George Stephenson High School Secondary Scheme of Work: Year 7

| Unit | Lessons | Key Progression Indicators Knowledge, Understanding and Skills |
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| Unit 1 - Online Safety | 6 | Understand a range of ways to use technology safely, respectfully, responsibly and securely, including protecting their online identity and privacy; recognise inappropriate content, contact and conduct, and know how to report concerns. |
| Unit 2 - Under the hood of the computer and computational thinking | 6 | Understand the hardware computer systems and how they communicate with one another. Students can name the internal components of a computer and describe their function. Understand the term 'Computational thinking' and that Computer Science is about problem solving. Understand that problems can be decomposed into smaller parts. Understand how complex problems can be decomposed into smaller parts. |
| Unit 3 - My LOL cat – Creating a virtual pet | 7 | To become familiar with building simple algorithms, making use of the three core-programming concepts; sequence, selection, and iteration. To developing their problem solving and mathematical skills. Understanding and making use of data structures (lists). |
| Unit 4 - Networks | 5 | Understand what the internet is and how computers are connected together. Understand how the www works. Understand how data travels around the internet. |
| Unit 5 - Spreadsheet Modelling | 6 | To be able to interrogate data. Understand the term 'Modelling' and that Excel is a piece of software we can use to model real life situations. Create a simple model using formulae and make use of basic formatting features. |
| Unit 6 - Making Shapes with Python | 4 | Introduction to Python a text-based language. Understand how to use iteration using Python turtle to draw repeating patterns. |

Computing Calendar

| Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 | Week 13 | | |
|------------------------|--------|--------|--------|--------|--------|--------|--|--------|---------|---------|---------|---------|--|--|
| Unit 1 - Online Safety | | | | | | | Unit 2 - Under the hood of the computer and computational thinking | | | | | | | |
| Self-assessment | | | | | | | | | | | | | | |

| Week 14 | Week 15 | Week 16 | Week 17 | Week 18 | Week 19 | Week 20 | Week 21 | Week 22 | Week 23 | Week 24 | Week 25 | Week 26 | |
|--|---------|---------|---------|---------|---------|---------|---------|---------|-------------------|---------|---------|---------|--|
| Unit 3 - My LOL cat – Creating a virtual pet | | | | | | | | | Unit 4 – Networks | | | | |
| KAT 2 | | | | | | | | | Self-assess | ment | | | |

| Week 27 | Week 28 | Week 29 | Week 30 | Week 31 | Week 32 | Week 33 | Week 34 | Week 35 | Week 36 | Week 37 | Week 38 | Week 39 | |
|---------|--------------------------------|---------|---------|---------|---------|---------|---------|------------------------------------|---------|---------|---------|-------------------|--|
| | Unit 5 - Spreadsheet Modelling | | | | | | | Unit 6 - Making Shapes with Python | | | | End of year tests | |
| | Self-assessment | | | | | | | Self-assessment | | | | KAT 3 | |