Bengeworth CE Academy

Learning Journey

Computing

(updated January 2023)

YEAR 6

- 3D modelling - create and manipulate 3D objects, compare 2D and 3D graphics, construct, design and develop a 3D model.
- Variable in games - variables in programs, improving games, design based on example, design, create and evaluate a project.
- Internet communication - search engines, ranks, search results, methods of online communication.
- Sensing - create, design and develop a program on a controllable run, flow, conditional statements.
- Introduction to spreadsheets - using data, formula, duplication, planning events, choosing ways to present data.
- Webpage creation - review structure, features, copyright, preview, navigation path, implications.
- Selection in quizzes - conditional statements, flow, design create and evaluate a program using selection.
- Flat-file databases - using a form, comparing paper vs computer databases, sorting, selecting and comparing data, asking questions.
- Video editing - moving pictures with audio, recording video, editing to improve, impact of choices when making and sharing.

YEAR 5

- Repetition in games - count-controlled loops, develop and modify a design,
- Sharing information - forming systems, the role of computers, transferring information, collaborative working and projects.
- Selection in physical computing - controlling a circuit, write a program, loops based on conditions, design a project, create a controllable system.
- Vector drawing - using tools to produce different outcomes and effects, create vector drawings, evaluate.

YEAR 4

- Data logging - gathering data over time, automatically collected data, data point sensors, collecting data to answer questions.
- Audio editing - digitally recorded sound, storing files, editing, combing, evaluating choices.
- Photo editing - changing composition of images, changing for different uses, choices when choosing tools,m recognise fake images, evaluating changes.
- Repetition in shapes - accuracy in programing, text-based language, count-controlled loops, decompose, create a program.
- The internet - connecting to networks, website sharing, adding and accessing online content, creation, consequences of unreliable content.
- Desktop publishing - text and images, editing layout to suit a purpose, choosing settings, add content, considering benefits.
- Events and actions in programs - sprite moves, create a program, adapt, add features, fix bugs, design and create a maze-based challenge.

YEAR 3

- Connecting computers - function of digital devices, input and output, purpose, sharing information, connecting devices, components of a network.
- Sequencing sounds- programming environment, commands, start and order, changing appearances, create a project from a description.
- Stop frame animation - sequence of drawings, plan an animation, consistency, review and improve, impact of other media.
- Branching databases - create yes/no questions, attributes to collect data, create, reasoning for good structure, compare information in a pictogram
- Programming quizzes - start and outcome of a sequence of commands, create and change a program design, make improvements.
- Pictograms - count and compare using tally charts, recognise objects as pictures, create, compare, presenting information.
- Digital photography - devices, describe, improve, making changes.
- Making music - feelings about music, identifying patterns, use of music, create music, review and refine work.
- Robot algorithms - instructions as a sequence, changing orders, logical reasoning to make predictions, coding, designing algorithms, create and debug.
- Information technology around us - features, IT at home and school, benefits, safe use, making choices.

YEAR 2

- Technology around us - computer, mouse, keyboard
- Moving a robot - commands, simple programs, finding solutions
- Digital painting - tools, digital pictures
- Digital writing - writing and editing text
- Grouping data - identifying, labelling, comparing
- Animation - commands, design, programming

YEAR 1

- Moving a robot
- Computing unplugged - algorithms, patterns, sequences
- What is technology? - At school, at home, retrieving information.
- Digital painting & digital writing
- Accessing the internet
- Using an iPad - camera, microphone

YEAR R

Alongside the computing curriculum children will access a progressive online safety curriculum focusing on:

-Self-image and identity
-Online reputation
-Online bullying
-Managing online information
-Health, well-being and lifestyle
- Online relationships
Privacy and security
-Copyright and ownership

Computing Units:

-Computing Systems and Networks
-Creating Media
-Programming A
-Data and Information
-Creating Media
-Programming B

Respect | Perseverance | Friendship | Responsibility | Trust | Forgiveness

School Values underpin all learning

Dream – Believe - Achieve