KING JAMES'S SCHOOL
KNARESBOROUGH

Year 8 Computing and IT Learning Journey

Introduction to Year 8

Know what you will be studying in Year 8 Computing.

Use Teams and OneDrive to find and organise your work.

Digital Skills

Name types of digital communication with examples.

Explain how email works and use good netiquette online.

Build an interactive branching adventure story in PowerPoint.

Under the Hood

Name the main hardware components and what each does.

Compare different types of storage for different scenarios.

Describe the CPU fetch–decode–execute cycle.

Bebras

Computational Thinking Competition

Animation

Analyse animations and spot what makes them work well.

Plan your animation using a storyboard.

Create a frame-by-frame pixel art animation.

Python — Virtual Pet

Use variables, input, if statements, loops and functions.

Build a text-based virtual pet game in Python.

Use Turtle commands, pixel art and Micro:bit features.

NASA Mars Mission

Investigate NASA's Mars mission goals and rover robots.

Design a robotic insect that could survive on Mars.

Gaming Shop Project

Design a looping advertising slideshow with a gaming theme.

Build a gaming shop spreadsheet with formulas and charts.

HTML & CSS

Write HTML to structure a web page with headings and links.

Use CSS to change colours, fonts, borders and layout.

Codebreaking

Investigate ciphers — Caesar, Vigenère and Enigma.

Encrypt and decrypt messages; explore modern encryption.