**Year Level: 5 Teacher(s): Ms Hopkins**

**Subject: Technology – *Digital Technologies* Duration: 7 week**

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| PART 1: IDENTIFY CURRICULUM  |
| *Digital Technologies Processes and Production Skills* | ***Digital Technologies Knowledge and Understanding***  | *General capabilities* |
| Plan, create and communicate ideas and information, including collaboratively online, applying agreed ethical, social and technical protocols [(ACTDIP022)](http://www.australiancurriculum.edu.au/curriculum/contentdescription/ACTDIP022)ElaborationsDeveloping a set of ‘rules’ about appropriate conduct, language and content when communicating online, and using these rules as a basis for resolving ethical dilemmas.Using a range of communication tools to share ideas and information, for example participating in collaborative online environments.  | Examine the main [components](http://www.australiancurriculum.edu.au/glossary/popup?a=T&t=components) of common digital systems and how they may connect together to form networks to transmit [data](http://www.australiancurriculum.edu.au/glossary/popup?a=T&t=data) [(ACTDIK014)](http://www.australiancurriculum.edu.au/curriculum/contentdescription/ACTDIK014)Elaboration Investigating how the internal and external components of digital systems are coordinated to handle data, for example how a keyboard, central processing unit and screen work together to accept, manipulate and present data and informationDescribing digital systems as having internal and external components that perform different functions, for example external components for inputting data including keyboard, microphone, stylus; internal processing components including the central processing unit; external output components including speakers, projector, screen; and data and information storage components including cloud and external devices.  | *Literacy*Comprehending texts through listening, reading and viewing* Comprehend texts
* Navigate, read and view learning area texts
* Interpret and analyse learning area texts

Composing texts through speaking, writing and creating* Compose texts
* Compose spoken, written, visual and multimodal learning area texts

*Information and Communication Technology (ICT) Capability*Managing and operating ICT* Select and use hardware and software

Applying social and ethical protocols and practices when using ICT* Apply digital information security practices
* Apply personal security protocols

*Critical and Creative Thinking*Inquiring – identifying, exploring and organising information and ideas* Organise and process information
* Identify and clarify information and ideas

Generating ideas, possibilities and actions* Consider alternatives
* Seek solutions and put ideas into action

Reflecting on thinking and processes* Reflect on processes
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| PART 2: ASSESSMENT EVIDENCE  |
| Year Level Achievement Standard: By the end of Year 6, students will have had opportunities to create a range of digital solutions, such as games or quizzes and interactive stories and animations.In Year 5 and 6, students develop an understanding of the role individual components of digital systems play in the processing and representation of data. They acquire, validate, interpret, track and manage various types of data and are introduced to the concept of data states in digital systems and how data are transferred between systems. Students progress from managing the creation of their own ideas and information for sharing to working collaboratively. In doing so, they learn to negotiate and develop plans to complete tasks. When engaging with others, they take personal and physical safety into account, applying social and ethical protocols that acknowledge factors such as social differences and privacy of personal information. (Adapted from Australian Curriculum Assessment Reporting Authority) |
| Assessment Task(s): *Plan design and create a presentation displaying the rules of appropriate conduct online.* *Students will upload their presentation onto the class google account for assessing.* *Students write a detailed description about internal and external components of the computer used to make their presentation.* *Assessment Date:* *Lesson 5 and Lesson 7*Other Evidence of Learning: *Teacher Evaluative checklist to monitor progress and guide planning.* *Record of observations of exploration and identification of rules.**Student planning and design of presentation.**Participation in group and whole class collaborative discussions.*Feedback: *Conferencing with students to ensure that they have checked the rubric.* *Peer discussions about content that is important to be in the set of rules.* *Peer evaluation of presentations before presenting to the class.**Whole class discussions and exploration of appropriate conduct and the main components of a digital system.**Whole class feedback in regards to common misinterpretations of the rubric.* Self-assessment:Whole class individual reflections. For example, have we as a class covered the learning objectives for today? Are you as the learning confident in the area we are learning? (Students raise hand yes or no). Individual reflections where students assess themselves against a rubric. Checking the final presentation to the original plan, have you self-checked and are you happy with the amount of content you have embedded into your presentation. Can you justify the changes you made?  |

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| **PART 3: LEARNING AND TEACHING PLAN**  |  |
| **Teaching and Learning Sequence**  | **Differentiation:**  | **Resources** |
| **Lesson 1 – Rules for Appropriate Conduct Online** **Learning Objectives:** * Students define what appropriate online conduct means.
* Students individually create a list of rules for appropriate conduct online.
* Students discuss the importance of conducting appropriately online.
* Students evaluate their rules and create a combined list of rules.

**Sequence:**Students in pair collaboratively discuss what appropriate conduct online means. Students are divided into mixed ability groups and in five minutes list their definitions of appropriate online conduct on butcher’s paper (this can be in dot points or sentences). Students present their ideas to the whole class. Students watch an interactive PowToon which displays scenarios of inappropriate conduct. Students evaluate the PowToon scenarios and create a list of rules.Students discuss the rules in groups.Students discuss the rules as a whole class and come up with a set of rules that the whole class will use. Students discuss the importance of conducting ourselves appropriately online. Introduce Assessment Task: Create a presentation about the rules for appropriate conduct online. **Lesson 2 – Exploring programs for presentation making****Learning Objectives:** * Students are guided through draft planning on 3 programs, Microsoft PowerPoint, PowToon.
* Students explore program to reinforce and recap their knowledge on how to operate the programs.

**Sequence:**Students explore familiar programs as a whole class. Students are introduced to programs and are allocated to time to explore the programs to reinforce and recap on previous skills.Students are allocated time to ask questions after explore a program. Students are allocated 10 minutes on each program and 5 minutes to ask questions about the program, taking into consideration the ideas they have for their presentation.Students reflect on how confident they are using the individual programs. **Lesson 3 – Planning our presentations****Learning Objectives:** * Students select a program to make their presentation
* Students discuss the rubric as a whole class.
* Students plan their assessment

**Sequence:** Students select the program they will use to create their presentation. Students discuss the rubric as a whole class. Students plan their presentation in their technology books.**Lesson 4 – Making our presentations** **Learning Objective:** * Students create their presentations

**Sequence:** Students individually create their presentations. Students ask questions about programs if having trouble. **Lesson 4 – Students complete presentations and provide feedback to a peer.****Learning Objectives:** * Students complete presentation
* Students work with a peer and evaluate and reflect on representations.

**Sequence:**Students are reminded of assessment task and re- read assessment rubric. Students complete presentation for 20 minutes of the lesson. Students with a peer evaluate and reflect on representations for 10 minutes. Students take on what the peer has said and change their program if they feel they need to for 15 minutes. Students save their work on their school USB. Fast finishers can share their presentation with others that are finished. **Lesson 5 – Explore components of a computer.** **Learning Objectives:** * Students watch a presentation that discusses the components of a computer.
* Students explore the internet and gather information about internal and external components a computer uses to transmit data.
* Students discuss in groups the components used in the computers we use in the classroom.

**Sequence**Students read assessment rubrics. Students watch a presentation that outlines the four main components of a computer. Students research internal and external components of a computer. Students work in mixed ability groups and discuss what the computer components are and how the components worked when creating our presentations. **Lesson 6 – Writing a detail description of the four main components of a computer** **Learning Objectives:** * Students write a detailed description of the four main components of a computer system and how the four main components were utilised while creating our videos.
* An example is read to the students

**Sequence**Students use their booklets and write a detailed description about the main components of a computer.  | The learning experiences in this unit can be differentiated by increasing:Utilising peer collaboration and mentoringCater to different learning styles through the multimedia PowToon Differentiated support including guided discovery through questions, clarifying expectations. Small group task – peer and collaborative learning – see resources on weebly. Additional teacher aide support for students on Individual Curriculum Plans (ICP). Reinforcing and recap understanding Utilising peer collaboration and mentoringIndividual reflections as self-assessment and to check in. (Check-ins show the teacher where the students are in regards to knowledge and understanding).Additional teacher aide support for students on Individual Curriculum Plans (ICP). Additional teacher aide support for students on Individual Curriculum Plans (ICP). Differentiated support including guided discovery through questions, clarifying expectations. Explicit instruction on task expectations and requirements throughout the lesson. Additional teacher aide support for students on Individual Curriculum Plans (ICP). Whole class discussion to scaffold and consolidate knowledge and understanding of task sheet.Differentiated support including guided discovery through questions, clarifying expectation (Differentiation Map available on weebly resource). Utilising peer collaboration and mentoring. Fast finishers activity Peer support and evaluationReinforcing expectationsCatering to different learning styles through incorporating multimedia and individual research. Peer collaborationAdditional teacher aide support for students on Individual Curriculum Plans (ICP). Mixed ability groups, consolidating learning. Minimal support as it is assessment. Spelling support.  | [PowToon Video](https://www.powtoon.com/online-presentation/gjUTN8dERPP/year-5-6-appropriate-online/) Technology Booklets Pencils Assessment Task sheet Appendix 1Interactive White Board. Butchers paper, marker pens. IWB: Optional Programs that students are familiar with. * Microsoft PowerPoint
* PowToon

Students plan in their technology booklets. Computers with internet. Technology Booklets Pencil; eraserRubric Appendix 3 Computers with internet. Computers with internet and PowerPoint and PowToon available. Technology booklet .Computers with internet. Watch: [Introduction to Computers](https://www.youtube.com/watch?v=9HpLmgc9hlE) YouTube Video on the IWB. Computers with internet. Assessment Task Sheet Appendix 2 Lined paper, pencils. Computers with internet.  |

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| **PART 4: TEACHER REFLECTION ON THE UNIT PLAN**  |
| Identify what worked well during and at the end of the unit, including:* What worked well in this unit?
* What in the unit was difficult for students?
* How would you refine it?
* What trends and gaps in learning have you identified?
* How will you build on these learning experiences next term and beyond?

(Adapted from Queensland Curriculum and Assessment Authority) 2016. |

Appendix 1

Appropriate Conduct Online

Technology Assessment Task Sheet

Year 5

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

You will:

1. Plan and create a detailed, labelled presentation that highlights the rules for appropriate conduct online in your Technology Book.
2. Create a presentation in class time using hardware and software you choose. The software you can choose from is Microsoft PowerPoint or PowToon (Or if there is a program you would prefer to use, have a discussion with the teacher).
3. A peer will evaluate your presentation and you will evaluate theirs.
4. Upload your profile to the class google account.

Appendix 2

Main Components of a Computer

Technology Assessment Task Sheet

Year 5

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

You will:

1. Write a detailed description about the four main components of a computer.
2. Write a description about the four main components and how they enabled you to create your presentation.

Appendix 3

Year 5 Name: Date:

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| Learning Area: Technology: Digital Technology Assessment Task:  |
| Description: | Students plan and design a presentation highlighting the rules for appropriate online conduct. Students write a detailed description describing the main components of a computer they used to make their presentation.  |
| Criteria | **A** | **B** | **C** | **D** | **E** |
| Process and Production Skill Students plan, create and communicate ideas and information, through a presentation highlighting the rules for appropriate online conduct. | Student planned a very detailed, labelled plan that communicated and provided information in the presentation about all the rules of appropriate online conduct.  | Student planned a detailed, labelled plan that communicated and provided information in the presentation about all the rules of appropriate online conduct. | Student planned a minimal detailed, plan that was not labelled and to a satisfactory lever communicated and provided information in the presentation about all the rules of appropriate online conduct. | Student did minimal planning and communicated information in the presentation about a few rules of appropriate conduct online.  | Student listed rules of appropriate online conduct but did not plan or communicate these rules in the presentation.  |
| Technology UnderstandingStudent describes the four main components of computer and how the computers main components enabled them to create a presentation.  | Student explicitly described the four main components of computer and highlights all of the four main components that enabled them to create a presentation.  | Student described the main four components of computer and highlights all of the four main components that enabled them to create a presentation.  | Student describe some of the four main components of computer and highlighted some of the four main components that enabled them to create a presentation.  | Students described less than three main components of computer and highlighted less than three of the main components that enabled them to create a presentation. | Students described the main components but could not describe how the components enabled them to create a presentation.  |
| Literacy Student comprehends texts through listening, reading and viewing.  | Student independently comprehended texts through listening, reading and viewing and understood content to a very high standard.  | Student independently comprehended texts through listening, reading and viewing and understood content to a high standard. | Student with support comprehended texts through listening, reading and viewing and understood content to a satisfactory standard. | Student was completely supported with comprehending texts through listening, reading and viewing. Student even though supported gained a minimal understanding.  | Student did not comprehend texts through listening, reading and viewing even when completely supported by the teacher and teacher aide.  |
| Information Communication Technologies Student selects and use hardware and software to make their presentation taking into consideration digital information security practices and student applies personal security protocols.  | Student independently selects and use hardware and software to make their presentation taking into consideration digital information security practices and student applies personal security protocols.  | Student selects and use hardware and software to make their presentation taking into consideration digital information security practices and student applies personal security protocols and asks minimal questions about the software and hardware.  | Student required support in selecting and using hardware and software to make their presentation. Student required prompting aboutconsiderations to digital information security practices and security protocols. | Student was completely support in selecting and using hardware and software to make their presentation. Student displayed a minimal understanding aboutconsiderations to digital information security practices and security protocols. | Student was completely support in selecting and using hardware and software to make their presentation. Student had no understanding aboutconsiderations to digital information security practices and security protocols. |
| Comments:  |

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