Learn to Code with Commands – Unit Plan

Based on delivery via the OneNote. The sequence of time will vary on the year level.

Week	Learning Intention	Activity	Resources
1	Understand how an IF Statement relates to a Trigger in Minecraft	Starter: Trigger Pairs (2 packs required) Place students in pairs or small groups with their pack of coding cards. Ask students to separate their IF (Trigger) cards from each pack, shuffle them and randomly lay the cards on the ground face down. Taking turns each student turns over two cards hoping for a match. If they don't match, they turn the cards back over; then it is the next player's turn. If a player gets a match they keep going. The player with the most matches wins. Triggers OneNote Sections – Pages: • Commands • Command Block Panel • IF Statement Triggers Explore the three trigger sections. Students access the video example in OneNote and complete the checklist whilst following along in the Minecraft Training World.	• Coding Cards • OneNote or Word Document • Download Minecraft Training World and Share with Students. • Video Tutorial
2	Develop simple IF, THEN statements to create algorithms to execute a Give, Teleport and Effect Command.	Allow students to work through the three beginner sections in the OneNote. Students access the reading and video examples in the OneNote whilst following along in the Minecraft Training World. Students complete the knowledge check for all three sections. You may also like to distribute the Microsoft Forms Knowledge Check. Finish this section by completing the Learn to Code with Commands Beginners PowerPoint as a class. Students will need their coding cards to participate.	• Coding Cards • OneNote or Word Document • Minecraft Training World • Microsoft Forms Knowledge Check. • Learn to Code with Commands Beginners PowerPoint

Week	Learning Intention	Activity	Resources
3	Develop intermediate IF, THEN statements with options to create algorithms to execute a Summon, Fill and Title Command.	Allow students to work through the three intermediate sections in the OneNote. Students access the reading and video examples in the OneNote whilst following along in the Minecraft Training World. Students complete the knowledge check for all three sections. You may also like to distribute the Microsoft Forms Knowledge Check. Finish this section by completing the Learn to Code with Commands Intermediate PowerPoint as a class. Students will need their coding cards to participate.	• Coding Cards • OneNote or Word Document • Tutorial Videos • Minecraft Training World • Microsoft Forms Knowledge Check. • Learn to Code with Commands Intermediate PowerPoint
Stop here for early years students (Year 3 – 4)		Have students apply what they have learned to a mini-game. You may choose to theme the game based on another learning area. Start by designing the game on paper with drawings of the game and a list of algorithms written to explain what will happen to the player. Students can choose to build in a desired bio word or use the build areas in the training word.	Small Build Area – Teleport to 493 32 197 Large Build Area – Teleport to 649 32 251
4	Develop Advanced IF, THEN statements with TRUE/FALSE Statements to create algorithms to execute a Testfor, Testforblock, Testforblocks and Gamerule Command.	Allow students to work through the four advanced sections in the OneNote. Students access the reading and video examples in the OneNote whilst following along in the Minecraft Training World. Students complete the knowledge check for all four sections. You may also like to distribute the Microsoft Forms Knowledge Check. Finish this section by completing the Learn to Code with Commands Intermediate PowerPoint as a class. Students will need their coding cards to participate. Additional Activity: Have student challenge their knowledge by using their coding cards to play Code Crafter.	• Coding Cards • OneNote or Word Document • Tutorial Videos • Minecraft Training World • Microsoft Forms Knowledge Check. • Learn to Code with Commands Advanced PowerPoint • Code Crafter Minecraft Card Game
5 (Suitable for 5 – 7)	Understand how to design algorithms involving complex branching and iteration	Starter: Have student challenge their knowledge by using their coding cards to play Code Crafter. Allow students to work through the three branching sections in the OneNote. Students access the reading and video examples in the OneNote whilst following along in the Minecraft Training World. There is no knowledge checks in these sections as students are required to complete more complex in-game activities. You may choose to ask students to explain what they are designing or present to the class how they solved each task. Students complete the Microsoft Forms Knowledge Check.	• Coding Cards • OneNote or Word Document • Tutorial Videos • Minecraft Training World • Microsoft Forms Knowledge Check. • Code Crafter Minecraft Card Game

Week	Learning Intention	Activity	Resources
6 - 7	Develop gaming scenarios implemented via a general-purpose programming language.	Students apply foundational knowledge from previous weeks and display the triggers and commands as block code. The following commands are converted to block coding: • Give • Effect • Summon • Fill • Title • Testforblock • Tesforblocks • Detect Allow students to work through the three MakeCode Beginner sections in the OneNote. Students access the reading and video examples in the OneNote whilst following along in the Minecraft Training World. Students complete the knowledge check for all three sections.	• Coding Cards • OneNote or Word Document • Tutorial Videos • Minecraft Training World • Microsoft Forms Knowledge Check. • Learn to Code with Commands Intermediate PowerPoint
8 - 10	Develop a functioning mini-game that helps solve a problem.	Students must design and build a mini-game that helps to find a solution to a problem. You may choose to theme the game based on another learning area or a local/social justice issue. Start by designing the game on paper with drawings of the game and a list of algorithms written to explain what will happen to the player. Students can choose to build in a desired bio word or use the build areas in the training word. **Assessment:** • The form the assessment takes will depend on the unit's learning intentions and the ability to integrate the unit with other subject areas. • Assessment does not need to be one big task. It can consist of/include all of the components/stages made available in this program along the way. • The final product (the game) is probably less important than the journey to get there. • Evidence of this can be gathered in OneNote	Small Build Area – Teleport to 493 32 197 Large Build Area – Teleport to 649 32 251