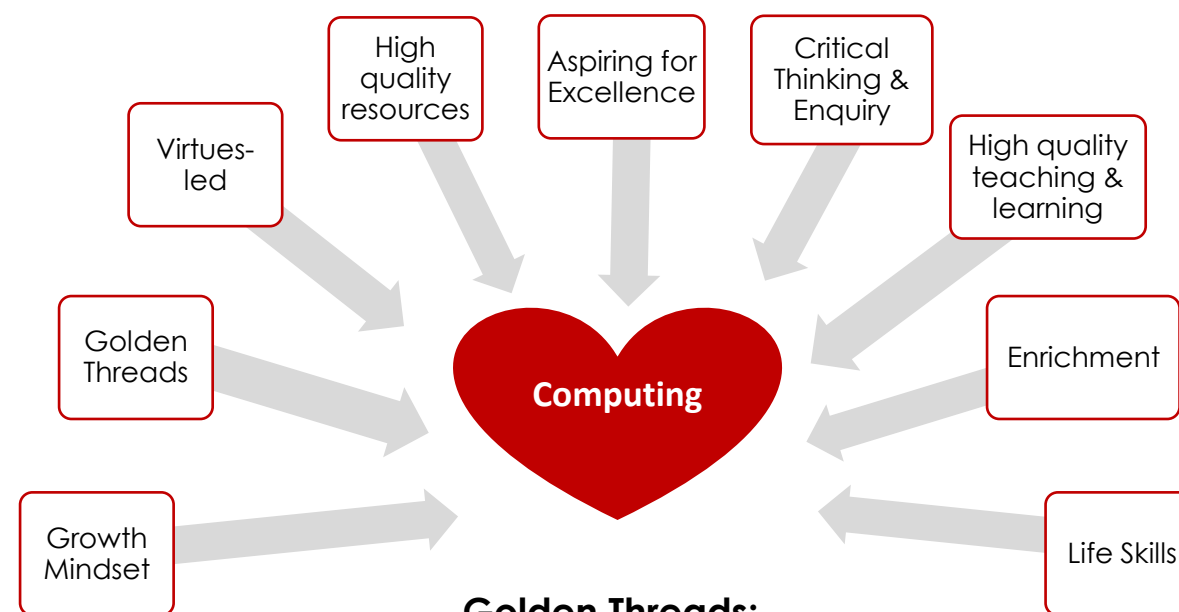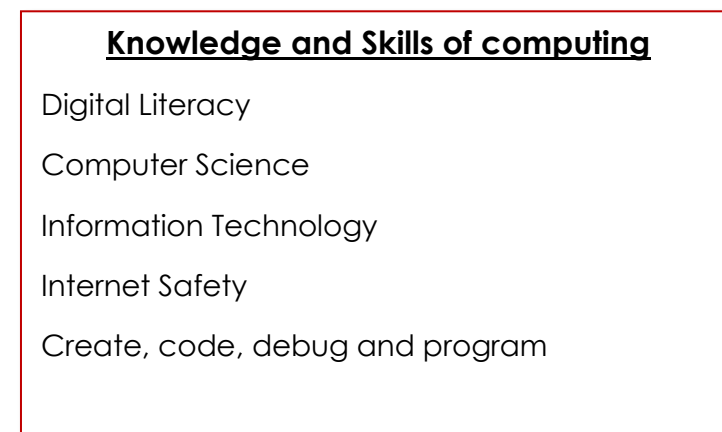# NPSB Computing Menu

Why do we prioritise Computing?

"If you want to create and be a visionary, you're probably going to be working with technology in some way." (Steph Curry). Our world is forever changing and developing, and technological advancements continue to play a significant part in this. Our pupils need to be prepared for this forever changing world. Our computing curriculum aims to:

- develop a life-long love of computing and computing skills enabling children to build a positive, diligent and creative attitude to and within technology.
- develop critical thinkers.
- enhance children to use technology safely, respectfully and responsibly. s
- develop children who use and understand computing language and recognise its importance as a language for communication and thinking.
- ensure pupils become fluent in the fundamentals of computing: digital literacy, computer science and information technology.
- develop and understand life-long skills of computing in a growing, technological world.
- be able to understand and apply how Computing links to other areas of the wider curriculum.
- learn about our responsibility to the Global Family.
- develop pupils who are keen to take responsibility for their own learning using a virtues-led approach.
- help to break down the barriers that they may face in life and to minimise and eliminate the gap for disadvantaged pupils.

Knowledge and Skills of computing

Digital Literacy

Computer Science

Information Technology

Internet Safety

Create, code, debug and program

Virtues Links

Creativity to solve problems and create new designs and concepts.

Resilience and **determination** to keep trying and preserving when problem solving and when developing our skills, knowledge and ideas.

Using **wisdom** when on the internet - making safe choices and knowing when situations are unsafe.

Using **kindness** and **respect** to others when using online platforms.

Understand how **collaboration** and **commitment** has developed technology and changed our world.

Striving for **excellence** and using **diligence** in all learning and outcomes by always trying our very best.

High quality resources — Aspiring for Excellence — Critical Thinking & Enquiry — High quality teaching & learning — Virtues-led — Golden Threads — Computing — Enrichment — Growth Mindset — Life Skills

Golden Threads:

GT1 – Love & Forgiveness vs Enmity & Hate   **GT2** – Peace & Collaboration vs Conflict & War   **GT3** – Trust in 'the Divine' / 'God'

Well-Structured	**A**mbitious & Inclusive	**L**ife-Long Learners	**K**nowing more & remembering more	**S**ubject knowledge and skills
• iCompute scheme: Well-sequenced progression of knowledge and skills document. • Vocabulary progression. • Lesson expectation document that outlines effective ways to teach Computing. • Purposefully planned units of work to link and build on learning. • Key concepts are progressively built on.	• Ambitious scheme (iCompute) to develop skills and knowledge and to promote critical thinking and curiosity. • Activities and challenges to enhance computational thinking. • Online safety is inclusive and taught through a range of contexts. • Working walls or examples to support learning. • Inclusive enrichment opportunities. For example, coding/computing club and STEM week.	• Golden Thread enquiry questions eg How has collaboration helped to advance technology? How can we resolve conflict that occurs online? • Lessons linked to virtues • Leaders of learning • Creating global citizens – understanding our responsibility to our global family. • Enrichment opportunities that foster a love of computing.	• 'The Big Picture' to capture the end goal of each unit and link current learning to previously taught knowledge and skills. • 'Can You Still…?' is an opportunity to retrieve and practise previously learned knowledge and skills. • The use of computers across subjects encourages recall of key computing knowledge and skills. • STEM Week as part of British Science Week incorporates the revisiting and application of previously taught knowledge and skills.	• High-quality teaching and learning • All staff involved in high-quality professional development and training. • iComputer scheme supportive of teachers' subject knowledge. • High-quality questioning and enquiry questions. • Opportunities to revisit previously taught knowledge and skills. • Cross-curricular links (eg Maths, Science, DT and English) and opportunities to apply previously learned computing knowledge and skills within different contexts. • Key vocabulary is explicitly taught.