Computing Golden Threads

Proverbs 22:6 *Train a child in the way they should go and when they are old they shall not depart from it.*

Computing is an ever-growing subject which has links across all areas of learning. We understand that as our children move through primary school, high school and into the world of work, computing will be a prevalent and important aspect of their lives. Through our computing curriculum, we aim to give our pupils the life-skills that will enable them to embrace and utilise new technology in a socially responsible and safe way. We want our pupils to be aware of the career opportunities that computing offers in the 21st century and to become proficient users of computing technologies, deriving enjoyment from their activities. We want the use of technology to support learning across the curriculum and to ensure that our curriculum is accessible to every child.

Golden Threads			
These Golden threads apply across all year groups. Their application is alongside the national curriculum objectives.			
Computational Thinking	**Computer Science**	**Information Technology**	**Digital Literacy**
Problem Solving Breaking down complex problems through: ● Decomposition: breaking it into a series of small, more manageable problems. ● Pattern Recognition: Examine the smaller problems considering how similar problems have been solved previously ● Abstraction: Focusing only on the important details, while ignoring irrelevant information ● Algorithms: Design simple steps or rules to solve each of the smaller problems.	**Foundations** How computers and computer systems work & how they are designed and programmed. ● Exploring how programmes are created and creating our own. ● Understanding the connection between instructions and coding. ● Identifying the skills required for a task set. ● Learning and revising skills using a variety of software.	**Applications** Looking at technology in our lives and the purposeful use of existing programs to develop products and solutions. ● Using technology to create our own digital content. ● Recognising the different software options available to us. ● Sorting through, presenting and evaluating data available to us. ● Know how to create and save our own work independently.	**Implications** The skills, knowledge and understanding needed in order to participate fully and safely in an increasingly digital world. ● Find, evaluate and communicate information effectively and safely. ● Understanding how to manage and minimise risks on the internet. ● Knowing who to, and how to, report concerns online.