

## Computing Curriculum Key Concepts and Disciplinary Knowledge

| Key Concepts  | Disciplinary Knowledge   |
|---|--|
| <ul style="list-style-type: none"> <li>• Digital systems</li> <li>• Devices/machines</li> <li>• Programming/program</li> <li>• Logic</li> <li>• Decomposition</li> <li>• Patterns</li> <li>• abstraction</li> <li>• Algorithm</li> <li>• Information/communication technology</li> <li>• Data</li> <li>• Digital literacy</li> <li>• Computer Networks</li> <li>• Internet services</li> <li>• Variables</li> <li>• Inputs/outputs</li> <li>• Debug</li> <li>• Sequence, selection, repetition</li> <li>• Software/hardware</li> <li>• Simulation</li> <li>• Search technologies</li> </ul> | <ul style="list-style-type: none"> <li>• Solve problems by breaking them down into smaller parts.</li> <li>• apply the fundamental principles and concepts of computer science, including abstraction, sequence, selection and repetition, logic, algorithms and data representation</li> <li>• design, write and debug programs that accomplish specific goals</li> <li>• Use logical reasoning to explain how some simple algorithms work and to find and correct errors in algorithms and programs.</li> <li>• evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems</li> <li>• use technology safely, respectfully and responsibly</li> <li>• select, use and combine software on a range of digital devices to create a programs, that accomplish given goals, including collecting, analysing, evaluating and presenting data</li> <li>• use search technologies effectively, be discerning in evaluating digital content</li> </ul> |