ORANGE HIGH SCHOOL

ASSESSMENT TASK NOTIFICATION

Subject	Year 7 Digital Technology
Topic	Crack the Code
Class Teacher	Campbell/ Wait/ Carroll
Head Teacher	D. Wait
Year	7
Date Given	Week 2
Date Due	Week 4
Weighting	20%

The final stage of Crack the Code is to design and create a control system using an Arduino board and electronic components and create an appropriate housing. Written components completed on Google Site

Part 1 <u>**Project management**</u> (Completed on Google Site)

- ➢ Time/action plan and Finance planning completed

- ➢ Flowchart and pseudocode sequenced correctly

Part 2 <u>**Coding and function**</u> (Completed on Google Site)

- ➢ Copy of code provided.

- ➢ Screenshots of error checking and adjustments made

- ➢ Design project code functions as intended

Part 3 <u>**Physical electronics**</u> (Physical construction of electronics and housing)

- ➢ Electronic circuit is fault free and constructed correctly

- ➢ Project is housed in an appropriate case/housing which is constructed to reflect the purpose of the design.

Part 4 <u>**Final Evaluation**</u> (Completed on Google Site)

- ➢ Detailed evaluation of design success and design improvement

Failure to follow the above procedures may result in a zero award.
The policies and procedures that are outlined on the ROSA booklet will be followed regarding the non-completion of assessment tasks.

Common grade scale Stage 4 TAS
Task mark allocation

A 20-19	The student has an extensive knowledge and understanding of the content and can readily apply this knowledge. In addition, the student has achieved a very high level of competence in the processes and skills and can apply these skills to new situations.
B 17-15	The student has a thorough knowledge and understanding of the content and a high level of competence in the processes and skills. In addition, the student is able to apply this knowledge and these skills to most situations.
C 14-11	The student has a sound knowledge and understanding of the main areas of content and has achieved an adequate level of competence in the processes and skills.
D 10-6	The student has a basic knowledge and understanding of the content and has achieved a limited level of competence in the processes and skills.
E 5-0	The student has an elementary knowledge and understanding in few areas of the content and has achieved very limited competence in some of the processes and skills.

Outcomes Assessed

❑ designs, communicates and evaluates innovative ideas and creative solutions to authentic problems or opportunities TE4-1DP

❑ plans and manages the production of designed solutions TE4-2DP

❑ designs algorithms for digital solutions and implements them in a general-purpose programming language TE4-4DP

❑ explains how data is represented in digital systems and transmitted in networks TE4-7DI

❑ explains how people in technology related professions contribute to society now and into the future TE4-10TS

Focus area	Outstanding 18-20	High 15-17	Sound 11-14	Basic 6-10	Limited 0-5
Project management	Time/action and finance planning is extensive. Project is completed within time frame and financial limitations. Flowcharts follow a clearly logical sequence that solve the brief.	Time/action and finance planning appropriate for the design project. Flowcharts follow a clearly logical sequence with minor errors that solve the brief.	Time/action and finance planning has some appropriate aspects to the design project. Flowcharts follow a logical sequence with some errors that attempt to solve the brief.	Time/action and/or finance planning has some relevance. Flowcharts follow a sequence with some errors that may/may not solve the brief.	Time/action and/or finance plan has limited connection to the design project. Flowcharts have little or no relevance to the brief.
Coding and function	Coding is error free and works in the design project. Evidence of error checking and/or tinkering/adjustment present. Design project functions as intended to fulfil the brief.	Coding is error free and works with the MAAS. ThinkerShield. Evidence of error checking and/or tinkering/adjustment present. Design project partially functions as intended to fulfil the brief.	Coding appears correct, though does not perform as intended. Some evidence of error checking and/or tinkering/ adjustment present. Design project has little function as intended to fulfil the brief.	Coding has errors or is missing aspects to perform intended function. Little evidence of error checking and/or tinkering/adjustment present. Design project appears to not function as intended.	Coding is minimal and/or non-existent. No evidence of error checking or tinkering/adjusting of the code. Design project does not function.
Physical electronics	Project is housed in an aesthetically pleasing and appropriate case/enclosure. Electronic circuit appears to be fault free and well-constructed.	Project is housed in an aesthetically pleasing and appropriate case/enclosure. Electronic circuit appears to be fault free.	Project is housed in an aesthetically pleasing and/or appropriate case/enclosure. Electronic circuit appears to be fault free.	Project housing is in a partially completed aesthetically pleasing and/or appropriate case/enclosure. Electronic circuit appears to have identified faults.	Project is not housed but a circuit is present. Circuit has faults that are not identified.
Final evaluation	Evaluation is detailed, objective and descriptive outlining areas of success and areas for improvement if you made the project again and why.	Evaluation is descriptive outlining areas of success and areas for improvement if you made the project again and why.	Evaluation outlines areas of success and areas for improvement if you made the project again.	Evaluation outlines some areas of success and/or areas for improvement.	Evaluation mentions some areas of success or for improvement.