Programmes designed to inspire and inform, linked to health and wellbeing and vocational skills. Suitable for primary and secondary age pupils.
Moths are a mysterious group of animals rarely seen by us due to their nocturnal habits, but playing a crucial role in food chains as both pollinators and prey. Pupils can visit Dumfries House STEM Centre to learn how moths see in the dark and use invisible colours to find their way around. They can build, wire and test live moth traps overnight during a stay at the Outdoor Residential Centre and learn how the variety of moths they find at Dumfries House fit into the ecosystem at the Education Garden.

Groups will design and build a moth trap at the STEM Centre, learning about invisible wavelengths and will then run the moth traps overnight and empty the trap in the morning, recording what they find for biological records while learning about the value of moths as pollinators. Each group will take a moth trap kit back to school to become a recording hub in their local community.

Explore the science of light and colour

Understanding of the importance of biological recording in understanding the effects of pollution

Make a contribution to scientific research

Harmony Principles - Interconnected, Diversity
A 5-day programme celebrating the International Year of the Periodic Table through an exploration of natural dyes, their chemistry, textiles and craft. Participants will have the opportunity to make dyes from various natural sources and experiment with acid and alkali to change the colours. They will explore the role of the elements in colour and how colour impacts on our view of the world and the stories we tell. This programme will work across educational areas, Valentin’s Farm, the Kauffman Educational Garden and Morphy Richards Engineering centre (STEM) in addition to Dumfries House itself.

To explore the connectedness of the expressive arts and the natural sciences
To increase the participants’ sense of curiosity and to capture their imaginations
To increase participants’ core skills through creative team work and exploration

*Through partnership with the organisation ‘See, Make, Think’, pupils may work towards an Arts Award through participation in this course. Further information on request.
Take part in a one-day STEM career focused workshop, accredited to the Industrial Cadets programme. Pupils take part in a unique hands-on learning experience, helping to bridge the gap between school curriculum and the real world of work. Working with industry partners in the key fields of aerospace, renewable energy or civil engineering pupils can develop their confidence, technical and practical skills whilst finding out about career pathways and routes to employment. Through their experience, young people will gain an Industrial Cadets Challenger Award.

Health and Wellbeing

**IMPROVED CREATIVE THINKING**

**OPPORTUNITY TO IMPROVE TEAMWORK AND PROBLEM SOLVING**

**ACCESS TO INSPIRING POSITIVE ROLE MODELS**

Key Information:
Spaces: 20-32
Stage: P6 - P7
Tuesday 17th September (Aerospace Engineering)
Tuesday 24th September (Renewable energy and Electrical Engineering)
Tuesday 22nd October (Civil and Environmental Engineering)
Tuesday 29th October (Aerospace Engineering)
Tuesday 12th November (Renewable energy and Electrical Engineering)
Tuesday 19th November (Civil and Environmental Engineering)
Wednesday 15th January (Aerospace Engineering)
Wednesday 22nd January (Civil and Environmental Engineering)
Wednesday 5th February (Renewable energy and Electrical Engineering)
Wednesday 19th February (Renewable energy and Electrical Engineering)

*Through partnership with the Engineering Development Trust, our Careers Focused workshops have been accredited to the Industrial Cadets Challenger Award*
Nature Based Learning

H-ART-MONY - INSPIRED BY NATURE

Outdoor Art and Creativity based on the principles of Harmony to allow new means of visual expression to be developed through a system of outdoor workshops. Nature has reoccurring patterns of geometry and symmetry. Throughout it the participants will explore the estate for identifying examples like the 5-pointed star, spirals and the double helix. Using natural dyes, raw clay sourced from the ground and using found natural or discarded materials they will create a collection of art pieces that communicate their feelings about the world around them. Other cultures will be looked at for inspiration. Verbal communication skills will be developed through critical analysis of their work.

Health and Wellbeing

OUTDOOR LEARNING

RECOGNITION OF SKILLS

HEALTHY LIFESTYLE

AWARENESS

SENSE OF ACHIEVEMENT

AND JOY THROUGH

CREATIVE PROCESS

ENHANCED COGNITIVE

ABILITIES

MINDFULNESS THROUGH

OBSERVATION OF THE

NATURAL WORLD

UNDERSTAND DIVERSITY

Key Information:

Spaces: 12-30

Stage: P5-S3

One day per week for three weeks

March through till September 2020

Participants will be aware of and be able to express their feelings and developing the ability to talk about them

As a result of experiencing and bonding with nature, participants will tend to develop pro-environmental behaviour

It helps with developing imagination and creative thinking whether it involves seeking a single solution or a number of alternatives

Harmony Principles - Geometry, Diversity
Nature Based Learning

THE CHICKEN AND THE EGG

The programme aims to raise awareness of where our food comes from, of healthy lifestyle choices and to encourage a greater sense of responsibility for the environment and other living things.

Using chickens and their care as the context, pupils will be able to learn in a truly cross-curricular manner, opportunities to explore enterprise, science and technology and cookery alongside key messages based on empathy, welfare and food provenance. Pupils will learn the key skills required to care for chickens and be involved in designing the coop in which their own small flock of chickens will live at Dumfries House.

The class will develop the knowledge and skills required to look after their own chickens in the school environment. Our staff will assist with a transition should the school wish to do so.

An appreciation of the journey from food to consumer, local availability, seasonality and sustainable food production

As a result of experiencing and bonding with nature, participants will tend to develop pro-environmental behaviour

The project supports set Scottish Government Good Food Nation Policy

Health and Wellbeing

OUTDOOR LEARNING

HEALTHY EATING AND FOOD CHOICES

HEALTHY LIFESTYLE AWARENESS

MINDFULNESS THROUGH OBSERVATION OF THE NATURAL WORLD

WELFARE, CLEANLINESS AND HYGIENE

EMPATHY FOR LIVING THINGS

UNDERSTAND DIVERSITY

Key Information:
Spaces: 12-30
Stage: P5-S3
10 days across the academic year
Academic Year 2019/20

Harmony Principles - The Cycle, Health
The programme aims to inspire and encourage schools to grow food together and eat together, raising awareness of where food comes from, making healthy lifestyle choices and encouraging a greater sense of responsibility for the environment. Pupils will develop skills in horticulture, food preparation and cooking. They will work with the food, farming and horticulture team primarily with the opportunity to visit other areas including the Cook School, STEM centre, Farm and Joinery workshop to take part in related activities including cooking, baking and building planters, all aimed at preparing them to set up and run their own school vegetable garden from the spring of the year. Pupils will serve their year group in the school canteen with delights they have cooked and baked from produce harvested from their school garden.

An appreciation of the journey from food to consumer, local availability, seasonality and sustainable food production.

As a result of experiencing and bonding with nature, participants will tend to develop pro-environmental behaviour.

The project support set Scottish Government Good Food Nation Policy.

**GROWING TOGETHER COOKING TOGETHER**

**Health and Wellbeing**

- OUTDOOR LEARNING
- HEALTHY EATING AND FOOD CHOICES
- HEALTHY LIFESTYLE AWARENESS
- MINDFULNESS THROUGH OBSERVATION OF THE NATURAL WORLD
- WELFARE, CLEANLINESS AND HYGIENE
- IMPROVED PHYSICAL WELLBEING
- UNDERSTAND DIVERSITY

**Key Information:**

- Spaces: 12-30
- Stage: P5-S3
- 10 days across the academic year
- Academic Year 2019/20

**Harmony Principles - The Cycle, Interconnectedness**
This two day programmes introduces pupils to the practices of a working professional kitchen with particular focus on healthy eating. Using home grown organic produce, they will create a balanced family meal on day one, followed on day two by an exploration of healthy vegan recipes to ensure all key nutrients are included for optimum health. Pupils will spend time in our organic garden selecting vegetables before creating recipes and learning key cooking skills as used by professional chefs. Pupils will learn how to time manage and use weights and measures. They will also understand the importance of food provenance and reducing food waste through considered approaches to using the produce.

An appreciation of the journey from food to consumer, local availability, seasonality and sustainable food production

Vocational skills linked directly to the Hospitality Industry

The project support set Scottish Government Good Food Nation Policy
Hospitality

PROFESSIONAL COOKERY

The programme aims to prepare pupils to cook and serve a professional quality menu by introducing them to the skills required to work in a professional kitchen. Pupils will use the latest equipment and learn how to use up to date cooking methods to serve a starter, main course and dessert to the highest standards possible. They will be working in teams, following a work plan and recipes in a hygienic way. Pupils will learn what the key considerations are for a menu which uses sustainable ingredients, many of which will be harvested from the Estate garden. Students will be shown how the recipes and menus can be changed to meet dietary needs including gluten free, lactose free, vegan and vegetarian. Core communication and numeracy skills will be developed as part of the process.

An appreciation of the journey from food to consumer, local availability, seasonality and sustainable food production

Vocational skills linked directly to the Hospitality Industry

The project support set Scottish Government Good Food Nation Policy

Health and Wellbeing

HEALTHY EATING AND FOOD CHOICES

MINDFULNESS THROUGH FOLLOWING PROCESS

WELFARE, CLEANLINESS AND HYGIENE

IMPROVED COMMUNICATION

UNDERSTAND OF SUSTAINABILITY IN THE FOOD CHAIN.

TEAMWORKING

Key Information:
Spaces: 12
Stage: S3+

5 days - can be condensed or rolled out across an academic year

Academic Year 2019/20

Harmony Principles - Health, The Cycle
Textile Crafts

**FABRIC CREATION AND SEWING SKILLS**

A 2 day programme exploring how fabric is made and products are manufactured. Pupils will create their own woven fabric inspired by images from the estate to understand proportion and colour. They will use luxury yarns such as wool and cashmere to learn about the importance of natural materials for a sustainable planet. They will then use domestic sewing machines to create a personalised item which will ensure they understand the importance of being an ethical consumer and that fast fashion has a true cost.

**Health and Wellbeing**

- Calming therapeutic process
- Improved creative thinking
- Develop meaningful and respectful relationship with environment
- Sense of achievement through the creative process
- Increased awareness of how colour can impact mood and behaviours

**Key Information:**

- **Spaces:** 12
- **Stage:** P5-7
- **One day per week for two weeks**
- **Academic Session 2019/20**

**To explore the connectedness of the expressive arts and numeracy**

**To increase the participants sense of curiosity and to capture their imaginations**

**To increase participants confidence and problem solving skills**

Harmony Principles - Beauty, Geometry
Resilience and Confidence Building

G.R.I.T - GROWTH, RESILIENCE, INDEPENDENCE, TRUST

‘GRIT’ is designed to enhance the confidence and resilience of young people’s confidence whilst developing a growth mindset. Throughout each session, the workshops are embedded with the principles of Growth, Resilience, Independence, Trust.

Participants take part in activities that they may find a challenge, giving them the opportunity to develop ‘bounce back’ and become more resilient. This could be through overcoming failure or simply by taking part in an activity outwith their comfort zone. Self-reflection is a big part of each session. This personal development gives the individuals a better understanding of emotions, strengths, weaknesses, drives, values and goals.

**Health and Wellbeing**

- OUTDOOR LEARNING
- IMPROVED HEALTH
- HEALTHY LIFESTYLE AWARENESS
- OPPORTUNITY TO IMPROVE TEAMWORK AND PROBLEMSOLVING
- BRINGING ABOUT SENSE OF ACHIEVEMENT
- ABILITY TO MANAGE RISK
- LEARN HOW TO ASK FOR HELP
- UNDERSTAND DIVERSITY

Participants develop self-awareness, self worth and respect for others

Participants meet challenges, manage change and build relationships

Experience personal achievement and build resilience, confidence and mindset

Key Information:

Spaces: 12-30

Stage: P6 - S3

One day per week for five weeks

2019/20 Academic Session

Harmony Principles - Oneness, Health