/Computing@Balcarras_

Balcarras
From strength to strength

SUBJECT	YEAR	TERM
Computer Science (OCR)	11	1

UNIT

Programming Fundamentals

INTENT

PRIOR LEARNING (TOPIC) – Pupils will have covered some programming fundamentals throughout Year 7 to 9.

At the core of all programming are some key fundamental concepts. This unit aims to introduce these and get pupils comfortable using them in simple programs. This includes the use of variables, sequence, iteration and selection.	**Specification Points:** This unit covers points 2.2.1 to 2.2.2.

FUTURE LEARNING (TOPIC): Advanced Programming

IMPLEMENTATION	IMPACT
Throughout the unit pupils will cover: • The use of inputs, outputs, variables and constants. • The use of sequence, selection and iteration. • The use of operators including MOD and DIV. • The use of different data types such as integer, real, string and Boolean. • How to use simple string manipulation techniques.	**Assessment:** Pupils will sit a 40 mark in-lesson assessment at the end of the unit, the score from which will be translated into a 9-1 style grading. In addition to this, pupils will complete regular exam style questions both during lesson and as part of homework tasks.

HOW CAN PARENTS HELP AT HOME?

All course materials are available via Firefly. In the build-up to the assessment, parents can help by supporting their child's revision. This can include testing them using flash cards or simply getting them to explain topics to you.

HELPFUL READING/FURTHER DISCUSSION

READING/EXTRA-LEARNING	CAREERS	WIDER SKILLS
There are an enormous number of online courses and tutorials to help pupils develop their computer science skills further. Visit the Next Steps section of the Computing department's Firefly page for more details.	The programming skills learnt in this unit lead perfectly into a wide range of careers including software developer.	Digital Literacy Numeracy Problem Solving Resilience

VOCABULARY

Input, Output, Variable, Constant, Assignment, Sequence, Selection, IF-ELSE, Switch Case, Iteration, Condition, Count, MOD, DIV, Casting, Integer, Boolean, Real, String, Char.