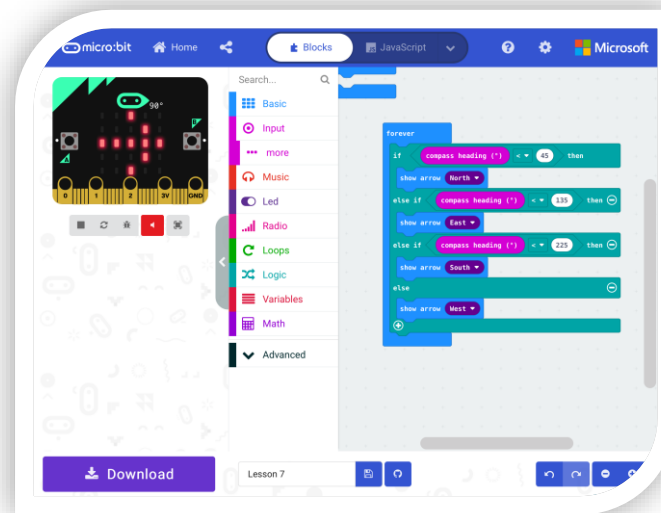
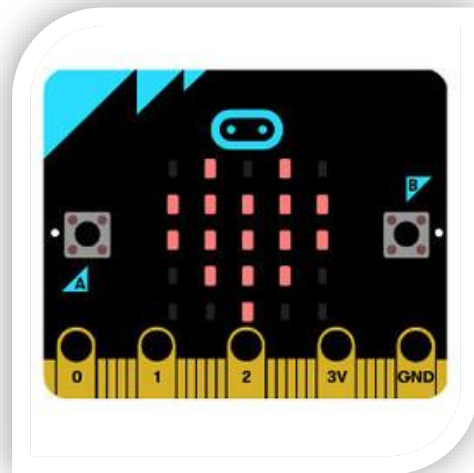
# About Us

Brookman PS is located in the southern suburb of Langford, Perth. Brookman PS has won the Governors STEM award 3 years in a row from 2018 to 2020. Our school has over 300 students with over 30 nationalities across all year levels. In future proofing student skills in discovery and innovation, all classes from Kindergarten to Year 6 have project based STEAM (Science Technology Engineering Arts Mathematics) activities embedded into their teaching programs.



# What we learnt about Micro:bits!

This Semester our class has discovered the Micro:bits for the first time and its amazing capabilities. We explored what is the purpose and function of Western Power in our environment and how they distribute electricity in Western Australia. Our class's favourite learnt features include: playing music with earphones attached, showing different light patterns using the Micro:bit's LEDs, you can code it to send a signal to other Micro:bits and you can code your own game using block coding.



# What we learnt about Western Power!

We learnt that Western Power handles all of the electricity in the grid throughout Western Australia and that they use emergency sensors to find problems in the grid. Our class had a mentor named Gina from Western Power and she taught us what to do when a broken power line is near you. We also learnt that Western Power is trying to use sustainable energy more than fossil fuels to reduce the impact on global warming. Now days electricity travels by underground cables to houses instead of power lines above ground although in Langford we still have parts with overhead power lines.



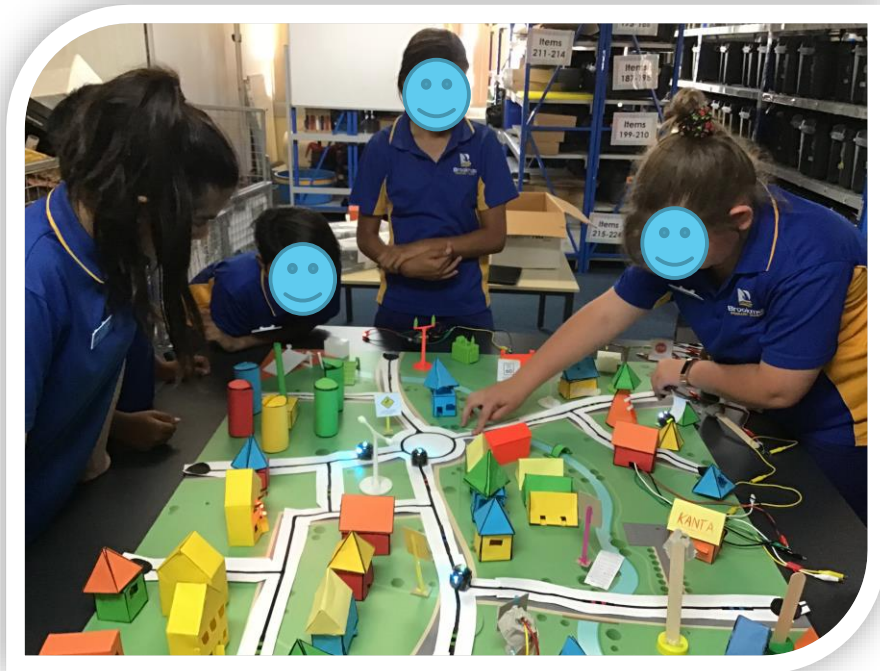
# What we learnt about electricity!

We learnt that electricity travels down and always seeks the ground within 7 metres, which is why birds don't get electrocuted when they land on the power lines. We learnt how electricity travels from the powerplant to your house and we went on a website called Shock Proof and it taught us how electricity can be dangerous and harmful to people.



# Our Network of the Future

After we learnt how to code many programs on the Micro:bit we created our network of the future using 3D printed houses, buildings, street lights, solar panels and traffic lights. We also used Ozobots as our mini cars so they can roam around our city. First of all we created our buildings using nets, then we placed them onto the map and started coding the Micro:bits for our building lights, signs and traffic lights.



# We Thank You...

We would like to thank Gina from Western Power for coming in to teach us how to be safe around electricity and for teaching us how it works. We all enjoyed the Circuit Breakers program and hope to do this again in the near future.

