

# Daffodil Grammar School for Girls

## Curriculum Plan - Design & Technology / Food

### Key Stage 3 Scheme of Work

|                                                                                                              |                                                                                                                          |                                                                                                                                  |                                                                                                                                 |
|--------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| <b>Key stage / year groups</b><br>KS3 (Years 7-9)                                                            | <b>Time allocation</b><br>KS3: 2 periods weekly, delivered through D&T and Food rotations.                               | <b>Delivery model</b><br>Practical design, make and evaluate projects, including product design and Food & Nutrition.            | <b>Grouping / pathway</b><br>Mixed ability, with differentiation through design briefs, skill complexity and support materials. |
| <b>Curriculum coverage</b><br>Final subject scheme of work for the stated key stage(s).                      | <b>Assessment cycle</b><br>Regular formative checks, summative assessment and targeted intervention.                     | <b>Review cycle</b><br>Annual curriculum review, supported by termly assessment analysis.                                        | <b>Version</b><br>1.2                                                                                                           |
| <b>Intent</b><br>Clear subject purpose with ambitious knowledge, skills, literacy and character development. | <b>Implementation</b><br>Cumulative sequencing across the key stage(s), with deliberate retrieval and careful modelling. | <b>Assessment Response</b><br>Regular formative checks, summative assessments and question-level analysis to guide intervention. |                                                                                                                                 |

## 1. Curriculum intent (Design & Technology / Food)

Design & Technology (including Food) at Daffodil Grammar School for Girls aims to ensure that all pupils in Key Stage 3: Experience a broad range of D&T disciplines, including product design, basic textiles and food & nutrition.

Learn to design and make high-quality products for real users and real needs, using an iterative design process (research → design → make → evaluate).

Develop practical skills in safe use of tools, equipment and ingredients, including basic CAD where available.

### Understand and apply key technical knowledge:

Materials and their properties.

Mechanisms and simple structures.

Basic electronics (when available).

Food science, nutrition and hygiene.

Make informed healthy food choices, understand the Eatwell Guide, and gain confidence cooking a range of savoury dishes from different cultures, within a Halal and culturally sensitive framework.

Think as problem-solvers, considering sustainability, environmental impact, cost and user needs.

Develop resilience, teamwork and independence, and see D&T/Food as relevant to everyday life and future careers (engineering, design, nutrition, hospitality, health sciences, etc.).

### Time allocation:

KS3: 2 periods per week in Years 7–9, delivered as rotations across:

Product Design / Resistant Materials

Food & Nutrition

(Optional small Textiles / Graphics strand as planned by the department)

Grouping: mixed ability; differentiation through task complexity, scaffolds and extension.

## 2. KS3 structure & rotation model

Each year group has three main units per year (e.g. two D&T units + one Food or vice versa, depending on staffing/rooms). Each unit typically runs for ~10–12 weeks.

### Across Years 7–9 pupils will:

Complete at least one Food & Nutrition unit per year (meeting Cooking & Nutrition requirements).

Experience product design / materials every year.

### Meet the D&T national curriculum expectations to:

Design purposeful, functional, appealing products.

Select and use materials and tools appropriately.

Evaluate and test their ideas.

Understand nutrition and cook a repertoire of dishes.

## 3. Year 7 – Foundations in D&T and Food

Overall intent: Introduce safe workshop and kitchen practice, core making skills, and basic healthy eating.

### Year 7 Unit Overview

| Unit | Focus                                        | Example Project          | Core Knowledge & Skills                                                                                                                                                                                                                                                                                 | Assessment Focus                                                                                                    |
|------|----------------------------------------------|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| 7A   | D&T Core Skills – Materials & Tools (Autumn) | Desk Tidy / Phone Holder | - Workshop rules and safety (risk awareness).- Measuring, marking out and cutting simple shapes (e.g. wood/acrylic depending on resources).- Simple joining and finishing techniques (glue, screws, sanding, basic paint/varnish).- Simple design brief, generating a few ideas and selecting the best. | - Safe tool use.- Accuracy of measuring and cutting.- Simple design folder: design ideas, final design, evaluation. |

| Unit | Focus                                                     | Example Project                                      | Core Knowledge & Skills                                                                                                                                                                                                                                                                                                                                               | Assessment Focus                                                                                                                                                           |
|------|-----------------------------------------------------------|------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 7B   | Food & Nutrition – Basic Skills & Healthy Eating (Spring) | Simple savoury dishes and lunches                    | - Kitchen hygiene and safety (cross-contamination, knife safety, heat sources).- Eatwell Guide; understanding food groups and balanced meals.- Basic preparation skills: chopping, peeling, grating, weighing & measuring.- Cooking simple savoury dishes (e.g. fruit salad, couscous/ rice salad, vegetable pasta, soup, simple flatbreads) using Halal ingredients. | - Practical skills (safe knife use, hygienic practice).- Ability to follow a recipe and work to time.- Short written task on Eatwell Guide / healthy lunch.                |
| 7C   | Design & Make – Simple Product for a User (Summer)        | Keyring / Bookmark / Simple Gift for a Younger Child | - Design process: user research (e.g. designing for a younger child), mood boards, idea generation.- Understanding and using simple design criteria.- Working with card, foam, simple plastics or textiles (depending on resources) to produce a small product with pattern/colour.                                                                                   | - Evidence of iterative design in booklet/sketchbook.- Quality of final product finish and suitability for user.- Pupil self-evaluation: what went well / what to improve. |

## 4. Year 8 – Developing Skills, Mechanisms & World Foods

Overall intent: Extend making skills, introduce basic mechanisms/structures, and deepen food & nutrition understanding, including global cuisines and cultural diversity.

### Year 8 Unit Overview

| Unit | Focus                                                          | Example Project                                          | Core Knowledge & Skills                                                                                                                                                                                                                                                                                                                                                                                          | Assessment Focus                                                                                                                                                                                 |
|------|----------------------------------------------------------------|----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 8A   | Mechanisms & Product Design (Autumn)                           | Moving Toy / Automata                                    | - Mechanisms: cams, followers, simple linkages; input–process–output idea.- Designing for a target user (e.g. a child, educational toy with Islamic/values-based theme if desired).- Working with wood/card/acrylic components; assembling moving parts accurately.- Decorating and finishing to suit the user.                                                                                                  | - Understanding of simple mechanisms.- Working drawings and annotated designs.- Evaluation of how well product functions and appeals to user.                                                    |
| 8B   | Food & Nutrition – World Foods & Cooking from Scratch (Spring) | Meals from different cultures                            | - Recap: hygiene and safety; Eatwell Guide.- Nutrients: basic understanding of carbohydrates, protein, fats, vitamins and minerals; importance of fruit & vegetables.- Cooking a range of savoury dishes from different cuisines (e.g. vegetable stir-fry, pilau, dhal, fajitas, tagine-style stew, etc.), all Halal and modest in presentation.- Reducing sugar and fat; healthy adaptations of popular dishes. | - Practical assessment of a main dish (knife skills, cooking methods, presentation, organisation).- Written task: adapt a dish to make it healthier; explain changes.                            |
| 8C   | Structures / Textiles / Packaging Design (Summer)              | Protective / Decorative Case, or Packaging for a Product | - Understanding simple structures and supports (tabs, flaps, folds, gussets, reinforced corners).- Basic textiles skills (if chosen): hand stitching, simple seam; or- Graphics/packageing: net construction, logo and branding basics, layout and typography.                                                                                                                                                   | - Application of structure/graphics to create a functional, attractive product.- Design thinking: how the product protects and appeals to user.- Written evaluation referencing design criteria. |

## 5. Year 9 – KS4 Bridge: Independent Design, Sustainability & Higher-Level Cooking

Overall intent: Prepare pupils for GCSE-level thinking in D&T/Food by focusing more on user-centred design, sustainability and more complex food skills.

### Year 9 Unit Overview

| Unit | Focus                                               | Example Project                                                                       | Core Knowledge & Skills                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Assessment Focus                                                                                                                                                                                                           |
|------|-----------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 9A   | Design for Sustainability & Real Users (Autumn)     | Eco Product for School or Home (e.g. desk organiser, reusable item, storage solution) | - Sustainability: reduce–reuse–recycle; material lifecycles; environmental impact.- User research: questionnaires/interviews, feedback from peers or family.- Iterative design: initial ideas → modelling (card/foam) → improvements.- Accurate measuring, cutting, joining and finishing.                                                                                                                                                                                | - Quality of design process (research, ideas, development).- Evidence of sustainability considerations (materials, longevity, reusability).- Final product functionality and finish.                                       |
| 9B   | Food & Nutrition – Planning Balanced Meals (Spring) | Designing & Cooking a Healthy Meal                                                    | - More detailed nutrition: macronutrients, micronutrients; special dietary needs (e.g. vegetarian, specific allergies, cultural/religious dietary considerations).- Cooking more complex savoury dishes (e.g. curry and rice, baked savoury dishes, layered salads, traybakes, homemade sauces, healthier desserts).- Meal planning and cost awareness; reading food labels (salt, sugar, fat).- Considering Islamic principles on avoiding waste (isrāf) and moderation. | - Practical assessment: planning and cooking a main course or 2-course simple meal (timing, organisation, sensory qualities).- Written task: plan a day's menu for a teenager that is balanced and Halal; justify choices. |

| Unit | Focus                                              | Example Project                                                                                        | Core Knowledge & Skills                                                                                                                                                                                                                                                                                                       | Assessment Focus                                                                                                                                                                                   |
|------|----------------------------------------------------|--------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 9C   | Design Challenge – Mini NEA-style Project (Summer) | Design a product to solve a real school/community problem (e.g. storage, signage, simple learning aid) | - Introduction to GCSE-style project work: design brief, specification, research (user & existing products), design ideas, modelling, final outcome, evaluation.- Basic communication of design ideas: sketches, annotations, simple CAD if available.- Reflection on strengths/weaknesses and links to possible KS4 options. | - Quality of design folder (research, specification, ideas, development, evaluation).- Practical outcome showing thought about user, function and aesthetics.- Readiness for KS4 D&T/Food courses. |

## 6. Key knowledge & concepts across KS3

D&T (Product / Structures / Mechanisms)

### Pupils will:

Understand that design is problem-solving for real users with real needs.

Use design criteria and specifications to guide their work.

### Learn the basics of:

Materials (wood, card, plastics, textiles – depending on resources): properties, suitability, basic environmental considerations.

Mechanisms (cams, levers, linkages).

Structures (frames, reinforcement, triangulation).

### Develop practical workshop skills:

Measuring and marking accurately.

Cutting, shaping and joining materials.

Sanding, smoothing and finishing surfaces.

### Learn to evaluate:

Their own products and those of others.

How well something meets user needs.

How sustainable and safe it is.

Food & Nutrition

### Pupils will:

Understand and be able to apply the Eatwell Guide.

Know the basic functions of key nutrients and the importance of a varied diet.

Practise a repertoire of savoury dishes suitable for family meals, packed lunches and snacks.

### Learn and practise safer food preparation methods:

Knife skills: bridge and claw grips.

Using hob/oven safely.

Working hygienically and avoiding cross-contamination.

### Develop awareness of:

Food waste and sustainability.

Cultural and religious dietary requirements, especially Halal.

How to read labels and make informed choices.

## 7. Assessment schedule

### KS3 (D&T and Food)

#### Ongoing formative assessment:

Teacher observation and verbal feedback in practical lessons.

Checking of design booklets/recipe worksheets.

Peer and self-evaluation activities.

#### Summative assessments:

##### At least one assessed piece per unit, combining:

Practical outcome (product/dish) – with rubric for skills, finish, functionality.

Design/knowledge element – short written task, design folder, or quiz.

#### End-of-year overview:

Judged against school D&T/Food criteria (e.g. emerging / developing / secure / exceeding) in:

Practical skills.

Technical knowledge.

Design thinking.

Safety and hygiene.

## 8. Inclusion, SEND & EAL in D&T/Food

#### Tasks are designed to be accessible and adaptable:

Scaffolded worksheets, step-by-step photos, checklists.

More time or simplified outcomes for some pupils.

Extension options for high attainers (more complex joints, more adventurous recipes, advanced presentation).

#### For SEND:

Adjusted expectations for volume, but focus on quality and independence.

Adapted tools (e.g. safer knives, grips, non-slip mats).

Additional adult support for high-risk tasks (heat, sharp tools).

#### For EAL:

High use of visual instructions, demonstrations and dual-labelled diagrams.

Key vocabulary (tools, verbs, ingredients) taught explicitly and revisited.

Opportunities to draw on pupils' own food cultures in Food units.

## 9. SMSC, British values & Islamic ethos

#### D&T/Food supports SMSC and British values by:

##### Spiritual & Moral:

Encouraging gratitude for food and resources; avoiding waste.

Discussing ethical issues (sustainability, fair trade, animal welfare at an age-appropriate level).

##### Social:

Collaboration in design teams, shared kitchen spaces, turn-taking and tidiness.

Sharing and appreciating different cultural dishes in a respectful way.

**Cultural:**

Exploring foods, materials and design traditions from various cultures (including Islamic art/architecture, traditional vessels, textiles).

**British values:**

Rule of law: health and safety rules in workshop and kitchen; food hygiene standards.

Individual liberty: making safe and informed choices about food and design direction within guidelines.

Mutual respect & tolerance: respect for different dietary needs and cultural preferences; collaborative working.

**Islamic ethos is reflected by:**

Ensuring all food practicals use Halal ingredients and modest presentation.

Emphasising moderation, no waste (isrāf) and sharing.

Encouraging design work that is useful, ethical and respectful, in line with Islamic values of service and stewardship.

## Curriculum quality assurance checklist

*Use this checklist during annual curriculum review, departmental moderation and inspection preparation.*

| Area           | Quality question                                                                          | Evidence |
|----------------|-------------------------------------------------------------------------------------------|----------|
| Intent         | Curriculum intent is clear, ambitious and linked to the school ethos.                     |          |
| Sequencing     | Knowledge, skills and vocabulary build logically over time.                               |          |
| Assessment     | Key assessments identify gaps and inform teaching, intervention and revision.             |          |
| Inclusion      | SEND, EAL, foundation and high-attaining pupils are considered without lowering ambition. |          |
| Implementation | Resources, routines and lesson expectations are understood by staff.                      |          |
| Impact         | Pupil work, assessment evidence and pupil voice show progress over time.                  |          |

**Suggested review evidence:** scheme updates, assessment analysis, samples of pupil work, intervention records, pupil voice, lesson visits, book looks and department meeting notes.