# Further information on each of the activities

# **Mathematics**

# Task Master

he first session was modelled on the TV program TaskMaster. The tasks were designed to encourage students to work cooperatively to complete each challenge and to think laterally.

The tasks included:

- Finding words within two given sets of letters.
- Working with square, cubes and primes
- A tower building challenge using "Cliksy" building blocks

The students enjoyed the tower building task the most. They found the number puzzle challenging to understand, but really got into it. There was a lot of team working, with students allocating tasks to each other. Communication was also key as they needed to discuss the aspects of each task.

# Isometric drawing and spatial reasoning

The second session involved an introduction to isometric drawing and spatial reasoning.

The tasks included:

- Constructing shapes out of multilink cubes
- Drawing the constructed shapes on isometric paper
- Visualising adding cubes to extend fixed shapes

Students enjoyed the challenge of building the shapes out of multilink cubes. There was a pleasant atmosphere and a light competitive nature in attempting the most complex constructions. The drawing of shapes on isometric paper, was a skill that the students have not seen before. Through scaffolding of drawing techniques all the students were able to draw, correctly, on isometric paper. With some students adapting to it very quickly and progressing onto the most challenging shapes. This session involved a lot of independent work and switching between the physicality of constructing shapes, and the more abstract 3D isometric drawing of those shapes.

# Tower Building

The third session was a team tower building challenge. The students were given a large collection of differentiated mathematics questions. They had to organise teams and build the tallest tower possible.

The tasks included:

- Answering mathematics questions
- Building the tallest possible free standing tower out of multilink cubes.
- Bonus points awarded for the most accurate representation of their tower on isometric paper.

Students enjoyed the activity. This was evidenced by the excitement when their final towers were measured to determine the winning team. Some students found questions involving directed numbers and BIDMAS calculations with powers challenging. However, with support they were able to access those questions towards the end of the session. While building their towers, students found that stacking cubes in a single column proved to be a poor way to construct a tall tower. With direction and questioning they improved their designs and began to find ways of stabilizing their structures. The tallest tower ended up being over 1 metre high!

## <u>English</u>

## **Creative Living**

Students were introduced to the theme of creativity and its relevance to their lives.

The tasks included:

- Product design: Students created a brand new item of furniture based on the shape of an existing fruit. They also had to decide on colours and materials they would use in their final product.
- Journal Writing: Students learnt how to keep journals for day to day record keeping, tracking their emotions, keeping a record of important memories and for general wellbeing.
- Collage Making: Students learnt how to create a collage for a vision board in order to inspire them towards a certain short or long term goal.

Students enjoyed the sessions, they worked well together and created some artistic pieces of work. The journal writing where students were asked to write for 5 minutes continuously, was very popular. Students seemed apprehensive to start with but when asked to reflect on their experience, enjoyed it. Some said it allowed them to get out their thoughts and 'empty their minds'; others appreciated the quiet time to write without the worry of being 'wrong' and some liked the idea of keeping memories alive in this way.

### Word games

Students engaged in four activities linked to skills required for the GCSE English Literature and Language examinations.

The tasks included:

- A to Z of me: Students had to recall information about themselves and provide a piece for each letter of the alphabet. This aided in developing their literacy skills along with 'remembering' in Bloom's taxonomy. The activity linked with Assessment Objective 1 of GCSE English Language.
- Scattergories: Students were given a list of random categories and had to come up with an
  example of each for a chosen letter of the alphabet. This sparked creative ideas on language
  and vocabulary. This task got progressively harder in stages, including allowing more than
  one word per category and removing point this was a great team activity and students
  worked well together.
- Taboo: This popular party game sparked creative ideas on language and vocabulary. This activity was challenging for students as some of the vocabulary were hard to understand.
- Picture quiz: In groups, students were given a range of pictograms of popular book titles.
   Students had to infer what the title was from the image, potentially picking apart the image in steps to find the explicit meaning. This task proved to be the most popular of the four, with students talking about it positively in other sessions.

### The Great Realisation

Students began the lesson by watching a video of a spoken word poem – 'The Great Realisation' by Tom Foolery. Students wrote down what was spoken about in the poem at different stages. Students then had to plan and write their thought on the writer's message. They began by writing an agree/disagree table and then a paragraph to explain their ideas that began with, 'In my opinion ...' and a connective 'however' to express an alternative view.

Students felt this task was interesting, especially as they could link it to the context of their real lives. There was a focus on the idea that being in isolation was horrible, but the video explained how this could be a positive in terms of time with families.

Students gained a range of skills here linked to the GCSE English Language examination: AO1 to identify aspects of what they have watched, AO2 commenting on how writers have achieved effects, AO3 comparing ideas and perspectives and AO4 evaluating texts critically.

#### **Immersive writing**

Initially this task was supposed to be based outside, using nature as a stimulus, but due to the adverse weather, the task was adapted to a virtual encounter. Students were asked to use their imagination, along with help from a video, to write a creative short story about an animal encounter from a first person perspective. Students were asked to plan the story, using sensory descriptions to set the scene and state how they managed to escape safely. Students were to work in pairs on their writing, coming up with ideas together and taking turns writing up their story and creating a book cover the match the story content.

Students felt this task was great! The reactions to the videos, especially during scenes when animals attacked vehicles, were met with cheers. Students enjoyed writing creatively, having the freedom to explore different environments and animals – some going as abstract as sharks and giant birds! Some students took pride in reading theirs out, adding to their Speaking and Listening skills.

Students gained a range of skills here linked to the GCSE English Language examination: AO1 to identify aspects of what they have watched, AO5 creatively writing a piece using structure and grammar to present their thoughts and AO6 using range of vocabulary to present their ideas.

#### Hybrid Writing One

During the activity, students enjoyed seeing slides of fictional characters from their childhood and enjoyed making guesses about what the word hybrid meant. This was an engaging way for students to think about a dry academic word and the concept behind it all. Several students, who had been quiet in week one of the summer school, joined in the discussions, as they felt confident about the characters they were discussing from the images they had seen.

During the second part of the activity, they had to gather true life stories for hybrid writing for each student- demonstrate and then play, in pairs, the true or lie game. Students loved playing this game, and all were able to come up with facts about themselves. Again, students who were reticent in week one were fully engaged. Students had a lot of fun and many students were able to surprise their partners with accomplishments they had made in their lives, and so this activity had a very positive wellbeing aspect. The class also began to gel very closely in this game, and the students asked for more time to play. The students also spoke at length or questioned at length, adding to their ability to sustain in speaking and listening.

Throughout the session, students were participating enthusiastically. Students were able to discuss ways to challenge others during speaking and listening activities, polite and formal language and etiquette, which was an unseen and very welcome impact.

#### **3D Ball Bearing Puzzle game**

The Design Technology department provided students the opportunity to create a 3D ball bearing puzzle game. The first part of the project required students to design a set of obstacles for the puzzle game, cut them out using a hand saw and bench hook, sand cut pieces to remove saw marks before gluing the pieces in place on a base. The second part of the project required students to place ball bearings into their game, glue down a pre-formed lid and sand corners to remove plastic burrs before completing a tool match task and process diagram.

Students thoroughly enjoyed the experience as this was the first opportunity for students to be in a Design Technology classroom. Data from the student survey showed 89% answered yes to the question 'did you enjoy the puzzle project', while the other 11% did not answer the question.

#### Enterprising IT

The ICT and Business Faculty offered students the opportunity to participate in Enterprising IT where students were given the task of marketing JLA Summer School 2022 to next year's cohort of students, using ICT equipment and their experience of the Academy to develop persuasive content. The first part of the project provided students to become familiar with the Academy campus by using the digital camera to take photos of the Academy to use their marketing material. During the second part of the project, students were introduced to a variety of ICT packages to use to develop their marketing material and the opportunity to create persuasive marketing materials using their current ICT skills.

Students very much enjoyed their Enterprising IT experience and it enhanced their confidence and knowledge in using the Academy IT systems.

#### My Amazing Brain and How to Grow it

The Psychology department offered sessions focussed on developing a growth mindset. This included exploration of how our brains work by labelling parts of the brain to identify their functions and create a playdough model of the human brain. During the second part, students identified 'seeds of learning' which would enable them to be successful. Students then planted some cactus seeds as a metaphor for what is takes to grow our seed of learning into success. During the final session, students were introduced to perception and the concept of optical illusions.

From the learning reviews carried out, students expressed that the sessions had been interesting, boosted their confidence, and encouraged them to demonstrate resilience when approaching any challenges that lay ahead. Some of the most notable responses included:

'If I work hard, and be myself, I will be successful'

'Now I know about neurons, I know that new things are hard because my brain is working hard to make new connections.'

'I know what happens if I persevere now, and I know what to do if I fail.'

'Different people might see things differently to me – that doesn't mean that either of us are wrong.'

### **Discover Leckie**

The Geography department offered students the opportunity to become familiar with four figure grid references and find their way around the academy site. After becoming familiar with how to read four figure grid references, students then had the opportunity to produce their own treasure map. For the second part of the activity, students were divided into small teams and each team was given a map and a series of four figure grid references. Students had to visit the site of each of the four figure grid references and collect the letters that were displayed on the poster. Once all sites had been visited, students returned to the classroom and rearranged the letters to make a saying which also supported the enhancement of literacy skills.

All students said that they enjoyed the activities and that they were pleased that they had learnt a new skill which they were looking forward to showing to their family and friends. Students were also pleased that they had been able to experience moving around the academy site and learn the location of several buildings and departments around the academy ahead of starting in Year 7 in September.

#### **History Mysteries**

The History department offered students the opportunity to become familiar with the Incas by looking at some images of the Incan society and identifying key features. Students also worked in small groups and looked at different interpretations of the Spanish Conquest (from the point of view of the Spanish Conquistadors and from the point of view of a modern historian). Students also had the opportunity to look at the Tollund Man and complete an autopsy report. Students were also asked to look at different opinions on why the Tollund Man was killed and discuss how convincing they found each opinion. Using the information obtained, students also had the opportunity to create a newspaper report.

Many of the students mentioned enjoying the activities, working as a group and making the poster and producing the report. Most students said that they knew nothing or very little about the Incas, to begin with. By the end of the two sessions, the students were able to describe aspects of Incan culture and explain how society was structured and discuss the impact of the Spanish conquest.

#### Team Building 'Leckie Style'

Students had the opportunity to interact and work together as a team by carrying out a range of team building tasks which included 'floor is lava', 'rat down a drainpipe', 'the Leckie waterfall' and '1 minute team challenge'. Students learnt that to be successful, every member of the team had to have an input into the challenge. Students also participated in more KS3 PE activities/ sports. The sport activities included; basketball, football, dodgeball, cricket and netball. All students were able to build upon their social and communication development at the start of the session and then input this into a sporting task. All students excelled in this and many came away with new experiences of sports that they have never played.

These sessions were really important for the students in preparing them for life at the Academy in September 2021. All students were engaged and participated in 2 hours + of physical activity with some students commenting that this was the first bit of exercise they have carried out in over 6 months! The team building aspect was really evident to see with all students learning how to speak, interact and listen to each other when set group tasks or challenges. Finally, all students left the session motivated, engaged and excited to start PE at the Academy in September.

#### Culture Club

At the Academy, there are great opportunities for students to explore the cultural diversity that exists in this school's community. To further enhance the rich diverse community within our Academy, the Culture Club activity was embedded in the Summer School. The Culture Club activity offered students the opportunity to enhance their knowledge about countries which are represented by students attending JLA and then to use IT to showcase their technical skills to create their final product. Students had the opportunity to create travel brochures; an Instagram page for the country selected; a travel blog; presentations and postcards. Students had the opportunity to become familiar with different IT software and also carry out cross-curricular links with RE, History, Geography, Languages, ICT, PE, Art and Food technology. The majority of the students were very keen to share their personal experiences of their cultural backgrounds. Further support was provided by providing the less confident students a template to support them with creating the end product. Students enjoyed leaning about various cultures and the activity incorporated links with SMSC and FBV.

#### Viking Mythology

Students had the opportunity to study Viking Runes and were handed the Runic Alphabet and were first asked to write their names using the symbols. This was a great way to get students to introduce themselves to different people and consolidate the relationship in the group. The students then progressed to creating challenging codes in their teams, using the Runic Alphabet and getting other teams to solve them. The second task involved groups using the resources available, to try and create an accurate model of a Viking Longship. This task required creativity and plenty of communication and collaboration amongst the students. To become familiar with 'The Nine Realms', each group was given a specific realm to complete further research into using the laptops. This combined effective use of IT, communication and presentation skills. Students were also given the choice of five different project titles- Viking Life, Ragnarok, Thor's Hammer, Viking Warriors and Viking Invasions to carry out research and share findings with others.

Students thoroughly enjoyed carrying out the research and sharing ideas with the rest. Creating a model of a Viking Longship created a competitive element to the activity.

#### **Anxiety Busters**

To support students understanding of their emotions and how they link to behaviour, this session provided students the opportunity to discuss their worries and how this made them feel and how their body reacted. Students had the opportunity to practice both belly breathing and tension/release. The second half of the session was used to create personalised calming bottles. The bottles were designed to represent how people's emotions may look when shaken. Once completed, the students then combined using the visual/sensory aspect of the calming bottles, with their belly breathing, to practice their calming down methods.

The feedback slips show all students found the sessions positive, with happy and calm being the feeling most represented. Students identified they had learnt about making calming bottles and how to breath/be mindful. 38% of students stated they were worried about nothing, even though at the start of each session all students, identified as having some form of worry. Overall the session had a

positive impact on the students wellbeing. It supported in reducing their anxieties about coming to JLA by both reassurance and giving them the practical skills to use.

### Drama and Theatre Skills Workshop

During the Drama Workshop, students had the opportunity to participate in a range of workshop activities to explore drama and performance through a range of different skills. Students had the opportunity to work in groups to create their own performance using a stimulus and then perform in front of their peers.

At first, students were not confident in taking part in the activity but once they started, they thoroughly enjoyed creating their performances. For the majority, this was the first time they had the opportunity to be in the Drama Studio.

## The Brain Game

According to research carried out by 'geekgeargalore', playing board games brings people closer, strengthens relationships and develops cognitive skills. During the session, students had the opportunity to play a range of games including; Four in a Row, Brain Master and UNO in a competitive element.

During the sessions, students had the opportunity to enhance self-confidence and develop problem and team working skills.

### Virtual Escape Room

The virtual escape room activity provided students the opportunity to work collaboratively to unlock several challenges. Each challenge required students to apply prior knowledge or interpret new meaning in a range of different subject areas and topics which included; researching different volcanoes in the world, understanding the different type of food that we should have as part of a healthy diet and rounding Pi to six decimal places. The competitive element of the challenges encouraged children to engage in each challenge in order to complete them quickly and earn points for their team.

The second part of the activity required students to create their own virtual escape room activity combining effective use of IT, communication and collaborative working. Students were keen to complete the activity and tried to be as creative as possible. To add an extra element to the activity, students were required to create a challenge for each subject they would be studying at Key Stage 3.

The overall feedback was really positive from the students. They thoroughly enjoyed the competitive element of the activity and also liked the opportunity to work with new peers and form new friendship bonds.

#### **Baking Galore**

Baking was extremely popular with the students. During the two weeks, students covered the importance of health and safety, hygiene, food nutrition and food preparation. Once students covered the theoretical aspect, they then had the opportunity to carry out the practical element.

Students worked in pairs and after following the demonstration, had the opportunity to bake; Muffins, Flapjacks, Cookies and Brownies. For each of the different bakes, student's ensured they followed each of the steps meticulously and paid great attention to detail to ensure the food they were baking, did not just taste amazing but looked appetisive too. Students also had the opportunity to be as creative and experimental as when cooking a homemade pizza.

Feedback from the students and parents were extremely positive with several students asking for recipes to try at home. For the majority, it felt like a mini version of Bake Off taking place, Leckie style! The recipes provided students a flavour of what Food Technology would be like at Leckie and also become comfortable in the kitchen environment.

#### **SEND Intervention**

A small group of students identified based on the SEN information (ASD, SEMH and Communication needs) had a bespoke session made available to them. The aim of the session was to develop confidence in recognising and managing feelings in themselves and others, identifying aspects of being a good friend and begin to improve on some communication skills. The session was broken down into sections and used a booklet to complete simple tasks; such as emotional charades, getting to know you questions and active listening tasks. Once all these skills had been taught and modelled by the staff involved, students then played the friendship formulae board game which required them to demonstrate the skills they have been practicing. Once completed students then provided feedback via an exit slip, including any potential worries for the worry monster.

Student voice both verbally and written, was difficult to get at times due to the nature of the students and their limited communication skills. However, during the session all students were actively engaged, answering questions, giving examples and feedback. They also demonstrated good friendship skills by encouraging other students and supporting them when they struggled. One particular student was almost non-verbal due to shyness, ASD and slower cognitive processing which

made it difficult at times to get responses, however with support from the Teaching Assistants and other students in the group they actively participated in one of the mini challenges on the board game.

Another student volunteered to do the emotion charades game, however decided against it last minute as they were too shy and worried about reading the words. Once another student had gone and encouraged him to do it, the student had another go and managed to give one of the charades. This small step demonstrated the progress students can make in the correct setting with the right support and positive environment.