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| MakeCode Totems/Dreamings Unit Plan Corinda SHS, Year 7/8, Digital Technology |

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| Unit title | Year level | Timing and duration of unit |
| Make Code Arcade Totem Game | Year 7 | 4 Weeks |

## Unit outline and assessment

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| Unit description | Achievement standard to be assessed | Assessment details |
| Rational:• To learn how to use games to educate and entertain people about aboriginal culture.Inquiry Questions:• What are games?• What types of games exist?• Can two games "be the same" but look different?• How can games be educational?• What are Totems/Dreamings & why are they important? | By the end of Year 8 students develop and modify creative digital solutions, decompose real-world problems, and evaluate alternative solutions against user stories and design criteria. Students acquire, interpret and model data with spreadsheets and represent data with integers and binary. They design and trace algorithms and implement them in a general-purpose programming language. Students select appropriate hardware for particular tasks, explain how data is transmitted and secured in networks, and identify cyber security threats. They select and use a range of digital tools efficiently and responsibly to create, locate and share content; and to plan, collaborate on and manage projects. Students manage their digital footprint. | Assessment title: Game DesignTechnique: ProjectConditionsWritten responses including graphical representations 200–300 words.Description of assessmentAt the start of the game players will be told information about a Totem/Dreamings and instructions on how to play the game. They will then need to complete the game to find the Totem/Dreamings.The core of the game is up to the player but needs to be culturally sensitive and at the end of the game players will find the Totem. | Due date/sTerm 2Week 10 |

## Curriculum focus

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| Content descriptions |
| Strand — Knowledge and understanding | Strand — Processes and production skills |
| None | **Generating and designing**design algorithms involving nested control structures and represent them using flowcharts and pseudocode(AC9TDI8P05)trace algorithms to predict output for a given input and to identify errors(AC9TDI8P06)design the user experience of a digital system(AC9TDI8P07)generate, modify, communicate and evaluate alternative designs(AC9TDI8P08)**Producing and implementing**implement, modify and debug programs involving control structures and functions in a general-purpose programming language(AC9TDI8P09)**Collaborating and managing**select and use a range of digital tools efficiently, including unfamiliar features, to create, locate and communicate content, consistently applying common conventions(AC9TDI8P11)select and use a range of digital tools efficiently and responsibly to share content online, and plan and manage individual and collaborative agile projects(AC9TDI8P12) |

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| General capabilities |
| Intercultural understanding | Students will be learning about how to make software that is culturally sensitive and why that is important. |
| Digital literacy | Students will be learning how to design and build software. They will learn about events and how to use software ban be used to teach concepts. |

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| Cross-curriculum priorities |
| Aboriginal and Torres StraitIslander histories and cultures | This unit will encourage students to research more about Totems/Dreamings and then share this information with others. |

## Sequence of teaching and learning

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| Week no. | Learning intentions and success criteria | Key teaching and learning experiences, including opportunities for feedback | Adjustments | Resources |
| 1 | LO: To understand key skills needed to make games.SC:I can explain why I should make a small game.I have completed 1 Beginner Skillmap | Watch the following videos to introduce game design:* Making your first game: How to Start
* Making your first game: Minimum Viable Product

Then go to Make Code Arcade and complete 1 or 2 Beginner Skillmaps. | N/A | <https://www.youtube.com/watch?v=z06QR-tz1_o><https://www.youtube.com/watch?v=UvCri1tqIxQ><https://arcade.makecode.com/> |
| 2 | LO: To understand what a Totem is and why it is important that more people are aware of them.SC:I know who my local tribe is.I can identify the totem of my local tribe. | Best OptionOption 1: Invite an elder to come and help teach this lesson.Alternative OptionOption 2: * Introduce Totems using the video on the right. Make sure that students are aware that everyone has multiple totems. Not just a single totem.
* Then share the story (link to the right)
* Ask students to use the map to find out who’s land they are on. See if that group has a website with additional information.
* Read the “Aboriginal Totems” book to the class. It was written by another student.
* Try to find out the totems of the local group. Do some more research and pick which one you would like to include in your game.
* Extension: Learn about Moiety (link)
 | N/A | Totems: <https://www.youtube.com/watch?v=vpHG9V2qJiE>Story:<https://www.youtube.com/watch?v=3gfOFgpyEPc>Map of Indigenous Australia:<https://aiatsis.gov.au/explore/map-indigenous-australia> Aboriginal Totems Book:<https://www.envirostories.com.au/wp-content/uploads/2014TTT/Totems/ES2014-CTLLS-Totems-WEB.pdf>Moiety:<https://www.evolves.com.au/aboriginal-moiety/>  |
| 3 | LO: To develop key skills needed to make games.SC:I have completed 1 Next Level Skillmap | Go to Make Code Arcade and complete 1 or 2 Next Level Skillmaps. |  | <https://arcade.makecode.com/> |
| 4-6 | LO: To extend an existing game and improve it.SC:I can add instructions to my game.I can add information about Totems to my game.I can add a Totem to my game at the end. | Students select one of the tutorials they have already completed, or they can created a new original game.They need to make sure that they:* add instructions to the start of the game to explain how to play it
* add information about the totem they selected
* add the totem at the end of the game
* change the game so that it is more related to the totem and people group selected.

There are a few important things to be aware of:* The player cannot be the Totem.
* The player cannot interact with the Totem.
* The Totem cannot talk to the player.
 |  | <https://arcade.makecode.com/> |
| 7 | LO: To give feedback to peers on how to improve the game.SC:I can receive feedback from peers.I can give feedback to peers. | Ask students to open their game and notepad.In Notepad they need to write: WWW and EBI.Arrange the screens so that both can be seen at the same time.Students need to go to at least 3 other students and play the games. Provide good feedback and what needs to be improved. Make sure the feedback is saved. For the second half of the lesson improve the games based on feedback. |  | WWW (What Went Well):EBI (Even Better If): |
| 8-9 | LO: To improve the game and finish the report.SC:I can finish my game.I can finish my report. | Students have time to finish their game and finish their report. |  | <https://arcade.makecode.com/> |

## Evaluation and quality assurance

Schools should ensure unit plans are reviewed and refined regularly to inform future planning, teaching, learning and assessment.

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| **Prior to implementation,** quality assure the unit to ensure assessment is valid, accessible and reliable, and that curriculum, teaching and learning is aligned with assessment.Determine the processes for moderation of assessment.[Insert quality assurance processes] |
| **During and at the end of the unit,** reflect on the teaching, learning and assessment to make refinements for the future.Evaluate how the teaching, learning and assessment provided opportunities to develop depth and breadth of student learning. Consider:* + Was the teaching, learning and assessment effective?
	+ Are there opportunities to improve the effectiveness of the teaching, learning and assessment? If so, where and how?
	+ Were there any common student misconceptions that need, or needed, to be clarified?
	+ How does student progress and achievement in this unit affect the planning of subsequent units within the year level/band?

[Insert evaluation] |

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