Y6 Thinking like a Computer Scientist

We are going to produce a 3D animated video telling a story.

What is 3D animation?
3D animation is the process of creating lifelike, three-dimensional moving images against a background, adding depth and realism to characters and objects. It involves creating 3D models; applying textures and details; animating to bring them to life; and creating a narrative.

Where and why is it used?
3D animation is used in a wide range of industries, including: film and television, video games, advertising, architecture, virtual reality and education. It is useful in developing scenes and characters as well as visualising real-world environments to create immersive experiences.

What is Visual Paradigm?
Visual Paradigm is a tool to build 3D environments and create animations. It enables users to adapt templates of characters, backgrounds and icons to create their own stories.

Animation	Animation is the process of making pictures or images move to create the illusion of action. It is often used in films, video games and cartoons.
3D modelling	3D modelling is the art of creating a two-dimensional object in a three-dimensional space using computer software, which can be viewed from different angles.
CGI	Computer Generated Imagery (CGI) refers to visual content - still or moving - created using computer software.
Templates	In 3D animation, a template is a pre-built, customisable project file containing elements like characters, scenes or motion graphics, providing a ready-made structure that users can modify.
Background/ Scene	The background/scene is the virtual environment (sets, props, lighting, textures) that provides context, mood and depth for the animated characters.
Motion graphics	This brings static 3D elements (like shapes, text, logos or models) to life, adding depth and realism.
Staging	Staging is the arranging all visual elements to present an idea or action so it's clear and emotionally impactful for the viewer.
Cut-scene	A cut-scene is a non-interactive, cinematic sequence (like a movie clip) that features animated characters and action.

Learning Questions

What did you discover when tinkering with 3D animation?

How did you alter the existing background of the template?

How did you make your characters move to add action to your scene?

What story did you tell using 3D animation?

What new knowledge and skills have you gained through your work on 3D animation?