Blessed Sacrament - Computing across the Curriculum Long Term Planning Map - [Y1]

This is your long-term overview for Computing. Please add to or amend this plan through the year. Underneath each section are the key skills for that area of computing. These can be assessed using the Assessment tracker spreadsheet. Refer to the Skills Sheets for more guidance in this section and essential steps for teaching. More activities and suggestions can be added as other subject areas are added to the plan.

T = Tutorial Available

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topics	Hot and cold places		Then and now		What is in the UK?	
Science	Animal features Fact files Setting descriptions Animal classifications Human and animal characteristics		Winter investigations Cookery		Materials uses and properties Spring and Summer investigations	
Literacy					Retelling familiar stories	
History			Toys The great fire of London Fire brigade changes over time Focus will be on Tudor/Victorians/80's/now Kings and Queens Clothing Houses		Queen Elizabeth II	
Geography	World map placement of countries Similarities and differences of climate/environment/species Autumn investigations Weather		Weather		Countries, cities and landmarks in the UK Liverpool landmarks Clay landmarks Local geography Building features	
Music			Music from the past and now			
Art / DT	Colour mixing Sketching of different animals and leaves				Sketching Design and make a handbag	

Computer Science

Control and Programming	**Code-a-pillar app** Sequencing directions. Drag on the directional commands and tap the caterpillars head to guide the sprite through increasingly different levels. **CS1.2,CS1.3**	**Jam Sandwich** Children give instructions to a teacher robot to make porridge or a sandwich. See link for ideas from Jam Sandwich project PDFs. **CS1.1,CS1.4,CS1.5**	**Box Island app** Develop sequencing skills and directional language. Each child can create their own profile or teachers can manually record each child's progress e.g. on ticklist. **CS1.2,CS1.3**	**ALEX the Robot app** Develop skills in sequencing and debugging directional instructions. Encourage children to show resilience and work through initial levels. **T** Teachers will need to manually record each child's progress e.g. on ticklist. **CS1.2,CS1.4**	**Code Studio** Create user accounts for class on https://studio.code.org/ website. After choosing appropriate age/ability course level for pupils to start from, allow them to work through course materials each term. Track and target pupil progress using the built-in pupil tracker. **T** **CS1.1,CS1.2,CS1.3,CS1.4,CS1.5**
Key Skills	CS1.1 Be able to say what an 'algorithm' is. CS1.2 Be able to use the appropriate keys or commands to make a virtual or floor robot go forward, backward, left and right. CS1.3 Be able to program a bot or sprite by giving simple sequences of commands with an immediate outcome. CS1.4 Can use basic symbols to record directional instruction. CS1.5 Be able to use a developing range of language and styles of control e.g. tilt and turn/instructional to direct a robot.				

Digital Literacy

Research: Internet					
QR Codes Use a QR code to open the website quickly. Link here for making QR codes. **DL1.2** **BBC Science Animals** Use the videos and activities to learn about animal classification. **DL1.1**	**Infant Encyclopedia - Autumn and Harvest** Allow children to explore the topic on computers or iPads by using a QR code or web link. Link here **DL1.1,DL1.2**	**Users of technology** Invite users of digital technology into school to demonstrate how technology can be used e.g. in the workplace. **Infant Encyclopedia - Victorians** Allow children to explore the topic on computers or iPads by using a QR code or web link. Link here **DL1.1,DL1.2**	**Infant Encyclopedia - Clothes through History** Allow children to explore the topic on computers or iPads by using a QR code or web link. Link here **DL1.1,DL1.2**	**Infant Encyclopedia - Houses (materials)** Allow children to explore the topic on computers or iPads by using a QR code or web link. Link here **DL1.1,DL1.2**	**Research** Search for and find images using keyword search on KidRex or Google Junior or in-app web search. **T** **DL1.1,DL1.2**

Online Communication and eSafety			
Introduction Ask children to write down or draw pictures of the sites they visit, apps or games they play on the internet. **DT1.4, DT1.5** **Digiduck** Read and discuss story of friendship and responsibility online. Link here. **DT1.4, DT1.5**	**Discuss being safe with 'images'** Talk about how we should only take pictures with a tablet of people in class if our teacher has asked us to. Also, explain to the children that they should not share their own picture with other people they do not know. Would they give a stranger in the park a picture of themselves? Do they know of any places on the internet where they could put their picture? Tell the pupils their pictures on a tablet should not be shared with other people you don't know. Also use Jessie and Friends: Sharing Pictures Film **DT1.4, DT1.5** **Smartie the Penguin** Use resources from Childnet to look at what we share on the internet. Download teacher resources and lesson plans for Year 1. **DT1.4, DT1.5**		**Asking for help** Explain to the children that if they are worried about something on the internet, they should always ask for help. **DT1.4, DT1.5** **Common Sense Materials** Going places safely How do you go places safely on the computer? Login and download these Common Sense Media resources. **DT1.4, DT1.5**

Modelling and Simulations	**MarcoPolo Weather app** Simulate and represent the effects of different weather. **DL1.6** **Animals in the local habitat** Use school grounds animal activity to explore what kinds of animals they may find around the school grounds. **DL1.1, DL1.6** **Education City Animals, including humans** Digital activities linked to animals and humans science topics. (Login required). Link here **DL1.6**	**Great Fire of London** Use the link below to find out what the GFOL was really like. Follow the story and find out about different artefacts along the way. Link here **DL1.6**	**Google Earth** Look at the local area, countries, cities and famous landmarks using aerial images. *This could be done as a whole-class activity on the board, as part of a geography lesson.* Identify physical features and also look at position on the 3D globe. **T** Link here **DL1.6** **Education City Animals, including humans** Digital activities linked to animals and humans science topics. (Login required). Link here **DL1.6**
Education City	**Maths activities and tools** When planning maths lessons, explore these activities to incorporate into your lessons. (Login required). Link here **DL1.6**		
Key Skills	DL1.1 Be able to navigate a website using links. DL1.2 Can access information on the internet through QR codes or links on a device. DL1.3 Be able to use a search engine to search for given information or images by using keywords provided by the teacher. DL1.4 Be able to say what information is personal and should not be shared online with support. DL1.5 Be able to tell an adult if they feel something they see online is inappropriate or hurtful. DL1.6 Can change options in models/simulations that represent real or fantasy situations and scenarios to create different outcomes and effects.		

Information Technology

Tutorial Link

Education City	**Education City Reading and Writing tools** Use the link below to explore a range of interactive reading and writing activities and tools. These can be used as a teacher led whole class activity or independent pupils activities depending on their ability. (Login required for teacher and pupils to access). Link here		
Word Processing and Desktop Publishing	**BBC typing game** Use Dance Mat Typing activities to develop keyboard skills. Start at Level One.(On-going) **IT1.2**		
	Pic Collage app Present information about animals and their features, combining text and photos. Different animal images could be organised on the page to categorise them in different ways. Choose a suitable frame to place the images. Add text to each image. **IT1.1, IT1.2, IT1.3**	**Purple Mash writing tools** Use 2Create a Story to form simple storyboards digitally. Combining pictures, drawing, text, sound and animation are all possible in this tool. **IT1.1, IT1.2**	**Shadow Puppet Edu** Search for images of different materials within the app, or use photographs that they have taken themselves. Add captions to the photos, selecting different options to make their text clear. Record a narration of their knowledge to create a film. Once they have saved their work, review and decide how to make improvements. **IT1.1, IT1.2, IT1.5**
Multimedia	**ChatterKids app** Save images of animals from Safari or teacher could provide them for the pupils. Add to Chatterkids. Ask pupils to prepare and rehearse what they are going to say. They could write this as a short script. Record their voices to create a video and bring their pictures to life. Add some text. Save to photo roll and then share. **IT1.3, IT1.4, IT1.5**	**Doodle Buddy app** Pupils create digital drawings, selecting relevant backgrounds, adding stickers and selecting brush colour, style and width. This could be linked to topics such as clothing, toys, the Great Fire of London or weather. **IT1.3**	**Purple Mash drawing tools** Use 2Paint a Picture to create different images based on a specific topic, such as weather or materials. **IT1.3** **Tiny Tap app** Share a few images of famous UK landmarks or materials to the iPads. Children can then add these into the Tiny Tap app, along with a title. Use the soundboard activity to allow children to explain each of the images by recording their voices. **IT1.4**
	Lit Film Fest Use the Lit Film Fest website to access free English projects. Each project has a set of structured lessons based around writing genres and shows how technology can be incorporated to produce a performance video by the end of the project. Users will have to create a free account to access the free resources, while other projects are under a paid subscription. This could be linked to book reviews or poetry during the year. **IT1.4**		

Data Handling	**Pictogram/Purple Mash 2Count** Show data linked to animals. Demonstrate on board, then create a shortcut on the desktop for the children to easily access the site. This could also be completed as a whole class activity led by the teacher on the interactive whiteboard. Link here Purple Mash link **IT1.6**	**Purple Mash 2Graph** Use 2Graph to create simple graphs or charts based on the topics being studied. This could be as a whole class activity or with children logging into Purple Mash (individually or in small groups). **IT1.6**	**Bar graphs** Make bar graphs e.g. linked to weather or materials. **IT1.6**
Key Skills	IT1.1 Can produce text, adding and making basic edits to text in appropriate word processing software. IT1.2 When entering text, can use their knowledge of where most letters are located on the keyboard, using appropriate punctuation. IT1.3 Can use a range of simple tools purposefully, to create and alter the appearance of an image. IT1.4 Can use simple video or animation software. IT1.5 Can use a sound recorder or on screen recorder to collect and store information as sound. IT1.6 Be able to use suitable on-screen graphing software to represent information.		