



# ORANGE HIGH SCHOOL

## ASSESSMENT TASK NOTIFICATION

<b>Subject</b>	Technology Mandatory Digital Technology
<b>Topic</b>	Crack the Code
<b>Class Teacher</b>	Bright, Walker/Whitfield, Campbell
<b>Head Teacher</b>	D. Wait
<b>Year</b>	7
<b>Date Given</b>	
<b>Date Due</b>	
<b>Weighting</b>	20%

**The final stage of Crack the Code is to design and create a control system using an Arduino board. Written components completed on Google Slide template provided in the google classroom.**

**Part 1 Project management** (Google Slide)

- ❖ Design ideas recorded, including researched ideas.
- ❖ Planning of final design solutions including sketches/drawings or pictures.
- ❖ Activities for development and construction planned out.

**Part 2 Coding and function** (Google Slide)

- ❖ Copy of code with pseudo code included.
- ❖ Screenshots of error checking and adjustments made.
- ❖ The code operating the design project functions as intended.

**Part 3 Physical electronics** (Physical construction of electronics and housing)

- ❖ Completed tinkercad
- ❖ Electronic circuits are 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 Final Evaluation** (Google Slide)

- ❖ Detailed evaluation of design success and design improvement .

**Non-completion of Task:**

If you know you are going to be away on the day that the task is due, you must make alternative arrangements with your teacher beforehand. If you are suddenly away on the day that the task is due, you must contact your teacher or Head Teacher on your return to school. Documentation will be required in both classes.

**Plagiarism:**

Plagiarism, the using of the work of others without acknowledgement will incur serious penalties and may result in zero award. Any cheating will also incur penalties.

**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

**Assessment Structure**

Students will work in groups of at least 2 and no more than 3 to design, plan and construct a successful project. Each group will produce a Physical project, constructed using physical electronics to operate the written code in an aesthetically pleasing housing.

Each individual student must complete a Google Slide recording the designing, planning, code production and final evaluation of the project.

<b>Focus area</b>	<b>Outstanding 18-20</b>	<b>High 15-17</b>	<b>Sound 11-14</b>	<b>Basic 6-10</b>	<b>Limited 0-5</b>
<b>Project management</b>	Design ideas and planning is extensive. Project is completed to a high standard. All stages of planning are completed with details.	Design ideas and planning appropriate for the design project. Project is completed All stages of planning are completed	Design ideas and plans have some appropriate aspects to the design project. Project is almost completed. All stages of planning have been attempted.	Design ideas and planning have some relevance. Most stages of planning have been attempted.	Design and final plan has limited connection to the design project. Some stages of planning have been attempted.
<b>Coding and function</b>	Coding is error free and works in the design project. Evidence of error checking and adjustment present. Pseudo code has been completed and is correct. 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 adjustment present. Pseudo code has been completed most is correct. 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 adjustment present. Pseudocode has been attempted but not completed. 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 adjustment present. Pseudo code has been written for a few lines. Design project appears to not function as intended.	Coding is minimal and/or non-existent. No evidence of error checking or adjusting of the code. Pseudocode has not been written. Design project does not function.
<b>Physical electronics</b>	Project is housed in an aesthetically pleasing and appropriate case/enclosure. Electronic circuits appear to be fault free and well-constructed. Project works as intended.	Project is housed in an aesthetically pleasing and appropriate case/enclosure. Electronic circuits appear to be fault free. Project works as intended.	Project is housed in an aesthetically pleasing and/or appropriate case/enclosure. Electronic circuits appear to be fault free. Project works with some glitches	Project housing is in a partially completed aesthetically pleasing and/or appropriate case/enclosure. Electronic circuits appear to have identified faults.	Project is not housed but a circuit is present. Circuit has faults that are not identified.
<b>Final evaluation</b>	Evaluation is detailed, objective and descriptive outlining areas of success and areas for improvement if the project was made again and why.	Evaluation is descriptive outlining areas of success and areas for improvement if the project was made again and why.	Evaluation outlines areas of success and areas for improvement if the project was made again.	Evaluation outlines some areas of success and/or areas for improvement.	Evaluation briefly lists some areas of success or for improvement.