St Anthony of Padua Catholic Primary School

Computing Medium Term Plan – Year 3 – Summer 1– Programming with Robots

Lesson	Driving Question	Activity	Assessment
1	What are robots?	1. Set up Seesaw class. 2. Introduce the lesson. 3. Discuss technology. 4. Discuss robots. 5. Create robot poster. 6. Model saving work and sharing PDF to Seesaw. Discuss why we do this. 7. 'TAG - Tell me what you think!' worksheets. 8. Self assessment and computing vocabulary.	(MS) I can troubleshoot when something doesn't appear to be working with my device. (MS) I can discuss different types of digital content and file types. (CS) I can explain how the internet works. (CS) I can explain how a search engine works. (IT) I can create with technology. E.g. Video, animation, 3D. (IT) I can improve the quality and presentation of my work.
2	How do you program a robot?	1. Introduce the lesson. 2. Watch short video clips about programs and discuss. 3. Model use of Lightbot app/website. 4. Take screenshots to upload to Seesaw and use microphone tool to record answers to set questions. 5. 'TAG - Tell me what you think!' worksheets. 6. Self assessment and computing vocabulary.	(MS) I can troubleshoot when something doesn't appear to be working with my device. (CS) I can use logical reasoning to predict and correct errors in algorithms and programs. (CS) I can plan, create and debug programs.
3	Would you trust a driverless car?	1. Introduce the lesson and driverless cars. 2. Discuss "what are algorithms?". 3. Unplugged task "Driverless Car Algorithms". 4. Create a flowchart online. 5. Take photo and video for Seesaw. Have the children comment. 6. 'TAG - Tell me what you think!' worksheets. 7. Self assessment and computing vocabulary.	(MS) I can troubleshoot when something doesn't appear to be working with my device. (CS) I can use logical reasoning to predict and correct errors in algorithms and programs. (CS) I can plan, create and debug programs.
4	Can you create a driverless car simulator in Scratch?	1. Sign up for a Scratch Teacher account. 2. Create children's accounts and get class signed in. 3. Discuss online safety, passwords and personal information. 4. Model using Scratch. 5. Model creating sprite and graphics. 6. 'TAG - Tell me what you think!' worksheets. 7. Self assessment and computing vocabulary.	(MS) I can troubleshoot when something doesn't appear to be working with my device. (DL) I know who I should be sharing information with and how to keep my data secure. (DL) I understand the term identity and I can take appropriate measures to protect my own online identity. (CS) I can plan, create and debug programs.
5	Can you create a program for driverless car simulator in Scratch?	1. Open Scratch files from last week. 2. Follow the step-by-step guide in the Teacher's Handbook and support the children in creating a driverless car program. 3. 'TAG - Tell me what you think!' worksheets. 4. Self assessment and computing vocabulary.	(MS) I can troubleshoot when something doesn't appear to be working with my device. (CS) I can plan, create and debug programs. (CS) I can use decomposition to help me solve computing problems. (CS) I can use logical reasoning to predict and correct errors in algorithms and programs.
6	Can you debug a program?	1. Open Scratch file "Children - Debug Challenge.sb3". 2. Introduce "The Driverless Car - Debugging Challenge!" 3. Follow the step-by-step guide in the Teacher's Handbook and support the children in debugging a driverless car program. 4. 'TAG - Tell me what you think!' worksheets. 5. Self assessment and computing vocabulary.	(MS) I can troubleshoot when something doesn't appear to be working with my device. (CS) I can plan, create and debug programs. (CS) I can use decomposition to help me solve computing problems. (CS) I can use sequence, selection, repetition and variables in programs. (CS) I can work with various forms of input and output. (CS) I can use logical reasoning to predict and correct errors in algorithms and programs.