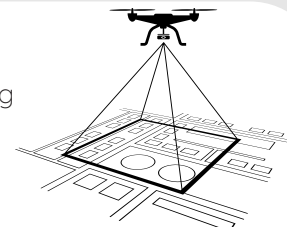


DRONE MAPPING

This activity delves into 3D mapping using cutting-edge technology, offering participants insights into drone operation and data collection techniques.



CAREER PATH

Demand for drone services in communities is increasing throughout Australia. Drone operators can be found working in places like government agencies, local councils, surveying organisations and universities.

F1 LINK

Interpreting photographic images in a way that can provide information about the surroundings.

THE ACTIVITY

STEP 1

Select an available image on the table.

STEP 2

Using the image of Country selected, design and place a Formula 1® racetrack using whiteboard markers on the laminated image.

Predict: What does a Formula 1® track need to include?

STEP 3

A racecar track has to include: - A start/finish line - Straight - Right hand and left hand turns - A chicane - A pit area - It has to be flat - It cannot go under or over landmarks.

Observe: What features did you observe that made your track easy or difficult to draw?

SCIENCE KNOWLEDGE

Drone services are increasing in demand across various sectors, particularly in Indigenous communities. Imagery taken by drones can highlight connections to songlines, emphasising the role of technology in preserving cultural landscapes and providing pathways into STEM for First Nations youth.

DEADLY CONNECTION

Interpreting photographic images engages us in the real-world applications of mapping technologies. It mirrors the intricate paths of songlines and the Indigenous cultural significance and considerations of traversing the landscape and travelling across Country.

STEP 4

Drones use cameras, as well as GPS and other navigational tools, to assist with mapping and surveying. We can use Computer Assisted Design (CAD), or simulation software to try designs and features before building anything. We can also use traditional knowledge of the land and navigational aids from stars to get where we need to go.

Explain: Based on what you have learnt here, what other tools can we use to help us navigate through the country, or build racetracks?

