

CIRCUIT BREAKERS 2020



MERREDIN COLLEGE



- **Merredin College is a K-12 school catering for approximately 600 students.**
- **Merredin College is located 260 kilometres east of Perth in the Central Wheatbelt.**
- **Eighteen Year 5 & Five Year 6 students participated in Circuit Breakers.**
- **The class worked as a team to design & create our network of the future.**
- **Each week a team of students was responsible for recording our week's learning journey .**

WHAT WE LEARNT ABOUT WESTERN POWER

- **We learnt that there are many interesting employment opportunities with Western Power.**
- **We were encouraged by Western Power's commitment to sustainable energy production.**
- **We were surprised to discover that Western Power are energy distributors not producers.**
- **As residents of regional WA we were pleased to see measures were being taken to ensure reliable energy delivery.**
- **We learnt that Western Power provides power safely to the community.**



WHAT WE LEARNT ABOUT ENGINEERING

- **Engineering is an exciting and diverse field**
- **Without engineers our lives would look very different**
- **Engineers think outside of the box**
- **Engineers like to solve problems**
- **Engineering is for everyone**



OUR NETWORK OF THE FUTURE

- **In developing our network we wanted it to be sustainable with a focus on renewable energy.**
- **Due to Merredin's location we are fortunate to have the right conditions for wind and solar farms.**
- **Wind farms fit with our sustainable model, as farmers can still use the land for agriculture. We believe that using the land for dual purposes is an important environmental benefit.**
- **Our network features a wind farm, solar farm and a community battery.**
- **Merredin homeowners will be encouraged to install solar panels on their roof. The excess energy will flow into the community battery. Merredin Shire will sell the energy to the Australian Energy Market Operator. The profits will be redirected back into our community, ensuring that our region remains strong and viable for future generations.**
- **Cars will be solar powered and residents will also be able to teleport anywhere.**
- **Our network features the first Virtual Reality Shopping Centre & Virtual Recreational Centre and Solar Powered Hover Park.**

OUR NETWORK OF THE FUTURE



OUR 5 FAVOURITE THINGS ABOUT CIRCUIT BREAKERS

- 1. Learning about circuits and coding our micro:bits.**
- 2. We loved the excursions and incursions we had to learn more about electricity production and delivery.**
- 3. Learning that engineering is an exciting career for us.**
- 4. We loved designing and creating our models for the network**
- 5. We enjoyed encountering new challenges.**

