



Boorowa Central School

Excellence through Respect, Responsibility and Participation

Assessment Task Notification

All tasks should be clearly outlined in the notice and give information pertaining to the nature of the task, the outcomes being assessed and the marking schedule giving individual component weightings.

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| Teacher: Mr A Corcoran | Course: Stage 5 STEM |
| Task and Number: 4- Drone Project | Task Weighting: 30% |
| Date Issued: 27th October 2020 | Date Due: 13th November 2020 |
| Syllabus component: Aerodynamics | |
| Syllabus outcomes being assessed: The Student: 5.1.1 Develops ideas and explores solutions to STEM based problems 5.1.2 Demonstrates initiative, entrepreneurship, resilience and cognitive flexibility through the completion of practical STEM based activities 5.4.1 Plans and manages projects using an iterative and collaborative design process 5.4.2 Develops skills in using mathematical, scientific and graphical methods whilst working as a team 5.5.1 Applies a range of communication techniques in the presentation of research and design solutions 5.5.2 Critically evaluates innovative, enterprising and creative solutions | |
| Description of task: Your task is to use the Tello Drone to complete obstacle courses of your design. The project will assess you skills in both programming the drone as well as free flying it The task is split into the designing and flying of three courses Course One – Programmed course – for this course you will need to program your drone using Droneblocks to complete a mission of our choosing, missions with higher complexity will be rewarded with higher marks. Course Two – Obstacle Course – for this part you will design an obstacle course that you should be able to complete in around 2 minutes. The course should be challenging but achievable. You will be assessed on both your free-flying skills and your course design. Course Three – Free flying speed course for this part you will design a speed course that you should be able to complete in less than 1 minute. The course should be challenging but achievable. You will be assessed on both your free-flying speed skills and your course design. | |
| Submission of Task requirements: There are 5 parts for the marking of this task Part 1 – Design Brief, this section includes research and designs of your 3 courses and explanations of what you want the drone to do. Maps that are annotated are expected Part 2 – Coding screenshot – A screenshot for the coding you use for Course 1 Part 3 – Programmed course completion Part 4 - Obstacle Course completion Part 5 - Free flying speed course completion | |

Note: If a student is absent for an assessment task or fails to submit a task when it is due, then a medical certificate or other acceptable explanation must be presented on the first day the student returns to school or a zero mark is awarded.