

## Computing KS3 Assessment - Gold Year 9

Computing in Year 9 is part of the technology carousel. They have one lesson a week for two half terms and they rotate each half term, so one falls in the first half of the year and the second is during the second half of Year 9. The aim is to build on the knowledge from Year 7 and 8 and enable the girls to develop the basic skills and knowledge in Computing and digital technologies. They cover topics to give them an informed choice about GCSE Computer Science.

Topics include: AI and the impact of digital technology, Python, Binary, Animation/Video projects.

Overview	Knowledge: What will they learn?	Skills: Understanding - What will they be able to do?	Literacy - Key Terminology	Assessment
<b>Aut1 - AI / Images</b>	Advanced AI concepts and applications. In-depth analysis of data learning processes. Comprehensive understanding of bias and ethics in AI. Complex decision trees and their applications. Solving advanced problems with sophisticated ML models.	Analyze advanced AI concepts and their real-world applications. Evaluate data learning processes in depth. Understand and discuss the ethics of bias in AI. Create and utilize complex decision trees. Apply advanced ML models to solve multifaceted problems.	AI, Machine Learning, Data, Bias, Ethics, Decision Trees, Model, Variables, Algorithms	Comprehensive quiz on advanced AI concepts and ethics. Practical task creating and analyzing complex decision trees. End of unit assessment solving a complex problem with an advanced ML model.

<p><b>Gold</b></p>	<p>What measurable criteria will you use to determine who is Above Expected, Expected, Below Expected, Cause for Concern? Using the average of assessed work for this term. However, the baseline test will not be taken into account at this stage, because it is a measure at the start of the course and will differ according to prior knowledge and primary school Computing lessons.</p> <ul style="list-style-type: none"> <li>● Above Expected: 90%+</li> <li>● Expected: 65%-89%</li> <li>● Below expected: 50% - 64%</li> <li>● Cause for concern &lt; 50%</li> </ul>			
<p><b>Apr - Stop Motion Animation</b></p>	<p>Advanced stop motion animation techniques. Comprehensive project planning and execution. Mastering recording techniques and equipment. Exporting professional-quality animations. Rigorous evaluation and iterative improvement.</p>	<p>Plan, storyboard, and execute a professional-quality stop motion animation. Master advanced recording techniques and equipment. Export animations with high-quality sound and visual effects. Conduct rigorous evaluations and make iterative improvements.</p>	<p>Stop Motion, Animation, Storyboard, Recording, Export, Evaluate, Effects, Professional Quality</p>	<p>Practical task creating a professional-quality storyboard. Recording a high-quality stop motion animation. End of unit project exporting a professional-quality animation and conducting a rigorous evaluation.</p>
<p><b>Gold</b></p>	<p>What measurable criteria will you use to determine who is Above Expected, Expected, Below Expected, Cause for Concern? Using the average of assessed work for this term. However, the baseline test will not be taken into account at this stage, because it is a measure at the start of the course and will differ according to prior knowledge and primary school Computing lessons.</p> <ul style="list-style-type: none"> <li>● Above Expected: 90%+</li> <li>● Expected: 65%-89%</li> <li>● Below expected: 50% - 64%</li> <li>● Cause for concern &lt; 50%</li> </ul>			

<p><b>Sum - Media/Business project</b></p>	<p>How media supports business and marketing. The role of branding, target audience, and purpose. The stages of production: planning, creating, exporting, and evaluating. Basic principles of effective advertising.</p>	<p>Plan a media product for a business idea. Create a storyboard and basic branding (logo/slogan). Produce a simple promotional media product (e.g. advert or video). Export the final product in a suitable format. Evaluate strengths and improvements.</p>	<p>Media, Business, Branding, Target Audience, Marketing, Advertising, Storyboard, Production, Export, Evaluation</p>	<p>Practical: storyboard + branding for a business idea. Production: create a promotional media product. End of unit: export final product and complete evaluation identifying strengths and improvements.</p>
<p><b>Gold</b></p>	<p>What measurable criteria will you use to determine who is Above Expected, Expected, Below Expected, Cause for Concern? Using the average of assessed work for this term. However, the baseline test will not be taken into account at this stage, because it is a measure at the start of the course and will differ according to prior knowledge and primary school Computing lessons.</p> <ul style="list-style-type: none"> <li>● Above Expected: 90%+</li> <li>● Expected: 65%-89%</li> <li>● Below expected: 50% - 64%</li> <li>● Cause for concern &lt; 50%</li> </ul>			

**Literacy - Key Terminology Overview**

Overview	Literacy - Key Terminology	Definitions and Examples
<b>Aut1 - AI / Images</b>	AI, Machine Learning, Data, Bias, Decision Trees, Model	AI (Artificial Intelligence): The simulation of human intelligence by machines (e.g., chatbots that answer questions). Machine Learning: A type of AI that learns from data (e.g., teaching a system to recognize animals in photos).
		Data: Information used to train machine learning models (e.g., images of cats and dogs to teach an AI). Bias: When a model's decisions are influenced by biased data (e.g., a facial recognition system being less accurate for certain skin tones).
		Decision Trees: A model used in AI to make decisions (e.g., a tree structure that helps predict the type of fruit based on attributes like color and size). Model: A trained algorithm that makes predictions (e.g., a model predicting house prices based on data).
<b>Spr - Stop Motion Animation</b>	Stop Motion, Animation, Storyboard, Recording, Export, Evaluate	Stop Motion: A technique where objects are moved slightly and photographed to create the illusion of movement (e.g., a clay figure walking one frame at a time).

		Animation: The process of creating moving images from static objects or drawings (e.g., animated characters in movies). Storyboard: A sequence of drawings that plan out an animation (e.g., sketching scenes before filming).
		Recording: Capturing each frame of animation (e.g., photographing a character's movement). Export: Saving the animation in a video format (e.g., turning the frames into a .mp4 file).
		Evaluate: Reviewing and assessing the animation (e.g., checking if the movements are smooth and realistic).
<b>Sum - Media/Business</b>	Storyboard, Recording, Export, Evaluate, Planning, Business	<p><b>Storyboard</b> – A plan using drawings to show each scene before filming.</p> <p><b>Recording</b> – Capturing photos or video clips to make the animation.</p> <p><b>Export</b> – Saving the finished project as a video file such as .mp4.</p> <p><b>Evaluate</b> – Reviewing the final project and suggesting improvements.</p> <p><b>Planning</b> – Organising ideas, scenes, props and timings before creating the project.</p> <p><b>Business Pitch</b> – Presenting the animation idea or product to an audience or client.</p>

