

West Kirby Grammar School KS3 Learning Overview



Subject: Computer Science

Head of Department: Mrs K Waight

Year: Seven

Curriculum organisation
Students are taught in form groups of 28-30 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"> • Introduction to WKGS computer system • Viruses, Security and Digital Footprints • Computer hardware and Software <ul style="list-style-type: none"> ○ Input, output, storage devices ○ CPU fetch, decode, execute cycle ○ Colossus ○ Moore's Law ○ Software applications 	Spring Term <ul style="list-style-type: none"> • Foundations of Computing <ul style="list-style-type: none"> ○ Origins of modern digital computing ○ Programming a machine • Drawing and manipulating Shapes <ul style="list-style-type: none"> ○ Decomposition of a simple problem ○ Writing algorithms ○ Creating flowcharts ○ Sequence instructions to draw basic shapes ○ Iteration, variables 	Summer Term <ul style="list-style-type: none"> • Python programming to create a chatbot <ul style="list-style-type: none"> ○ Decompose a problem ○ Write algorithm ○ Create flowchart ○ Develop logical thinking skills 	<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 • Lunchtime Learn to Program Club

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