King's Climate & Sustainability
King's Food

Sustainability Projects Fund

Past successful applications

Successful applications from 2019-20 (anonymised)

King's Community Garden

Project description
King's Community Garden is a project based on Guy's campus, which began in September 2019. The project was started with minimal funding on a small scale, using two neglected planters outside Addison House. The project has been an amazing success so far, but we would like to grow as a community and increase the size of the garden. We already have an extensive email list of staff and students who would like to get involved, and have been approached by several others who would like to start similar projects on other campuses. We have been given permission to expand into the surrounding area. The idea of the project is to build a community where people can take time out from there busy schedules in a green and peaceful environment. We will be growing all sorts of food for volunteers to share and various plants to help increase and encourage biodiversity. We welcome input and project ideas from all members of the King's community. Although on the face of it, this is a food growing project I see it much more as a community building and wellbeing project which will improve people's work life, help raise awareness of environmental issues and empower people to take action.

Project scope
The project has already started and will be ongoing and hopefully continue to grow. It is based in the courtyard between Addison House, The Hodgkin building and the Wolfson CARD. We have already received enquiries from several groups on Guy's campus as well as other campuses about how they could start a growing project. I would like, as part of the project, to be able to offer them advice supply, seedlings and help them build planters. We currently have a mailing list of around 70 people, a mixture of staff and students from many different departments at King's. I think this project will benefit many groups not only those at King's but also in the wider community. I have had enquiries from the course leader of the 'BSc in Mental Health Nursing Programme, they would like to run a wellbeing module at the garden. King's sport wish to include the garden in there BeActive & GoodGym schemes. We have had teams visit from the principle's office, the Service Team and King's Alumni. We have held events for the Staff well being week and sustainability week. This is only a small proportion of the number of groups and people at King's that we could have a positive impact on. To do this effectively the garden will need to grow in size which will require extra inputs. The following is a list of benefits the community garden will have, relating to the seven categories of the Sustainable Development Fund: 1. The garden is offsetting some of the energy usage of the surrounding buildings by using heat generated from the plant room for a heated seed bed. 2. We will increase biodiversity by the plants we grow, which in turn will encourage other wildlife.

3. We will be reducing waste by reusing pallets to build planters and garden furniture. Cardboard and food waste will be used to make compost.
4. We would like to attach water butts to the drains to reduce waste water.
5. & 7 We plan outreach events for the local community including visiting schools and collaborations with other community groups and charities, such as Loughborough Farm.
6. We have started a conversation with King's food who may be able to use some of the food we produce, and we can make use of much of their waste.

This project will also save King's money, as the garden area will not need to be maintained by estates.

Funding requested
Topsoil £320 Compost £440 Seed compost £30 Weed control matting £64 Plant pots (biodegradable) £30 2 hand Forks, 2 trowels, 1 shovel, 1 digging fork £55 Watering cans £16 Hammer £10 Crowbar £10 Nails £40 Total funding request = £1,015

Blooming Balcony

Project description
Our project will see us transform our bare department balcony into a small garden accessible to all staff and visitors. The aim of Blooming Balcony is to reduce waste, engage staff in sustainability practices, and promote staff wellbeing by using tea, coffee and food waste to compost and establish and maintain a small communal garden that grows food and flowers suitable for pollinators such as bees. Blooming Balcony therefore falls within the following King's sustainability categories: • Biodiversity • Waste Reduction and Promotion of a Circular Economy • Sustainability Education and Awareness The DTR Sustainability Team (the applicants) will lead on the set-up of the garden and be responsible for its overall maintenance. The aim however is that all DTR staff members will be able to contribute to the project and enjoy its benefits. We will set up food waste bins in both kitchens within the DTR, with clear signage to explain their use. When the food waste bins fill up, we will transfer the contents to our compost tumbler. The compost tumbler will convert our food waste into fresh compost within 6-8 weeks. Fresh compost that is not used immediately in the planters will be stored in the compost bin. We will work with We Are Waterloo gardeners (with whom we have already made links), thereby building a relationship with our local community group. Outcomes we expect to see are: - A decrease in waste produced by the department, as food "waste" will be used to make compost for the garden - An increase in staff wellbeing by providing a natural, aesthetically pleasing green space within the department - An increase in staff bonding by giving the department a project to work together on, and that everyone can contribute towards • - An increase in biodiversity in the area • - Growing of edible plants that may be harvested and shared in the department. We could make and share a communal salad (for example), further re-enforcing the enjoyment of Blooming Balcony bounty.

Project scope
The project will be able to start as soon as funds are received and will be able to run indefinitely once we have purchased the items requested below. The following team members (anonymised) will be responsible for the following activities:

- A and B will purchase the items
- A and C will set up the items on the balcony
- D will prepare and send out the monthly DTR e-newsletter updates and poll staff members on what they would like to plant
- B and C will liaise with We Are Waterloo gardeners for seed planting and gardening advice
- B and C will run the planting of seedlings and gardening
- A (on the 4th floor) and B (on the 3rd floor) will be responsible for taking food waste from the kitchens to the compost tumbler
- A will help maintain and care for compost (I.e. add brown waste, turn tumbler, decant to compost bin etc.)
- E will weed garden and any other general garden maintenance

The garden will be located on the balcony facing the Thames on the 3rd floor. The balcony is freely accessible to all department staff and is used in the summer for department socials. Staff not on the sustainability team will be welcome and encouraged to contribute to the garden.

Expected benefits of Blooming Balcony include:

- - A reduction in our total waste, as food waste will be used for making compost
- - A new green space within the DTR for all staff to enjoy
- - Raised awareness within the DTR of sustainability practices whilst bettering our local environment
- - Growing and consumption of herbs, lettuces and some vegetables that may be enjoyed by staff
- - Enhanced staff well-being through physical connection to and nurturing of growing plants

Improvements in the future include:

- - The garden may be extended – we aim to create a living wall in the future that could take up a large portion of the facade of the balcony. By using the vine trainers, we will know what climbing plants thrive well in the balcony environment. A living wall will increase the plantable area of the balcony, without reducing useable space for staff to enjoy gatherings and socials that occur there in the warmer months.
- - Upgrading the outdoor furniture currently in place, to make it more appealing to staff
- - Improve/move the current bike storage solution to allow for more useable space on the balcony

Lasting impact

- The goal for this project is to embed in the DTR a culture of food waste recycling. The project will also support the DTR sustainability team's longer-term programme of activities to encourage staff to have healthy lives and work-life balance, with an emphasis on spending time outside with nature to alleviate stress and exercising (including through gardening).

- Staff members who get involved in the project will be upskilled in composting and managing a small garden, and we hope they will use these skills to carry out similar projects at home or in their own communities.
- The **key stakeholders** in this project are DTR staff members, who number around 80. We have the support of our TwinsUK Resource Executive Committee, which oversees all activities within the DTR, for our Blooming Balcony project.
- To ensure ongoing engagement with staff members, we will:
- - Have a waste sorting "quiz" in all the loos (see Appendix 1 for the quiz), for maximum reach as all staff use the loos
- - Include regular updates in the monthly DTR staff e-newsletter and on the kitchen whiteboards
- - Poll staff about the vegetables and flowers they would like to plant for each planting season
- - Staff engagement in the garden will be bolstered with the provision of 'home-grown' produce. Informal discussions with colleagues have already sparked much excitement about the prospect of the Sustainability Team creating the garden
- - The garden will provide a great deal of positive aesthetic reward as it will be designed and created on what is at present a rather drab balcony (the only thing saving it currently is the view over the Thames).

Blooming Balcony is perfectly in line with King's strategies and policies.

- Blooming Balcony echoes King's Environmental Sustainability Policy, as it will contribute towards the targets set for waste and resource use; biodiversity on campus; and training and awareness. The project therefore also aligns with UN Sustainable Development Goals 3, 11, 12 and 15 (good health and well-being; sustainable cities and communities; responsible consumption and production; and life on land respectively).
- Blooming Balcony also fits with Ambition 1 of King's Service Strategy 2018-2023 to enable a movement and facilitate the participation of King's staff in sustainable activities. By embedding the project in the DTR by DTR staff members, this will show to other staff that it is possible to carry out projects within King's that will provide benefits to staff and the university separate from research.

Funding requested

We request a total of £497 to carry out our Blooming Balcony project. This cost is broken down in the table below.

Item	Number	Total cost (£)
Odour-free kitchen food waste bins	2	52.00
Compost bin	1	100.00
Compost tumbler	1	120.00

Tall planters	2	130.00
Short planters	2	65.00
Seeds	/	30.00

Sustainable travel

Project description

International travel is essential for a global university, yet the resulting carbon emissions are significant. Business air travel emits 7955 tonnes CO_2e annually, over 5% of King's overall carbon emissions, according to the latest Sustainability Report. If King's is to achieve its commitment to being carbon neutral by 2025, it is essential that the number of flights are reduced without impacting on international academic collaboration. A simple way to achieve significant reductions in carbon emissions would be to encourage a switch from domestic and shorter European flights to rail travel.

King's central London location gives unparalleled access to national and European rail networks, making journeys to most UK cities, Paris and Brussels quicker by rail than flying (once travel to/from airports and check-in times are included). Onward connections from the Eurostar put much of France, Germany, Belgium and the Netherlands within easy reach by rail. While rail is an attractive option, it is often more expensive than the equivalent flight, due to the lack of taxation on aviation fuel. One way to overcome this would be to subsidise King's personnel to use rail transport rather than flying.

Our project will set up a pilot scheme for subsidising rail travel: the Future Travel Fund. When booking business travel, staff and students would be encouraged to obtain quotations for both rail and flight options. When the rail option is more expensive than flying, they will be offered a payment from the Fund to offset the additional cost of sustainable travel. The pilot scheme will operate within the Department of Diabetes and aims to both promote awareness of alternative forms of transport and to reduce the number of domestic and short European flights taken. Data on the effectiveness of this pilot will be used to encourage adoption of a similar College-wide scheme.

Project scope

The project will run from 1 May 2020 – 31 April 2021.

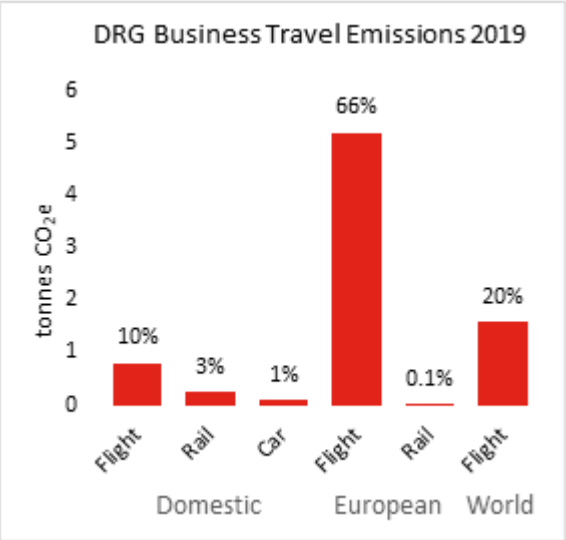
It will impact on all staff and students in the Department of Diabetes (School of Life Course Sciences, Faculty of Life Sciences & Medicine) who undertake business travel paid through the King's finance system. It aims to reduce carbon emissions by subsidising sustainable transport.

A travel survey was undertaken in the Diabetes Research Group which comprises approximately half of the Department of Diabetes. The group travelled on business over 54 thousand km in 2019 producing an estimated 7.9 tonnes of CO_2e,

roughly the equivalent emissions of providing heat and electricity to 2.5 average UK homes. The group's travel is summarised on the map (right), with flights shown in red and rail travel in green with line thickness representing the number of trips.

The breakdown of emissions by journey type (graph below) shows:

- 10% of emissions came from domestic flights, which are easiest to transfer to rail.
- Two thirds of emissions came from European flights. 41% of these flights were shorter than 800 km (500 miles) where rail travel represents a good alternative.



Targeting these two, this scheme aims to:

- Reduce domestic flights by 80%
- Reduce European flights by 30%

Reductions of this scale would reduce our business travel emissions by 28%, and if extended across the whole Department of Diabetes would achieve estimated emissions cuts of 4.4 tonnes CO_2e.

The Future Travel Fund will encourage a shift to rail travel by refund additional costs compared to an equivalent flight. The project will be managed by the applicant with the assistance of the Departmental Administrator. Travellers will apply to the Fund before booking a journey by submitting a simple web form and attaching quotations for both rail and flight options. This will automatically generate an email detailing the calculated contribution from the Fund and the conditions. Once the traveller has booked rail travel from an Activity Code, they submit proof of purchase and receive the agreed contribution from the Fund to that Activity Code by journal transfer.

This project aims to produce significant reductions in the carbon emissions from business travel within the Department of Diabetes in the first year. The long-term aim is to test the effectiveness of incentives for sustainable transport. We will use the results of this pilot to lobby for the following improvements in the emissions from College-wide business travel:

- Engage with the Sustainability Team and the College Officer responsible for Environmental Sustainability Policy (Senior Vice-President (Operations)) to encourage adoption of the Future Travel Fund College-wide.

- Engage with the above stakeholders, Finance & Planning Directorate, and Procurement Strategy & Services to investigate the possibility of introducing an internal carbon offset scheme on business flights to provide long-term funding for the Future Travel Fund.
- Engage with Procurement Strategy & Services to update the College Travel Policy (which currently contains not a single reference to carbon emissions) to encourage business travellers to consider carbon emissions when purchasing travel.

Please include the total amount of funding requested and a breakdown of costs.

The total amount requested to set up the Future Travel Fund is £ 3 100.

To ensure the maximum reduction in flights in obtained from the Fund, contributions to individual journeys will be limited. The Fund will contribute the difference between the full journey cost by rail and flight (including transport to and from airports) with the following limitations:

- For a single journey completed within one day, the contribution from the fund will be limited to the lower of:
  - 50% of the total journey cost OR
  - £100
- Where the increased journey time requires an extra night away an additional £50 per night will be allowed as contribution towards hotel accommodation or sleeper train.

With these conditions, we estimate the fund will contribute an average of £50 per single domestic journey and £100 per single European journey which is switched to rail. Based on our travel survey data extrapolated to the whole Department, achieving our targeted reductions in flights would require funding the following number of domestic and European journeys:

10 domestic journeys with an average contribution of £50	£ 500
26 European journeys with an average contribution of £100	£ 2 600
Total funding requested	**£ 3 100**

Sustainable education in chemistry teaching

Project description
This project will consist of two parts. The first will be to investigate chemistry student's perceptions of sustainability within their degree through questionnaires and focus groups, and then try to improve this through education and different interventions. The second part of the project will be to examine the current experiments conducted by students to find opportunities to reduce the amount of waste (chemistry departments use a high level of single-use plastics and consume high quantities of water) and improve sustainability (by altering current methods and more sustainable procurement). We hope that these two approaches will inspire the students to help increase sustainability within the department and further outwards into the King's community. The aim of the project is to increase chemistry student's perception of sustainability and its relevance within their own degree, and to reduce the environmental impact and increase the sustainability of the undergraduate practical course.

Project scope
The project will be based in X, with experimental work conducted in X. The project will begin in July 2020, with the design of the impact questionnaires to measure perceptions before and after intervention (including ethical approval application). At the start of the 2020/21 academic year, surveys and focus groups will be conducted to collect initial data (targeting first year students who are new to the degree, but students in all years will be invited to engage). During the first semester, experiments will be analyzed for possible points of improvement. These improvements could include; reduction of waste and water consumption, testing of new greener methods/equipment and improvement of sustainable supply chains. During second semester, interventions designed to educate students will be deployed and their impact measured using quantitative and qualitative data. We aim to impact 300 chemistry students using the interventions to educate them on how the course sits within the area of sustainability, and improve their choices regarding waste, initially within the lab, then spreading to all aspects of their life at King's. By improving the current undergraduate experiments and educating students on sustainability, we aim to have a positive economic and environmental impact, through reduction of waste, single-use plastic and water consumption, and also have a social benefit of creating more socially and environmentally responsible students. Following the initial findings of this project, we will seek to gain funds to scale up the impactful interventions and improved methods so that they can be applied across all levels of the course, and across other department labs. Ultimately, we hope to design a model of sustainability which can be shared with other HE institutions but also to secondary level education, with the lasting impact of increasing awareness and social responsibility of students through education and practical examples of sustainable development. The key stakeholders for the project are the chemistry students, the course organizer and the technical staff. Students will be engaged with interventions during practical sessions. The course organizer has

already been approached and is keen to see improvements that can be made to the current programme to make it more sustainable. This academic will be consulted throughout the project to aid the understanding of current methods and make sure any improvements/interventions are sustainable, without negatively impacting on the student's education. Technical staff for the lab, who organize the everyday use of the lab for all years, have also already been approached and again are keen to engage. The lab already holds a sustainability award, however this is from interventions from the perspective of the technical staff and not from students, so they looking to engage with the project to further improve their sustainability credentials. The technical staff will also be providing data such as consumable & utility usage, and current supplier lists that will be used in the analysis.

Funding requested
The total cost of the project would be £480, the breakdown of these costs is as follows: Cost of chemicals, consumables and equipment (testing and improving current methods): £400 Cost of materials for interventions: £40 Cost of data collection (conducting surveys and focus groups): £40

Reducing clothing waste from international students

Project description
The aim of the project is to raise students' awareness of sustainable fashion and reduce clothing waste. When international Masters students at KCL graduate, much of the clothing they have bought in the UK is discarded. This creates a significant sustainability problem. This project will focus on working with this group of students on clothing disposal and retention practices after graduation and explore creative solutions to reduce waste. This project will be conducted in the form of a creative workshop where students will discuss garments they have an emotional attachment to and therefore intend to keep and those they plan to throw away. Students will be asked to bring one garment they are attached to and one garment no longer in use to the workshop. We will use these discarded garments to create new products. (new garments, arts products or home products etc.) In this way students will give these garments a second life. At the end of this project, the creative products made during the workshop will go on display. Students will be given the option of keeping or sell their innovative products to the next generation of students at KCL's shop. All innovative products will have an accompanying digital label that will record the creation student's memory story and provide guidance on sustainable creative approach to fashion. In particular, these labels will provide students with innovative solutions on how to deal with clothes sustainably, helping them give their discarded clothes a second life, reducing waste, and giving them new value. This project will be part of my MA dissertation research.

Project scope
The target group is international postgraduate students who will graduate from KCL in 2020. The expected time for delivering the workshop is in mid-May when international students are still on campus. I plan to hold the workshop in the REACH space on the KCL strand campus, in student halls of residence or at the students' union (tbc). The primary purpose of this project is to let students reflect on their consumption habits in the process of comparing clothes with the most memorable stories and clothes to be discarded. Using this comparative method of retention and abandonment, I hope to stimulate students' deep thinking on the value of memory, at the same time reflect on the issue of sustainable fashion for more attention and reflection. Moreover, there is another purpose through this project, hoping to stimulate students' creative thinking and create the new life and memory value for discarded clothes, which can prolong the life of clothes that were initially discarded. Also, explore how to use memory attachment to reduce throwaway culture. From the appearance, it seems to be a simple, sustainable fashion project to help graduates solve discarded clothes. However, it is also a sustainable thinking project to help KCL graduates reflect on a deeper level. Meanwhile, combined with creative thinking, Masters graduates can use their unique

memory perspectives and reflections to think about sustainable problems at different levels, thus creating their solutions and sharing innovative solutions with more students.

It is also a sustainability project, which means students in the graduation season of each year can use their discarded clothes to create new memory products. Students will be able to keep these new products or sell/trade them – I plan to work with the Students' Union to explore opportunities for the students to sell their innovative products to the next generation of students at the KCLSU shop. Creative products for sale will come with a digital label introducing the memory of graduates' creation and the sustainable fashion creative approach they have created. In particular, it will provide student consumers with innovative solutions to the problem of how to deal with clothes sustainably, helping them to give their discarded clothes a second life, reducing waste, and giving discarded clothes new value.

This is a brand-new experimental project and will mainly impact the international student community at KCL. I would plan to run six workshops this time (15 students per workshop, 2 hours each) but if successful it could be scaled up and extended to more students with further funding and include undergraduate graduates and non-international students in the future. This project will form part of my MA dissertation research and I am interested in working with the Sustainability Team to develop this into an activity that could be run across the KCL student residences.

Key stakeholders:

- International postgraduate students
- KCLSU
- KCL residence managers
- KCL Sustainability Team

Funding requested

1.Materials for workshops：£306

-creativity project stencil fees such as scissors, glue, needle and thread, cardboard, coloured pens, and other tools for adapting clothing

2. Workshop assistant: £194

Student @ £10.75 per hour, 18 hrs for six workshops including set up

Total：£500

Food for Good

Please give a brief description of your project (max 300 words). For example; "*Our project will oversee the planting of 50 trees and 15 benches in student accommodation thereby providing much needed shelter for wildlife and expansion of King's biodiversity. It will also provide shade for students in the summer months, improve the aesthetic appearance of the area and offset our carbon footprint. The aim of the project is to monitor improvements made to the lives of the inhabitants of student accommodation as well as visitors".*

Our project started in October 2019, when we began redistributing consumable (i.e. not expired) food - that was otherwise being thrown in the bin - from various King's food outlets to a soup kitchen in Charing Cross. Our project aims to reduce the environmental and social impact of food waste while simultaneously addressing the issue of food poverty in London.

In order to do so, a small group of voluntary students have been collecting the leftover food from the Arcade in Bush House and Chapters in Strand Building each Friday. Our collection takes place on Fridays because as the university is closed over the weekend, most of the packaged food expires over the weekend, which means that it is unsuitable for sale on Monday. We bring this leftover food to 'Charity Begins at Home', a soup kitchen based on Strand where volunteers personally hand out food and drinks to members of the homeless and less-privileged communities.

Through this project, we are not only addressing the issue of food waste at King's - thereby reducing the university's carbon footprint (as a result of waste going to landfill, for example) - but also ensuring that this leftover food reaches those who need it most.

We are currently only conducting our project at the Strand campus (as we have a limited number of volunteers). However, we want to expand to other campuses, as the issue of food waste is not unique to Strand alone. We want to begin by expanding to the Waterloo campus, and are therefore applying for funds to purchase trolley bags to transport the food across Waterloo bridge to the soup kitchen at Charing Cross. We will make use of these bags on the Strand campus as well, as we often struggle to transport the fluctuating and generally large amount of leftover food.

Please outline the Scope of your Project: (Max 500 words) Your project's scope should include the project's start and end date, locations from where the project will operate from (if relevant), the groups of people it will impact, etc. Please include any environmental or social benefits, how might your project be improved on in future years, what might the lasting impact of your project be, key stakeholders involved in this project and how do you plan on engaging with them?

As mentioned above, the start date of our project was in October 2019 and we want to continue this initiative until the issue of food waste is close to eliminated across all King's campuses. As we have already highlighted, we are currently operating from the Strand campus, but looking to expand to Waterloo and eventually to all King's campuses. In light of this aim, we are currently seeking to recruit more volunteers to help with the transportation of the food, and seeking to purchase the aforementioned trolley bags to make the process of transportation more convenient.

In the future, we hope to continue working closely with the staff at King's Food in order to analyse and address the issue of food waste at King's. We are aware that entirely eliminating food waste is a difficult task (as the volume and type of food consumed varies on a day to day and campus by campus

basis) but we would hope to use our weekly sessions as an opportunity to establish what food items are the most and least popular, and as such, how the food orders could be adjusted by King's Food accordingly. From conducting the project thus far, for example, we have established that certain food items such as the 'Spicy Meatball Panini' at Chapters, Strand, was quite an unpopular item compared to the other paninis. As such, King's Food was able to adjust the orders for this item accordingly, and reduce some food waste in this sense.

Since we started in October, we have had the chance to experience the impact of the project not only on the homeless and less privileged members of the community, but also within King's, where we have seen the attitudes of staff members and students who have encountered our project change to become more conscious of how problematic the issue of food waste is, but also hopeful that food waste within King's can be tackled. It is precisely because we have come across these passionate and like-minded individuals that we are confident that even after we graduate in 2021 and 2022 respectively, our project will continue to flourish. Logistically, obtaining these trolley bags would make the process of transportation easier and thus further sustain this initiative, and we thus hope you approve of this application.

Please include the total amount of funding requested and a breakdown of costs.

In order to sustain and improve the quality of our project, we are applying for funds to purchase some trolley bags that we can use in the transportation of the food waste from the various King's campuses to soup kitchens nearby. We have detailed the types and amounts of trolley bags we would like to request below, along with links:

- 2 x Heavy Duty Extra Large Folding Supermarket Grocery Shopping Boot Cart Box Trolley with 35kg capacity from Warehouse Direct – each for the price of **£14.95**
- 3 x Foldable Shopping Bag with Wheels from CNSSKJ – each for the price of **£11.99**
- 3 x Large Folding Shopping Trolley Dual Wheel Foldable Trolley Cart from CMYKZONE – each for **£10.85**

Breakdown of costs (as of 24th February 2020):

£14.95 x 2 = £29.90

£11.99 x 3 = £35.97

£10.85 x 3 = £32.55

£29.90 + £35.97 + £32.55 = **£98.42 Total costs**