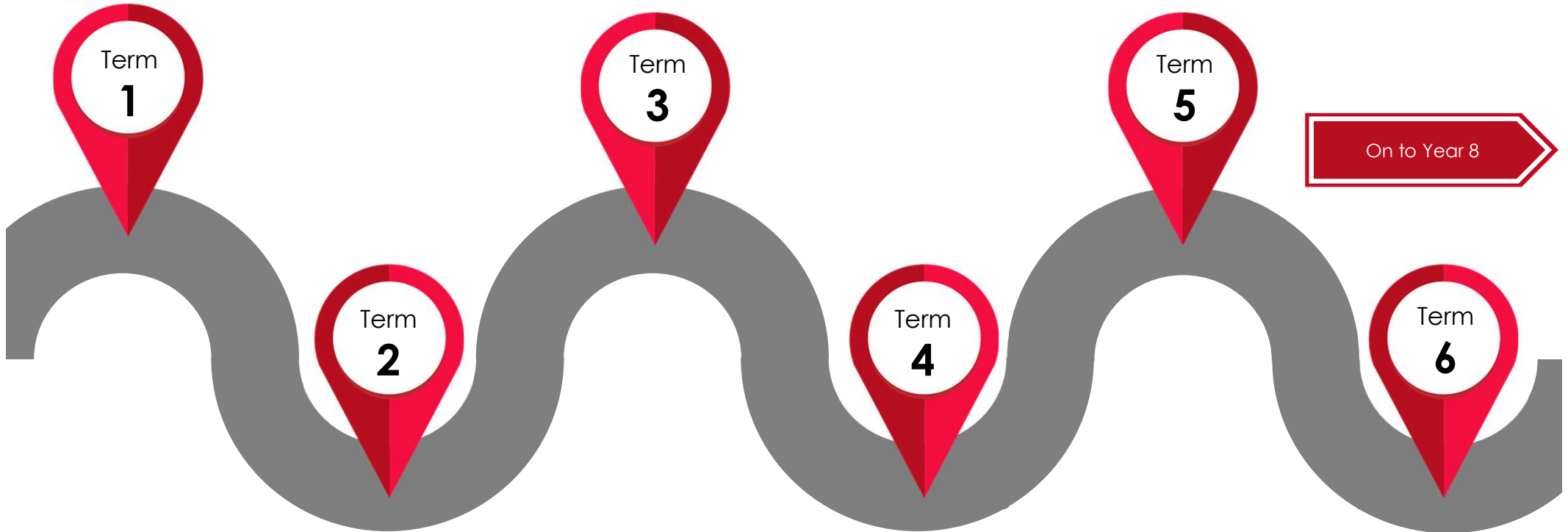




Computer Science Year 7



On to Year 8

Introduction to Computer Science

- 1.1 CAT4 Testing
- 1.2 Introduction
- 1.3 Baseline

Introduction to Computer Science

- 1.3 British Values
- 1.5 Microsoft Outlook
- 1.6 Microsoft Word
- 1.7 PowerPoint
- 1.8 E Safety

Modelling Data

- 2.1 Introduction
- 2.2 Spreadsheet Calculations
- 2.3 Formatting
- 2.4 Using Formula
- 2.5 Collecting Data
- 2.6 Charts and Functions
- 2.7 Data Handling Skills

Networks

- 3.1 Networks and Protocols
- 3.2 Hardware
- 3.3 Wired and wireless services
- 3.4 The internet
- 3.5 Internet services
- 3.6 Revision
- 3.7 Assessment

Scratch Programming

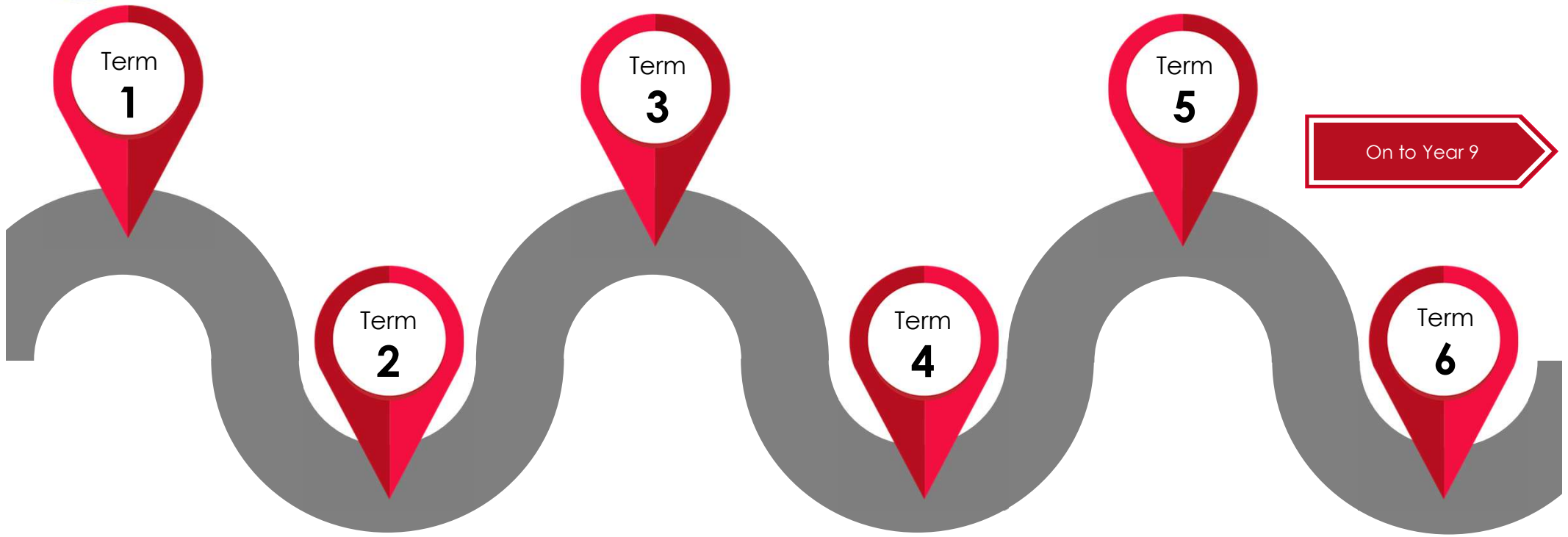
- 4.1 Instructions
- 4.2 Selection and Logic
- 4.3 Problem Solving
- 4.4 Abstraction
- 4.5 Decomposition

Representation

- 6.1 Binary
- 6.2 Binary Addition
- 6.3 Image Representation
- 6.4 Image Representation
- 6.5?
- 6.6 Sound Representation
- 6.7 Compression



Computer Science Year 8



On to Year 9

Cyber Security

- 1.1 Introduction
- 1.2 Phishing
- 1.3 Social Engineering
- 1.4 Censorship
- 1.5 Cyber Bullying
- 1.6 E-Safety

Scratch Programming

- 4.1 Instructions
- 4.2 Selection and Logic
- 4.3 Problem Solving
- 4.4 Abstraction
- 4.5 Decomposition

Hardware / Software

- 3.1 Digital Devices
- 3.2 Software
- 3.3 Revision
- 3.4 Assessment
- 3.5 CPU
- 3.6 Memory
- 3.7 Network Hardware

Representation

- 6.1 Binary
- 6.2 Binary Addition
- 6.3 Image Representation
- 6.4 Image Representation
- 6.5?
- 6.6 Sound Representation
- 6.7 Compression

Scratch Programming

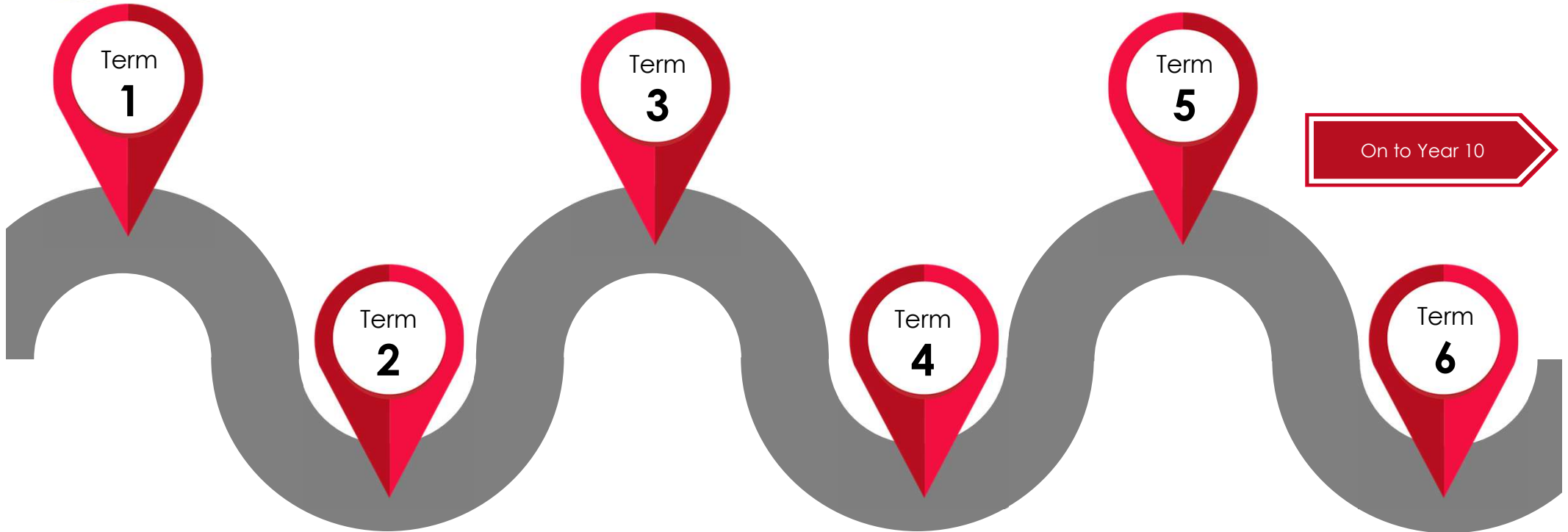
- 2.1 Instructions
- 2.2 Selection and Logic
- 2.3 Problem Solving
- 2.4 Abstraction
- 2.5 Decomposition
- 2.6 Subroutines

Web Design

- 6.1 Properties of a website
- 6.2 Planning
- 6.3 Creating a Website
- 6.4 Review and Evaluation



Computer Science Year 9



On to Year 10

Ethics

- 1.1 Privacy
- 1.2 Legislation
- 1.3 Environmental Issues
- 1.4 Legal Issues
- 1.5 Social Issues

Python Programming

- 2.1 Instructions
- 2.2 Expressions
- 2.3 Programming
- 2.4 Iteration
- 2.6 Data Structures

Representation

- 3.1 Revision
- 3.2 Assessment
- 3.3 Binary
- 3.4 Binary Addition
- 3.5 Image Representation
- 3.6 Sound Representation
- 3.7 Compression

Algorithms and Logic Gates

- 4.1 Boolean Logic
- 4.2 Boolean Circuits
- 4.3 Decomposition
- 4.4 Abstraction
- 4.5 Algorithms
- 4.6 Flowcharts

Computer Systems

- 5.1 Hardware
- 5.2 Software
- 5.3 Memory
- 5.4 Input / Output
- 5.5 Networks

Representation

- 6.1 Decomposition
- 6.2 Properties, purpose & audience
- 6.3 Abstraction
- 6.4 Digitising
- 6.5 Algorithms
- 6.6 Flowcharts
- 6.7 Pseudocode



AQA GCSE Computer Science (Year 10)



Term
1

Term
2

Term
3

Term
4

Term
5

Term
6

On to Year 11

Unit:
Fundamentals
of algorithms

Topics:
Decomposition
Abstraction
Flow Charts
Pseudo code

Unit:
Programming

Topics:
Basics of
Programming
Iteration
Repetition
Functions
Arrays
Files
Dictionaries
Robust
Programming

Unit:
Data
Representation

Topics:
Number Bases
Conversion
Units
Binary
Arithmetic
Representing
Images
Representing
Sounds
Data
Compression

Unit:
Computer
Systems

Topics:
Hardware /
Software
Boolean Logic
Systems
architecture

Unit:
Networks

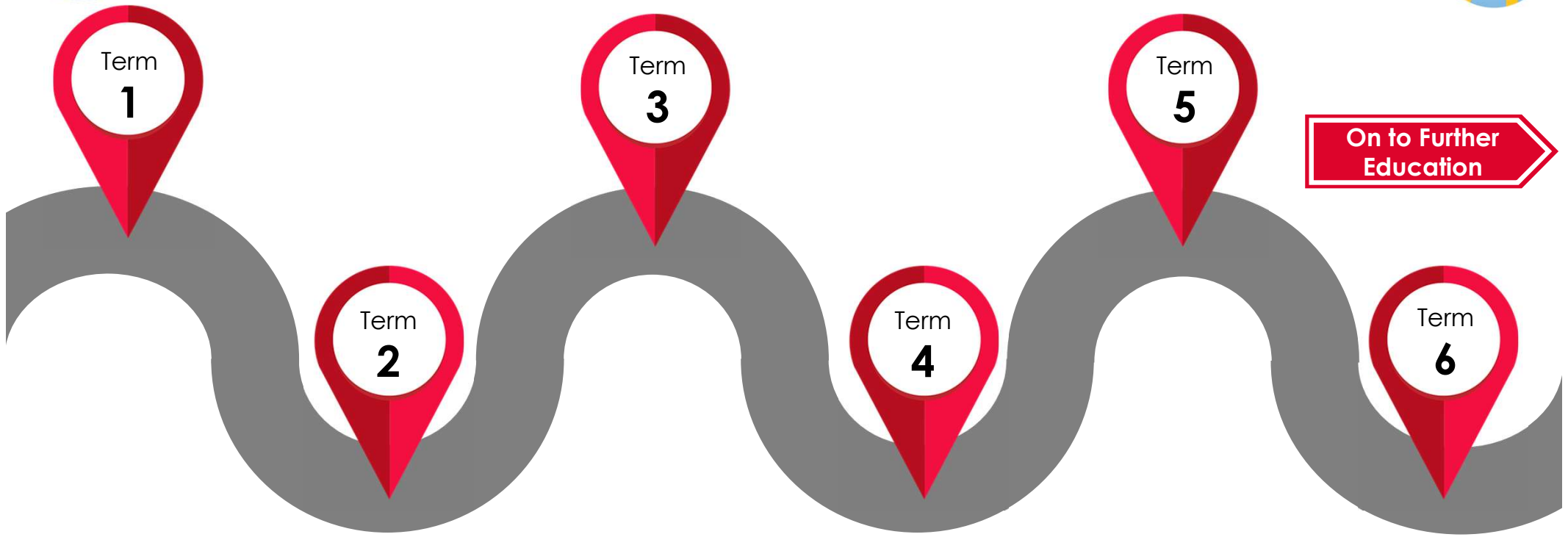
Topics:
Wired /
Wireless
LANs
Security
Protocols
Cyber Security

Unit:
Impact of
Technology

Topics:
Ethical
Legal
Environmental
Society
Privacy



AQA GCSE Computer Science (Year 11)



Programming (NEA)

Designing the solution
Creating the solution
Testing the solution
Potential enhancements and refinements

Fundamentals of algorithms / Programming

Topics:
Revisiting all topics from Year 10

Data Representation / Computer Systems

Topics:
Revisiting all topics from Year 10

Networks / Impacts of Technology.

Topics:
Revisiting all topics from Year 10

Revision

Topics dependent on knowledge audit / mock exam analysis.

External Examinations