

West Kirby Grammar School KS3 Learning Overview



Subject: Computer Science

Head of Department: Mrs K Waight

Year: Eight

Curriculum organisation
Students are taught in mixed form groups of 20-22 students for one lesson per week.

What topics will your daughter be studying this year?			How will your daughter be learning?
Autumn Term <ul style="list-style-type: none"> • HTML web design <ul style="list-style-type: none"> ○ What is HTML and features ○ Create a web page using HTML • Python programming to create a chatbot <ul style="list-style-type: none"> ○ Decompose a problem ○ Write algorithm ○ Create flowchart ○ Use of iteration, variables and selection 	Spring Term <ul style="list-style-type: none"> • The BBC Microbit <ul style="list-style-type: none"> ○ Microbits distributed to students ○ Two projects completed • Binary mathematics <ul style="list-style-type: none"> ○ How computers store data using binary ○ Conversions between decimal to/from binary ○ Add/subtract binary ○ Data representation of images/text/sound 	Summer Term <ul style="list-style-type: none"> • Logic Gates <ul style="list-style-type: none"> ○ Recognise that questions can have a boolean answer (Y/N) ○ Understand the differences of the words AND, OR, NOT ○ Recognise AND, OR, NOT gates • Advanced programming 	<ul style="list-style-type: none"> • Whole class discussion • Pair/group work • Problem-solving tasks • Independent learning

Equipment needed for lessons	What can you do to support your daughter?
<ul style="list-style-type: none"> • Standard school stationery • Access to Online resources <ul style="list-style-type: none"> ○ Teach-ict.com ○ Dynamic learning 	<ul style="list-style-type: none"> • Encourage independent learning • Be positive about 'trial and error', this is particularly important in the programming units • Help with general use of desktop style computers

How will learning be assessed and progress measured?	Extension & Enrichment opportunities
<ul style="list-style-type: none"> • Baseline assessment in Autumn half-term 1 • Students will peer-mark some exercises • Different assessment techniques at the end of each unit to be graded using the WKGS Grading Criteria • end of year examination comprising questions on all topics studied this year 	<ul style="list-style-type: none"> • All units have extension opportunities • Learn to Program Club

If you have any questions about this Learning Overview, please contact the named Head of Department above.