



Low season  
special offers for  
visits taken between  
November 2026 –  
March 2027

# STEM Activity & Discovery Packages

All-inclusive residential packages for KS1 & KS2

## Book Now

Call us on **0203 467 2002** or email  
**[school.travel@firstbus.co.uk](mailto:school.travel@firstbus.co.uk)** to discuss  
your requirements.



## Who are we?

First Education and School Travel are one of the UK's leading providers of school trip packages, working in partnership with over 100 venues and activity providers.

## All-inclusive packages

We provide two all-inclusive package themes at this fabulous location - STEM and Discovery - take a look at the details below to help you make your choice of outstanding school trip experiences.

These all-inclusive curricular linked residential visits are delivered in partnership with VSTEAM Education and YHA Chester Trafford Hall. We have two great contrasting programmes available - both are renowned for their high quality and value for money.

Packages are fully inclusive of coach travel, accommodation, meals plus your chosen activities.

## Renowned school tour operator

We are a fully bonded school tour operator working to current UK Package Travel Regulations, meaning your payments are 100% safe with us.

## The Venue



YHA Chester Trafford Hall is situated in a spectacular location on the outskirts of the City of Chester and within easy reach of some of the North West's largest conurbations. Built in 1756, the Hall is a fine building with fabulous historic character that reflects both the past, and today's modern facilities.



The Hall now works to deliver the YHA mission to enrich the lives of all - but especially young people - with a programme of activities that help to promote good physical health, mental wellbeing and life skills through the experiences we create.

## Why choose Chester?

Chester Trafford Hall offers a unique opportunity for your group to stay in and explore 14 acres of organic gardens and woods, it has on-site renewable energy facilities, sustainably designed bedrooms and carbon-neutral training space. The venue has 214 beds, over 53 all en-suite rooms, 42 rooms in our Segal's accommodation and 11 rooms in the Stables. All private and dorm rooms are en-suite.

Groups can make full use of the shared spaces in the hall, including a spacious lounge and dining area. There is also a drying room just in case! The fun games room includes a pool table and table-top football (both require a small charge).



## Our two great activity packages

Both these incredible activity packages include your return coach travel, accommodation, a full board meals service as well as your chosen activities.

### Introducing our all-inclusive STEM package - delivered by VSTEAM

VSTEAM is a unique team compromised of talented STEM instructors and professional dance performers who offer a dynamic and innovative approach to STEM education.

VSTEAM provides exclusive Science and Engineering workshops whilst combining the expertise of their STEM instructors with the creativity and energy of professional street dance. Each member of the team has a unique individual background and passion for Science and Technology. This approach has a positive and inspiring impact on students - combining science and art.

#### Demonstrations

As part of their engaging activity program, VSTEAM will be treating children to a wide range of demonstrations, featuring captivating elements like drones, robots, and circuits for their enjoyment and enrichment.

These incredible Science based programmes cover many KS2 areas within the curriculum. They are delivered on-site and led by the incredible VSTEAM team. All activities are fully risk assessed.

2 nights / 3 days - Arriving at lunchtime on Day 1 - departing at lunchtime on day 3 - activities are delivered during the mornings, afternoons and evenings. Starting with afternoon on day 1.

#### Choose a STEM package to include some of the following activities:

Bridge Building - Renewable Energy - Aircraft - Biology  
Solar System - Forces & Motion

### Introducing our all-inclusive DISCOVERY package - delivered by YHA

These LOTC accredited Discovery activity programmes cover several KS2 areas and subjects within the curriculum. They are delivered on-site and led by the YHA team. All activities and delivery sites are fully risk assessed.

We offer a wide range of activities - all of which are suitable for KS1 & KS2 pupils and are all designed to include all participants ALL of the time ensuring that all participants are immersed in fun and enjoyment from start to finish!

2 nights / 3 days - Arriving at lunchtime on Day 1 - departing lunchtime on day 3 - activities are delivered during the mornings, afternoons and evenings. Starting with afternoon on day 1.

#### Choose a Discovery package to include some of the following activities:

Archery - Fencing - Night Line - Team Challenges - Orienteering & Map Skills  
Environmental Art - Fire Lighting - Bush Craft, Den/Shelter Making  
Egg Rockets - Evening Camp Fire

### We are members of the Council for Learning Outside the Classroom

# KS2 STEM Package Activity Descriptions

## Bridge Building

Dive into bridge engineering through hands-on practical work. Explore various bridge types, including arch, beam, cantilever, suspension, and truss bridges. Learn the intricacies of load transfers and design a stable bridge.

### Learning Outcomes

- Understanding the basic principles of bridge engineering.
- Identify various bridge types and comprehend how load transfers occur.
- Apply knowledge to design and construct a stable bridge.

## Renewable Energy

Investigate generator mechanics, kinetic and gravitational potential energy, and the vital role of renewable energy in addressing climate change. Children construct a working toy windmill to illuminate a small LED bulb.

### Learning Outcomes

- Exploring concepts of renewable energy and its significance in addressing climate change.
- Understand the mechanics of generators and the conversion of energy.
- Recognise kinetic and gravitational potential energy.
- Gain awareness of sustainable energy sources and their impact on the environment.

## Aircraft

Gain insights into aircraft aerodynamics through practical experiments. Understand lift, thrust, drag, weight, and centre of gravity while building a lightweight cardstock indoor glider for hands-on flight control experimentation.

### Learning Outcomes

- Discover the principles of aircraft aerodynamics
- Experiment with flight controls to understand how they affect flight.
- Develop an appreciation for aviation technology and its role in modern society.

## Biology (Microscopes)

Explore the microscopic world of cells, microorganisms, and photosynthesis. Enhance biology knowledge with fun, microscope-based activities, offering stunning 1000x magnification views of organisms.

### Learning Outcomes

- Learn about the process of photosynthesis and its importance in the ecosystem.
- Develop scientific observation and microscopy skills.
- Enhance understanding of basic biological concepts in primary school curriculum.

## Solar System

Embark on a cosmic journey with seven practical and hands-on experiments to explore space and our planets. Explore curriculum-based topics such as gravity, forces, and motion with micro:bit activities.

### Learning Outcomes

- Investigate the structure of the solar system and the characteristics of planets.
- Explore concepts related to gravity, forces and motion in the context of celestial bodies.

## Forces & Motion (Tornadoes and Rockets)

Deepen your understanding of forces and motion with engaging activities. Create captivating water tornadoes and launch stomp rockets using our specialised pressure pump kit. Explore concepts such as thrust, gravity, friction, drag, and pressure whilst having a blast.

### Learning Outcomes

- Apply knowledge to real-world scenarios, such as rocket propulsion.
- Develop critical thinking skills through engaging hands on activities in physics and fluid dynamics.

## Demonstrations

As part of this engaging activity program, pupils will experience a wide range of demonstrations, featuring captivating elements like drones, robots, and circuits.

# KS2 Discovery Package Activity Descriptions

## Archery

Archery sessions offer a focused skill in accuracy, control and a steady hand which are vital for achieving the best results. Upon completion, participants will have demonstrated the ability to listen to, understand, and act on instructions received, understand the rules of the game and why they need to be followed, whilst also developing an understanding of associated hazards.

## Fencing

Fencing is a fun and exciting activity that increases focus and concentration, as well as the powers of observation. It also develops self-assurances and discipline. The mind must constantly work and build its decision-making skills. Building on these skills can improve one's performance in many other aspects of daily life.

## Night Line

This is a great team activity, an exploration of the senses and ideal for all ages. The Nightline guides the group through a series of challenging obstacles. Pupils will need to rely on a series of skills including team work, communication, leadership, encouragement, mutual respect, risk awareness and personal development.

## Orienteering & Map Skills

The aim is to confidently identify and interpret the symbols used on an orienteering course set in the fabulous grounds. Pupils challenge themselves physically and have a chance to take part in this growing and competitive sport. At the end of the challenge the aim is to be able to successfully use and understand a compass and follow map settings and plot directions.

## Environmental Art

Using the extensive grounds to be creative and to plan, design and present a piece of fabulous art to the wider group. Pupils will explore surroundings to discover all sorts of natural materials, and then through experimentation, the group work together to develop skills in various media and in their approaches to art making. Their challenge is to find and identify safe natural art materials, tools, and equipment and prepare and present their artwork for display.

## Fire Lighting

To work as a group to safely start a controlled fire in the grounds, pupils will learn about the fire triangle and practice creating a spark using a flint and steel. This is a great team activity designed for pupils to work as a group to ultimately to create a small fire. Of course, all under supervision.

## Bush Craft & Den/Shelter Making

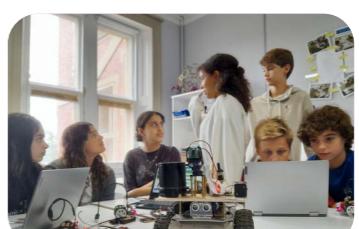
Bushcraft is used interchangeably with 'wilderness skills'. This brilliant activity focuses on pupils using the resources available in the natural environment to promote survival skills and to create a spectacular den or shelter. This is a brilliant teamworking activity.

## Bottle Rockets

The group will design and build a water bottle rocket that flies straight and in the desired direction. The instructor will convey each of the steps in the design process as the group create their rockets. This is a fun and exciting activity that highlights successes and failure, the benefits of working as a team, listening, and working together to suggest improvements.

## Evening Camp Fire

Campfires are a great opportunity for building friendships and strengthening group dynamics by sharing stories and memories. This activity also helps pupils to understand responsibilities and the requirement for sensible actions around the fire, whilst also having fun with their peer group, singing campfire songs and toasting marshmallows.



# What's on the menu?

The package includes a full board meals service for groups covering breakfast, packed lunch, and a two course evening meal.

**Breakfast** is a buffet, served by members of the team, with guests choosing from a range of cooked food (**sausage, bacon, hash brown, tomato, beans, scrambled eggs and vegetarian sausage**), **continental pastries, cereal, yogurt, fruit juice, along with tea and coffee**.

**Packed lunches** consist of a pre-ordered sandwich, a piece of fruit, a biscuit bar and a bag of crisps. Please note that as part of YHA's commitment to reducing plastic waste. Bottled drinks are not provided – however a water refilling station is available and we recommend that all guests bring a bottle to fill and refill.

**Evening meals** vary on different days, and an example two-course menu would consist of the following options:

**Red tractor pork sausage with gravy and mash with vegetables** – 915 kcal

**Vegetarian Cumberland sausage with gravy and mash with vegetables (v)** – 787 kcal

**Jacket potato with optional cheese and beans (v)** – 657 kcal

**Mini doughnuts with salted caramel sauce (v)** – 285 kcal

**Choc ice (v)** – 171 kcal

**Fresh fruit (v)**

The team can cater for most allergies and other dietary requirements with advanced notice. Group leaders are sent meal choice forms ahead of the visit to allow participants to make their choices and return them along with details of any dietary requirements.



Find out more about us at  
[firsttravelsolutions.com/  
fest](http://firsttravelsolutions.com/fest)

## Low Season = Being more inclusive

As a long-standing school tour operator, we understand the current impact of cost of living increases on household budgets. We recognise how this will be affecting some pupils' opportunity to take part in a school visit. You can help parents to include their child by moving your visit to a **low season month**, thus reducing this cost burden significantly.

We all recognise the positive impact of outdoor experiences and moving to low season makes visits more affordable, enabling more children to take part. Encouraging opportunities for all.

We can beat the squeeze on budgets with our low season residential packages delivered between November and March when significant savings can be made.

These special prices are only available when booked directly with us as an all-inclusive package



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email [school.travel@firstbus.co.uk](mailto:school.travel@firstbus.co.uk)



## Protecting the environment – making a clean getaway

We are committed to caring for the environment and finding the most sustainable methods of moving passengers are the UK in the most eco-efficient ways possible. We continue to work with our partners in recruiting and providing the greenest of vehicles with the cleanest and most fuel-efficient engines for all school travel journeys.

Wherever possible, we ensure vehicles are powered by Euro 6 diesel engines, these are the cleanest engines currently on the road in the UK and fully compliant with the Green Air Act.

We recognise our responsibility in doing our utmost to provide the cleanest methods of travel.

## How to book

**Simply let us have some details of your proposed group and your requested dates and we will provide an all-inclusive quotation.**

**Call us on 0203 467 2002 or email [school.travel@firstbus.co.uk](mailto:school.travel@firstbus.co.uk)**