

3D Design Curriculum Overview

3D Design Curriculum Overview: KS3

Our Vision

At RPA, we aim to nurture students' creativity and technical skills in 3D design. Through a balance of manual sculpture and digital modelling (using SketchUp), we aim to equip students with the tools to create innovative and meaningful three-dimensional works.

Key Objectives

- Develop a strong foundation in 3D design techniques, including sculpting and digital modelling.
- Explore the creative potential of various materials and tools.
- Understand the principles of form, space, and composition in 3D design.
- Develop critical thinking and problem-solving skills.
- Appreciate the historical and cultural context of 3D design.

Curriculum Structure

Our curriculum is designed to spiral, building upon students' knowledge and skills year by year. This allows for a deeper understanding and application of concepts.

Year 7

- **Foundation Skills:**
 - Introduction to basic sculpting techniques (e.g., modelling, carving, assembling).
 - Exploration of different materials (e.g., clay, plaster, wood).
 - Basic digital modelling concepts using SketchUp.
- **Creative Expression:**
 - Creating 3D models inspired by natural forms, objects, or abstract ideas.
 - Developing a sense of form and space.
- **Technical Skills:**
 - Learning to use basic sculpting tools and techniques.
 - Understanding the principles of measurement, proportion, and scale.

- **Historical and Cultural Context:**
 - Exploring the history of sculpture and 3D design.
 - Examining the work of famous sculptors and digital artists.

Year 8

- **Advanced Techniques:**
 - Exploring more complex sculpting techniques (e.g., casting, armature creation).
 - Expanding digital modelling skills in SketchUp.
- **Conceptual Development:**
 - Creating 3D models that convey specific ideas or messages.
 - Developing a deeper understanding of composition and storytelling.
- **Technical Proficiency:**
 - Refining sculpting and digital modelling skills.
 - Learning to use more advanced tools and techniques.
- **Critical Thinking:**
 - Analysing and evaluating the work of others.
 - Developing a critical eye for 3D design.

Year 9

- **Independent Projects:**
 - Undertaking individual or group projects that demonstrate a high level of skill and creativity.
 - Exploring personal interests and passions through 3D design.
- **Digital Literacy:**
 - Deepening understanding of digital modelling software (e.g., SketchUp, Blender).
 - Exploring the possibilities of 3D printing and other digital fabrication techniques.
- **Contextual Understanding:**
 - Investigating the role of 3D design in contemporary society.
 - Understanding the ethical and social implications of 3D design.

Throughout the curriculum, students will have opportunities to experiment with different materials, techniques, and approaches. They will also be encouraged to develop their own unique artistic styles and perspectives. Our goal is to inspire students to become confident and creative 3D designers.