



Hardware and software and computational thinking - Searching and sorting algorithms and logic		
Week Commencing	Learning	Assignment completion
1 st June	<ul style="list-style-type: none"> I will understand why sorting algorithms are needed I will understand that there are a number of different sorting algorithms I will be able to explain how a bubble sorting algorithm works 	<p>The lesson content and resources are all online here: https://www.teach-ict.com/2016/ks3/sows/sow11/s_lesson1.php</p> <p>Students download a worksheet with questions then use the website to find the answers and the submit it through teams.</p>
8 th June	<ul style="list-style-type: none"> I will be able to complete a flowchart showing a bubble sort algorithm I will be able to describe a bucket sort I will be able to describe an insertion sort 	<p>The lesson content and resources are all online here: https://www.teach-ict.com/2016/ks3/sows/sow11/s_lesson2.php</p> <p>Students download a worksheet with questions then use the website to find the answers and the submit it through teams.</p>
15 th June	<ul style="list-style-type: none"> I will understand that there are different searching algorithms I will be able to explain how a linear search algorithm works I will be able to explain how a binary search algorithm works 	<p>Students have a choice of three computational challenges increasing in difficulty. They need to create a flowchart for one of the algorithms they have learnt about in this topic then submit it on teams.</p>
22 nd June	<ul style="list-style-type: none"> I will understand what is meant by Boolean logic I will be able to use binary numbers to represent Boolean logic I will understand how to complete a truth table for AND logic 	<p>The lesson content and resources are all online here: https://www.teach-ict.com/2016/ks3/sows/sow4/s_lesson1.php</p> <p>Students download a worksheet with questions then use the website to find the answers and the submit it through teams</p>



	<ul style="list-style-type: none"> I will recognise an AND logic gate 	
29 th June	<ul style="list-style-type: none"> I will understand how to complete a truth table for OR and NOT logic I will be recognise an OR and NOT logic gate I will be able to combine different logic gates and write their corresponding truth tables 	<p>The lesson content is online here: https://www.teach-ict.com/2016/ks3/sows/sow4/s_lesson2.php</p> <p>Students have to complete a challenge based on the learning from the previous lesson. They complete the challenge on a word document and submit through teams.</p>
6 th July	<ul style="list-style-type: none"> I can solve computational problems 	Students will be given a selection of 'hour of code' activities to choose from and will submit the certificate awarded on completion via teams.
13 th July	<ul style="list-style-type: none"> I can solve computational problems 	Students will be given a selection of 'hour of code' activities to choose from and will submit the certificate awarded on completion via teams.