



Loreto College Coorparoo

Semester 1 2021

YEAR 7 / Technology: Ideas & Innovation

Student		Teacher	Mr Wright
Issued	1/2/2021	Due Date	7A Mon 15 th March P5
Unit	Robots & Drones		

Conditions			
Technique	PDF Booklet + Practical demonstrations		
Duration	6 Weeks		
Mode	Project Based Learning	Length	
Individual/ group	Individual	Other	
Resources available	Dig Tech Portal, Drones, Jimu Robots, Work Booklet, Chromebooks, iPads		

Assessment Dimensions	A+	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	E+	E	E-
1. Knowledge & Understanding															
2. Processes & Production Skills															

Authentication strategies
The teacher will provide class time for task completion.
The teacher will conduct interviews or consultations with each student as they develop the response.
Student progress will be documented and copies of student digital responses collected at the checkpoints.

CRITERIA SHEET

	A	B	C	D	E
The folio of a student's work has the following characteristics:					
K & U	comprehensive explanation of how the features of Robotics impact on designed solutions and influence design decisions	detailed explanation of how the features of Robotics impact on designed solutions and influence design decisions	explanation of how the features of Robotics impact on designed solutions and influence design decisions	partial explanation of how the features of Robotics impact on designed solutions and influence design decisions	statements about how the features of Robotics impact on designed solutions and influence design decisions
P & PS	systematic testing, modification and proficient implementation of Robot and Drone coding	reliable testing, modification and effective implementation of Robot and Drone coding	testing, modification and implementation of Robot and Drone coding	partial testing or modification and partial implementation of Robot and Drone coding	fragmented testing or modification or implementation of Robot and Drone coding

Context

You will be learning to drive and fly Robots and Drones and also how to program Drones and Robots. Programming is sometimes called Coding and involves using a programming language to give commands to devices such as Robots. The coding language you are going to be using is called **Blockly**.

You are going to be using Jimu Astrobot & Rover Robots and Tellos Drones.

To successfully program these devices you are going to write Blockly code using the **Jimu Robot App**, **Tynker** and other apps. You will also be using Android Chromebooks and iPads.

Task

You are to complete:

- Rover Coding Challenge Tasks (*Robot & Drone Workbook*)
- Astrobot Coding Tasks (*Robot & Drone Workbook*)
- Drone Coding Challenge Tasks (*Robot & Drone Workbook*)
- Research Task (*Word document*)

CHECKPOINTS

Week 3 of 6 — progress check (Rover Code)

Week 5 of 6 — progress check (Drone Code)

Week 6 of 6 — progress check (Research Task)

To complete this task, you must:

Use the resources available to you on the Technologies Portal. These can be found at:

http://dt.loreto.qld.edu.au/7_II/u1_robots_drones/1_intro.html

ETHICAL SCHOLARSHIP DECLARATION – Robots & Drones Assessment

I, _____, confirm and acknowledge that the work produced in this assessment piece, including coding, is my own. Any words/phrases that I have used from other sources have been referenced and acknowledged.

Signed: _____ Date: _____