

Subject:

# Design & Technology Graphics



HECKMONDWIKE  
GRAMMAR SCHOOL

## KS4 - Year 10 Curriculum Overview

Autumn Term

### Topics being taught

**New and Emerging Technologies**

- Unit 3: Wider Implications: New and Emerging Technologies
- Unit 7: New and Emerging Technology.
- Sketching initial ideas.
- CAD modelling and development.
- 3D printing of a final idea.

**Energy and Controlled Movement**

- Unit 3: Wider Implications: Sources of Energy.
- Unit 6: Controlled Movement.
- Sketching initial ideas.
- Prototype modelling and development.

Term 1

### What you will be assessed on

**Stepping Stone Assessment**

- Unit 7: New and Emerging Technologies.
- **Progress grade:** quality of project submission.

**Milestone Assessment**

- Unit 3: New and Emerging Technologies: Sources of Energy.
- Unit 6: Controlled Movement
- **Progress grade:** quality of project submission.

Term 2

### How you can support at home

Seneca: 2.2 Impact of New and Emerging Technologies

Independent Reading: Chapters 5 and 14 New and Emerging Technologies.

Seneca: 8 Technical Understanding; 3.2 Energy Generation and Storage.

Independent Reading: Chapter 6 Sources of Energy; 12 Controlled Movement; 13 Electronic Systems.

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Spring Term

### Topics being taught

**Illustration / working with textiles.**

- Unit 5: Material Categories - Textiles.
- Advanced Adobe Illustrator skills.
- CAD preparation for 2D Design.
- Applying vinyl graphics to textiles.

**Mechanical systems**

- Unit 8: In-Depth Papers and Boards.
- Sketching initial ideas
- Dieline prototype modelling and development.
- Using Adobe Illustrator to create graphics for packaging.

Term 3

### What you will be assessed on

**Stepping Stone Assessment**

- Unit 5: Material categories - textiles.
- **Progress grade:** quality of project submission.

**Milestone Assessment**

- Unit 8: In-Depth Papers and Boards.
- **Progress grade:** quality of project submission.

Term 4

### How you can support at home

Seneca: 5 Material categories (5.1.6 Textiles).

Independent Reading: Chapter 10 Categories of Materials (Pg. 32-33)

Seneca: 9 Manufacturing Processes & Techniques.

Independent Research: The work of Robert Sabuda.

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Summer Term

### Topics being taught

**Exam Technique and Practice.**

- Unit 1: Identifying Requirements.
- Unit 2: The work of others.
- Unit 3: Wider Implications.
- Unit 4: Design Communication.
- Unit 5: Material Categories.
- Unit 6: Controlled Movement.
- Unit 7: New and Emerging Technologies.
- Unit 8: In-Depth Papers and Boards.

**Non Exam Assessment (NEA).**

Term 5

### What you will be assessed on

**Stepping Stone Assessment**

- GCSE exam style extended questions.

**Year 10 Finals Assessment**

- GCSE Level exam paper.
- **Progress grade:** Teacher Assessed Grade.

Term 6

### How you can support at home

Independent Revision.

GCSE exam style extended questions.

Independent NEA study.

Independent Reading: Chapter 15 In-Depth papers and boards.