# Rubrics: Templates

This rubric focuses on one specific criteria related to a content description. It is organised into ‘Quantity of knowledge’ and ‘Quality of understanding’.

| Achievement standard **[add relevant achievement standard text]** |
| --- |
|  | Quantity of knowledge | Quality of understanding |
| **[add relevant content focus from the achievement standard text]** | No evidence of understanding | [Modify to suit] Student is able to describe … | [Modify to suit] Student can … | [Modify to suit]  Student is able to ... | [Modify to suit] Student is able to … |
| Optional Score | 0 | 1 | 2 | 3 | 4 |
| [Add prompt for reflection] |

Page 1 of 3

Use this rubric for students who are creating an app or a game. This is an editable example.

| **Achievement standard (elements assessed)** | **Assessed through** | **Excellent** | **Satisfactory** | **Needs improvement** |
| --- | --- | --- | --- | --- |
| **[add relevant content focus from the achievement standard text]****Design** and **implement** modular programs, including an object-oriented program, using algorithms and data structures involving modular functions that reflect the relationships of real-world data and data entities.**Design** and **evaluate** user experiences and algorithms.**Test** and **predict** results and implement digital solutions. | Algorithm for game Testing process documentation | [Modify to suit] The student presents a range of algorithms that show correct branching, iteration and functions, as well as correct elements of structured algorithms (eg correct symbols/keywords). Their algorithms demonstrate the extent of the game and are clearly linked to the game plan. The student demonstrates testing of algorithms prior to programming. They find solutions and document them in the troubleshooting guide. | [Modify to suit] The student presents algorithms that show correct branching, iteration and functions, as well as mostly correct elements of structured algorithms (eg correct symbols/keywords). The student demonstrates testing of algorithms prior to programming. They find solutions and document them in the troubleshooting guide. | [Modify to suit] The student presents algorithms that have some correct features. |
| **[add relevant content focus from the achievement standard text]****Design** and **evaluate** user experiences and algorithms. | User interface of game Evaluation | [Modify to suit] The game is functional, accessible and usable. It has a clear, easy-to-use, well-designed user interface. Evaluation of the functionality, usability and user interface is thorough, clear and reflective. | [Modify to suit] The game is functional and usable. It has an easy-to-use user interface. Evaluation of the functionality and user interface is clear. | [Modify to suit] The game is usable. The user interface is okay but it is not easy to use. A description of the functionality, usability and user interface is provided with limited evaluative comments.  |
| **[add relevant content focus from the achievement standard text]****Design** and **implement** modular programs, including an object-oriented program, using algorithms and data structures involving modular functions that reflect the relationships of real-world data and data entities. | Completed game | [Modify to suit] The student demonstrates a range of control structures, and objects developed in Unity. Complex programming features are used within the game. | [Modify to suit] The student demonstrates a range of control structures, and objects developed in Unity. | [Modify to suit] The student attempts to demonstrate a sequence. |

Page 2 of 3

Use this rubric to assess project-based assessment tasks. Modify highlighted text to suit your students’ needs and project focus.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ***Achievement standard criteria*** | ***E*** | ***D*** | ***C*** | ***B*** | ***A*** |
| **[add relevant content focus from the achievement standard text]*****Managing a digital project*** | *Poor management of project* | *Needed reminders to stay on track* | *Used class GANTT timeline to manage project* | *Adhered to class GANTT timeline to manage project* | *Managed project independently in school & home time* |
| **[add relevant content focus from the achievement standard text]*****Defined & decomposed the problem in terms of functional requirements & restraints*** | *Poor understanding of the problem* | *Needed assistance to define & decompose the problem* | *Defined & decomposed problem. Completed sample projects to help understand restraints.*  | *Clearly defined & decomposed problem. Applied knowledge of function & restraints.* | *Excellent ability to define & decompose problem in terms of functional requirements & restraints.* |
| **[add relevant content focus from the achievement standard text]*****Designing:******Design user experiences*** | *Unfinished/unclear, unworkable design* | *Design communicates intentions; shows some necessary components; some consideration of end user* | *Design clearly communicates intentions; shows necessary components; demonstrates function. Consideration given to end user* | *Design clearly & accurately communicates intentions; is annotated & detailed; shows necessary components; demonstrates function. Focus on needs of end user.* | *Design is unique & innovative; clearly & accurately communicates intentions; is detailed; shows necessary components; meets needs of variety of end users* |
| **[add relevant content focus from the achievement standard text]*****Assembling hardware*** | *Construction is incomplete and/or inaccurate. No understanding demonstrated.* | *Components are assembled following instructions with teacher assistance.**Limited under-standing of how components work in the circuit.* | *Components are assembled safely & correctly, following the diagrams, with assistance as required. Demonstration of basic understanding of circuits.* | *Components are assembled safely & correctly with understanding of polarity and circuits. Some assistance may be given* | *Components are assembled independently, safely & correctly demonstrating understanding of electronics.**Hardware allows for automation of heat pump.*  |
| **[add relevant content focus from the achievement standard text]*****Programming:******Design algorithms incorporating branching & iterations***  | *Programming is incomplete, little effort* | *Program is copied from sample code with little understanding* | *Program works & allows for data collection & presentation, includes branching & iterations. Basic understanding of code* | *Program is efficient & annotated allows for data collection & presentation, includes branching & iterations. Good understanding of code* | *Programming is elegant & efficient. Excellent understanding. Programming allows for automation of heat pump* |
| **[add relevant content focus from the achievement standard text]*****Modifying:******Test & modify digital solutions*** | *Solution not tested* | *Solution tested, no consideration given to modifications* | *Solution tested & modified where required* | *Solution tested. Various modifications implemented.* | *Solution tested in different conditions. Modifications made to optimise performance & aesthetics.*  |

Rubric for student self-assessment and teacher assessment, courtesy of Cindy Thornton (Flinders Island)

Page 3 of 3

Page 3 of 3