Autumn 1- Sparks Might Fly!

Subject	Key Learning
Religion	**God the Father** **The children will have the opportunity to:** • Take responsibility for themselves and towards others • Understand similarity equality and difference • How the local Church is good news for people and how everyone can have a part in it • Sunday as the Lord's day • The rights of Baptism and Confirmation and the response they invite • Elements of sacramental celebrations • Key images of Church used in Scripture and implications of this imagery for community life • The life of the Church in other parts of the World • Taking responsibility for themselves and towards others • The Gospel message that Jesus brings fullness of life for all people **The children will have the chance to:** Explore how the Bible helps us to pray; Experience how God speaks to us in the Bible; Experience a guided meditation on a text from the Bible.
Design Technology	**Evaluation of Existing Products** ▪ Investigate similar products to the one to be made to give starting points for a design. ▪ Draw/sketch products to help analyse and understand how products are made. ▪ Investigate key events and individuals in Design and Technology. **Focused Tasks** ▪ Use electrical systems such as switches, bulbs and buzzers. ▪ Develop vocabulary related to the project. ▪ Use ICT to control products. **Design** ▪ Develop more than one design or adaptation of an initial design – research needs of user. ▪ Plan a sequence of actions to make a product. ▪ Use prototypes to develop and share ideas – identify the strengths/weaknesses of their design ideas in relation to purpose/user. ▪ Think ahead about the order of their work. ▪ Decide which design idea to develop; propose realistic suggestions as to how they can achieve their design ideas.

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	• Consider aesthetic qualities of materials chosen. • Use CAD where appropriate. **Make** • Select from techniques for different parts of the process. • Select from materials according to their functional properties. • Use appropriate finishing techniques. **Evaluation (of Their Finished Product)** • Consider and explain how the finished product could be improved. • Discuss how well the finished product meets the design criteria of the user.
Science	**Electricity** • Identify common appliances that run on electricity. • Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers. • Identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery. • Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit. • Recognise some common conductors and insulators, and associate metals with being good conductors. • Know that electricity can be dangerous. • Recognise electricity sources can be mains or battery. • Know that batteries 'push' electricity round a circuit and can make bulbs, buzzers and motors work. • Recognise that faults in circuits can be found by methodically testing connections. • Know that drawings, photographs and diagrams can be used to represent circuits (although standard symbols need not be introduced until upper KS2). **Pupils Might Work Scientifically** • By observing patterns, for example, that bulbs get brighter if more cells are added, that metals tend to be conductors of electricity, and that some materials can and some cannot be used to connect across a gap in a circuit.
Computing	**Programming** **Skills**

	- Write programs that accomplish specific goals. - Read what a sequence in a program does. - Work with various forms of input. - Work with various forms of output. - Use logical reasoning to predict outputs. - Design programs, showing skills needed to plan and implement a task / problem that accomplish specific goals. - Create programs that implement algorithms to achieve specific goals. - Debug programs that accomplish specific goals through self and peer assessment. - Use sequence, repetition and selection in programs - Use sequences of commands to control physical devices using outputs. - Demonstrate and develop a sense of audience when appropriate. - Use logical reasoning to detect and correct errors in programs. **Knowledge** - Understand how to plan and write programs that accomplish specific goals. - Know a range of input devices and how they can be used. - Know a range of output devices and how they can be used. - Know the difference between an input and an output. - Understand that computers can collect data from various inputs. - Know what debugging is and how it can be used to achieve specific goals. - Understand that planning is a vital part of designing programs. - Understand that evaluation is a vital part of the design process. - Understand what the terms sequence, repetition and selection mean and know how to use them in programs. - Understand how to control physical devices. - Be aware that everyday devices use sensors and outputs, e.g. automatic doors, traffic lights, intruder alarms. - Understand how to use logical reasoning to detect errors in programs. - Understand how to use logical reasoning to correct errors in programs. Understand that computers can collect data from various inputs.
PE Swimming	- Swim competently, confidently and proficiently over a distance of at least 25 metres - Use a range of strokes effectively [for example, front crawl, backstroke and breaststroke] - Perform safe self-rescue in different water-based situations

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PE Invasion Games	Task (Netball/basketball type game)
	To send and receive a ball
	To travel with a ball.
	To travel with a ball with control
	To use simple tactics to outwit and opponent
	To apply basic principles suitable for attacking
	To evaluate and recognise their own success
	To travel with a ball with control in an invasion game
	To apply basic principles suitable for attacking in an invasion game
	To evaluate and recognise their own success