Circuit Breakers 2020

Roseworth Primary School

Our school

- We have
  - Around 300 students from PP to Year 6
  - A strong digital technology and STEM focus
- We are in the Northern suburbs of Perth, Girrawheen
- Our Circuit Breaker team consisted of 3 class from Year 4, Year 4/5 and Year 5

What we learnt about Western Power

- Western Power monitors the electrical network that supply power to the whole of WA.
- When a pole is damaged or the power supply is broken, Western Power is notified that it needs to be fixed.
    - This all happens in less than a second!
- Western Power have a lot of different types of jobs. They have:
    - Computer specialists
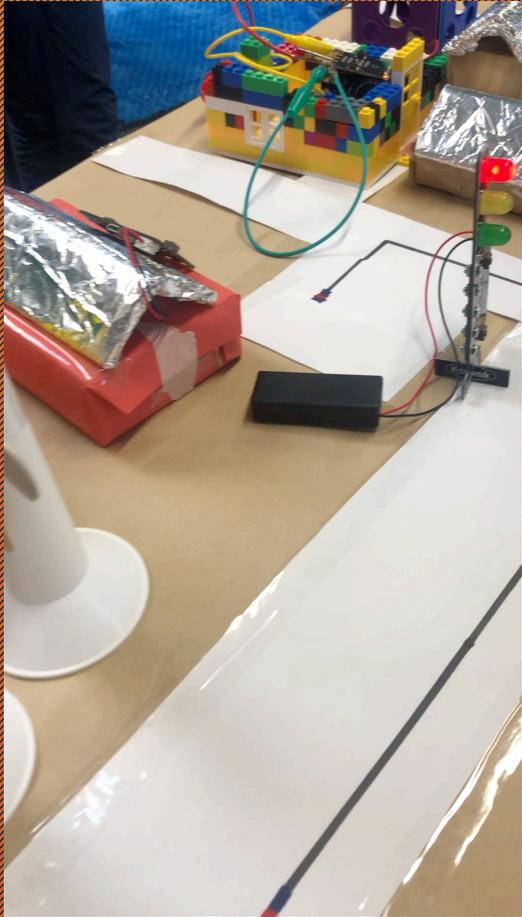   - Engineers from many different fields
    - Electricians
    - Innovators

What we learnt about engineering…

- Engineers are PROBLEM SOLVERS
- Engineers look at how things work, how to improve and how to build: they are STEM Professionals
- Initially we thought STEM Professionals were builders and coders but that's not all they do…
  - They imagine
  - They discuss
  - They prototype
  - They reflect
  - They innovate
  - They discover new ways
  - They listen and work with others

W4s network of the future: micro:town, Roseville
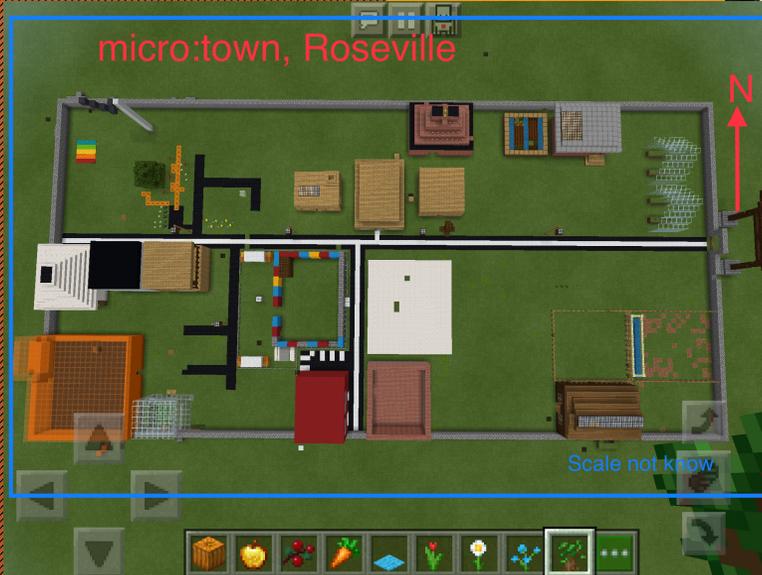
- micro:town is a place that is self sufficient and incorporates old world living with functioning farms (food and wind).
- We have a
  - Wind Farm
  - Green Houses
  - All amenities that a village needs
  - Western Power
  - And the usual; houses, hospitals, schools, traffic and street light
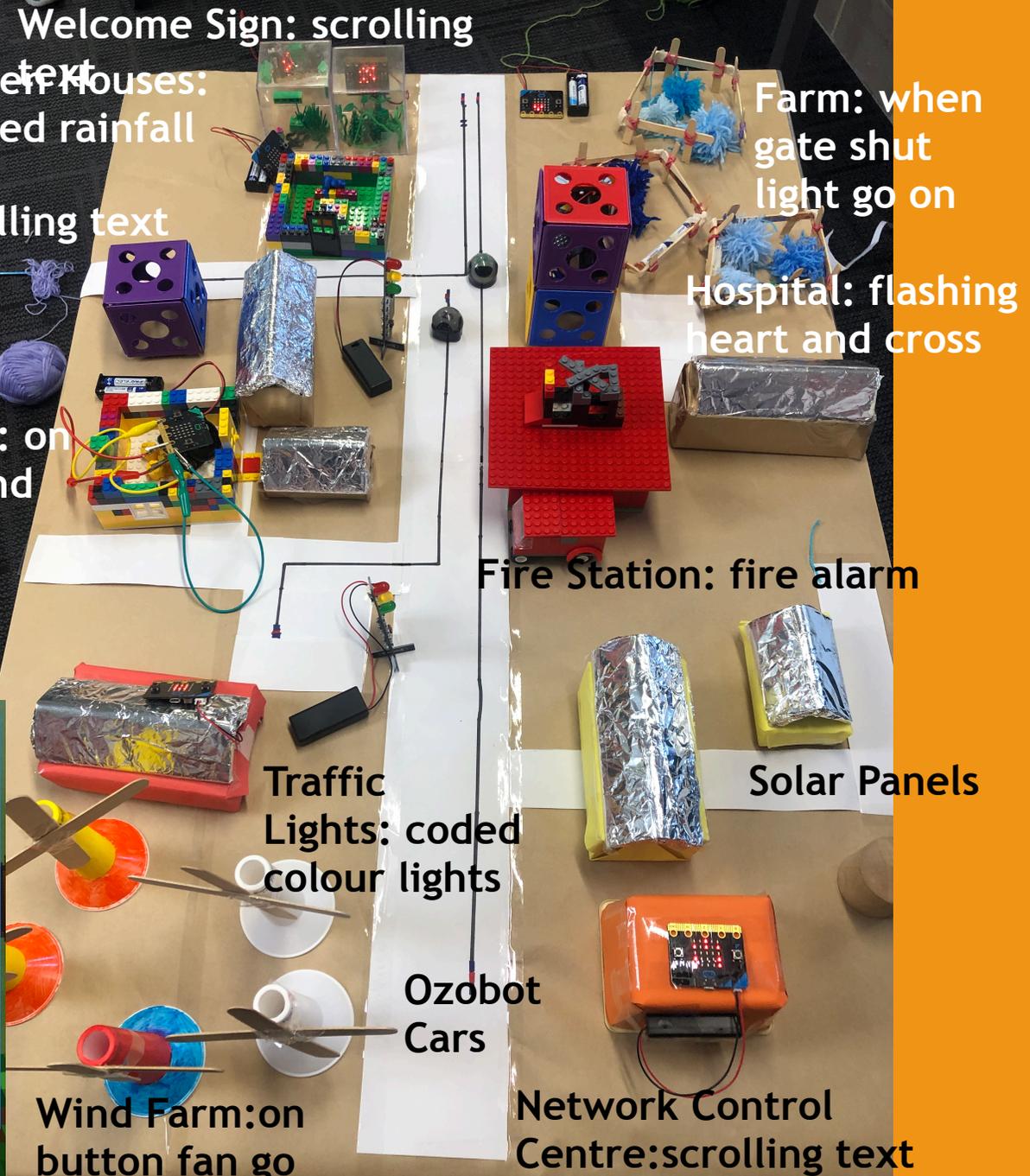
Welcome to W4s micro:town, Roseville

Welcome Sign: scrolling text

Green Houses: coded rainfall

Shops: scrolling text

Farm: when gate shut light go on

Hospital: flashing heart and cross

Press *PLAY* to walk through the town

Doorbell Houses: on button play sound

Minecraft Planning

micro:town, Roseville

N

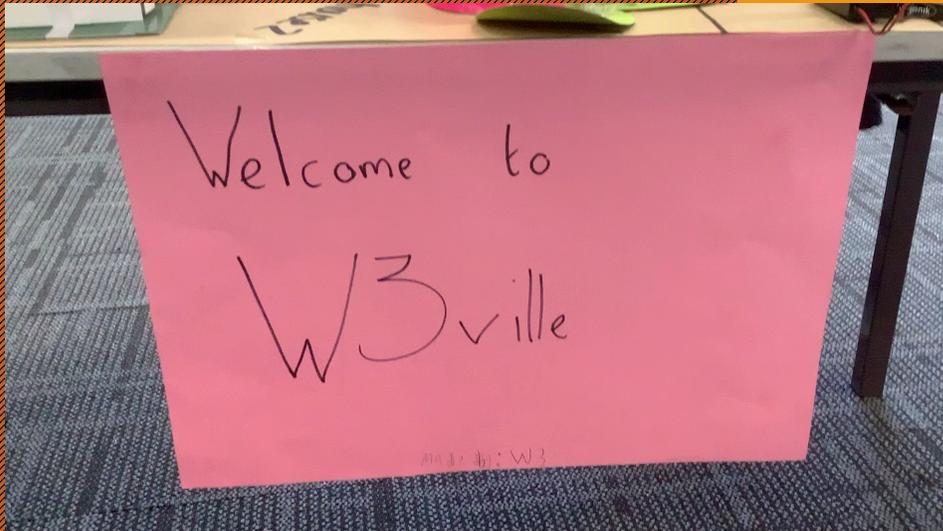Scale not know

Fire Station: fire alarm

Traffic Lights: coded colour lights

Solar Panels

Ozobot Cars

Wind Farm: on button fan go

Network Control Centre: scrolling text

Welcome to W3

Train : Lights and coded display of next train time

Greenhouse: coded thermometer

Houses: lights

Hospital: lights

Traffic lights: changing lights

Police Station: Lights

Solar panels

Ice cream van: coded song to play

Clock: coded chime

Park
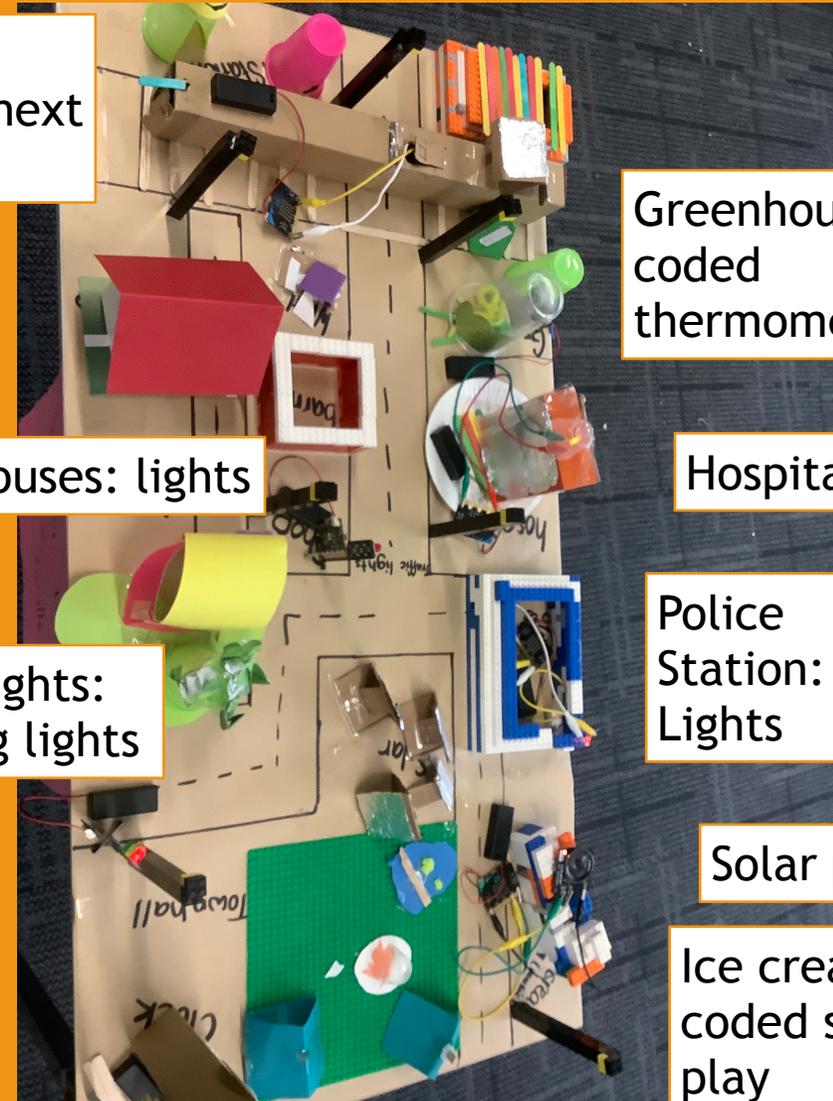
Our 5 favourite things about Circuit Breakers

1. Having fun while building our town
2. Being resilient and learning how to code
3. Using micro:bits spell words
4. Learning about Western Power and what they do for us
5. Being engineers and problem solving in different ways

Thank you...

Shops

Western Power

Matthew our Mentor