



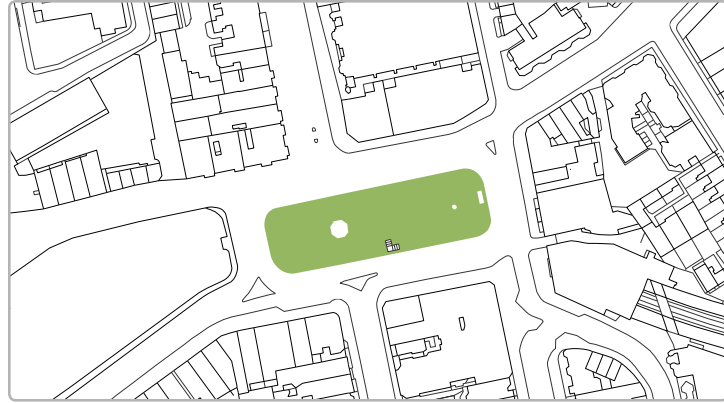
FRANCIS HOLLAND SCHOOL
SLOANE SQUARE

Architecture in Schools Portfolio





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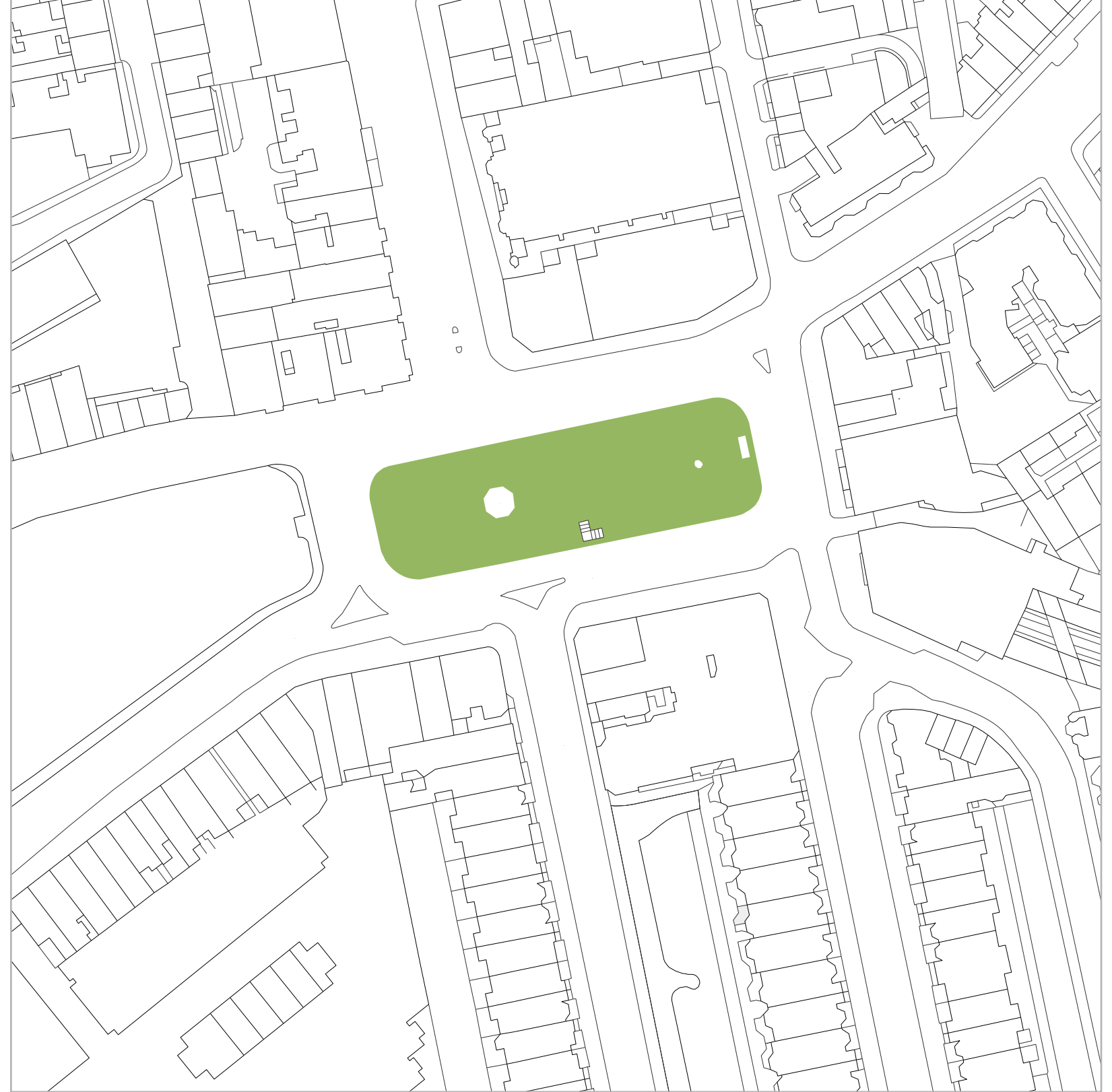
Introduction of the brief



In mid September, the girls were introduced to the Architecture in Schools project and the overall competition brief. As the school is located very close to Sloane Square; and most pupils live around the area, the 'site' or neighbourhood chosen for design and exploration was Sloane Square.

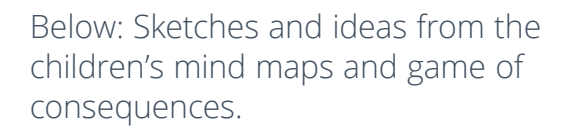
In our very first in-school workshop Y5 were encouraged to think about the meaning of 'A Celebration City', and how architecture might play a part in this. Architecture as a subject or design discipline was very new to them so we looked at a range of iconic buildings in and around London including the Gherkin and the Shard.

We focused on 3 activities – Mind mapping 'happy' places, de-constructing familiar buildings, and trying to imagine the purpose of local buildings (both inside and outside) by playing a game of 'consequences'.



Chosen Neighbourhood Project:
Re-Imagining Sloane Square.

In order to inspire their drawings, we looked at a variety of architects such as Will Alsop, Zaha Hadid, Hundertwasser and Frank Gehry. We talked about their individual and distinctive styles, but how they all managed to convey their ideas for shapes and proportions.





Our visit to Foster + Partners' office



The students and teachers from Francis Holland School visited Foster + Partners on Tuesday 21st September, to learn how architects, designers, model makers and other professionals come together to design buildings and urban spaces.

The team at Foster + Partners gave the school group a guided tour of their campus, including their main studio, material research centre, sketch model shop and took them on a walk around the neighbouring Albion building (designed by Foster + Partners).



Above: The girls looking at a model of London
Left: Drawing and reflection activity in progress

The energy and excitement amongst the visitors and hosts was palpable across the campus. The girls not only got an opportunity to see scaled models of the city of London and Apple campus but also saw some model making machines in action.

The model shop team demonstrated how foam board may be cut in various patterns using a CNC machine and the girls were even able to take some tiny foam board shapes with them. The tour around the material research centre generated wide eyed fascination and amazement. The girls were bright and enthusiastic and very keen to start imagining their future designs.



Left: Exploring the modelshop
Above: Visiting the MRC (Material Research Centre)



The students were then taken for a short walk around the Albion, (a residential building designed by Foster + Partners), where they had informal conversations about the character of the space and nature of materials, surfaces, urban furniture and landscape elements used.

The girls quickly began highlighting things that were missing from the space and what they thought should be added to make it more, fun, inclusive, warm, and welcoming for everyone. Using London as an example, urban designers from the practice also shared with the girl's simple concepts, ideas, and strategies of how cities are planned and designed.



Left and below: Conversations and walk around the Albion building



After a quick break (that of course included sweet treats) the girls were given a short slide presentation about design elements and features that make urban spaces such as Trafalgar Square, Regents Street, Hyde Park, Granary Square so special.

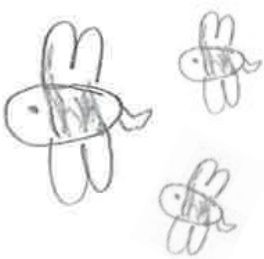
Conversations ranged from fountains, benches, trees and people movement to car free zones, traffic congestion and inclusive environments.



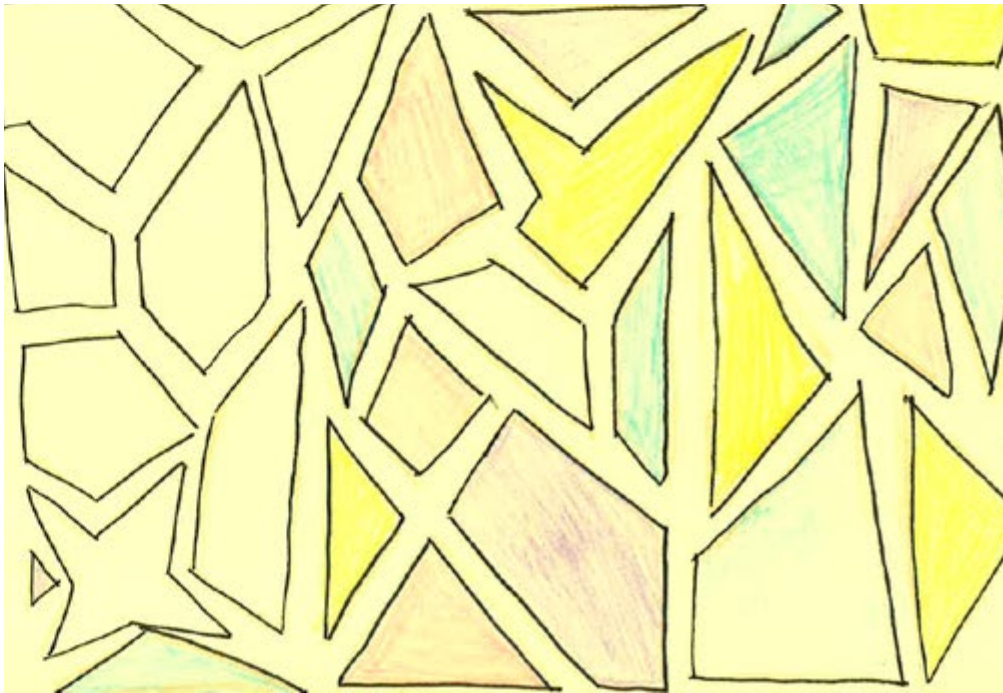
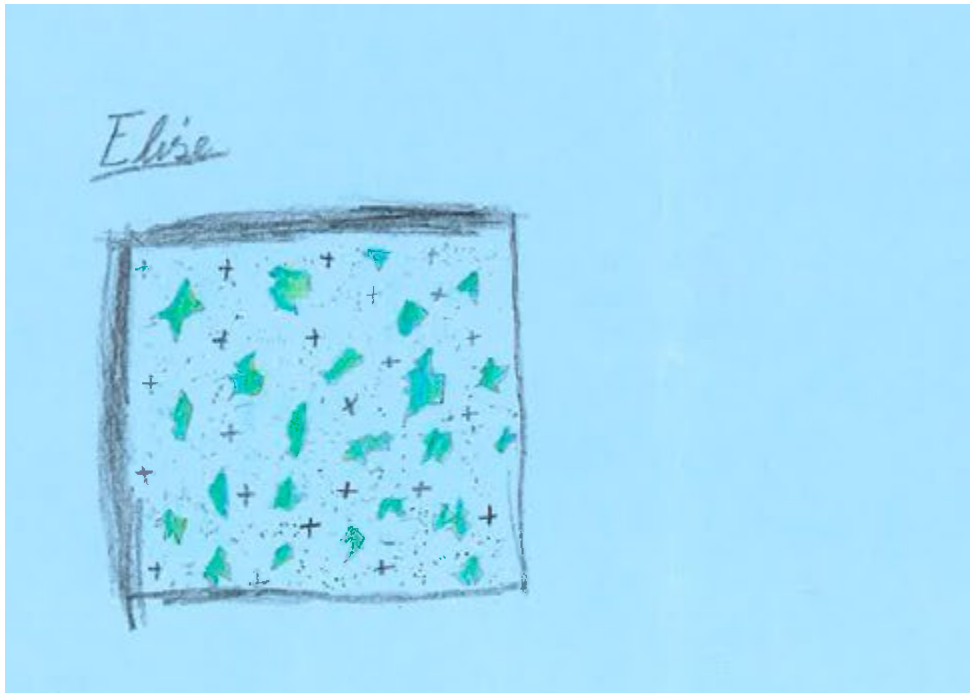
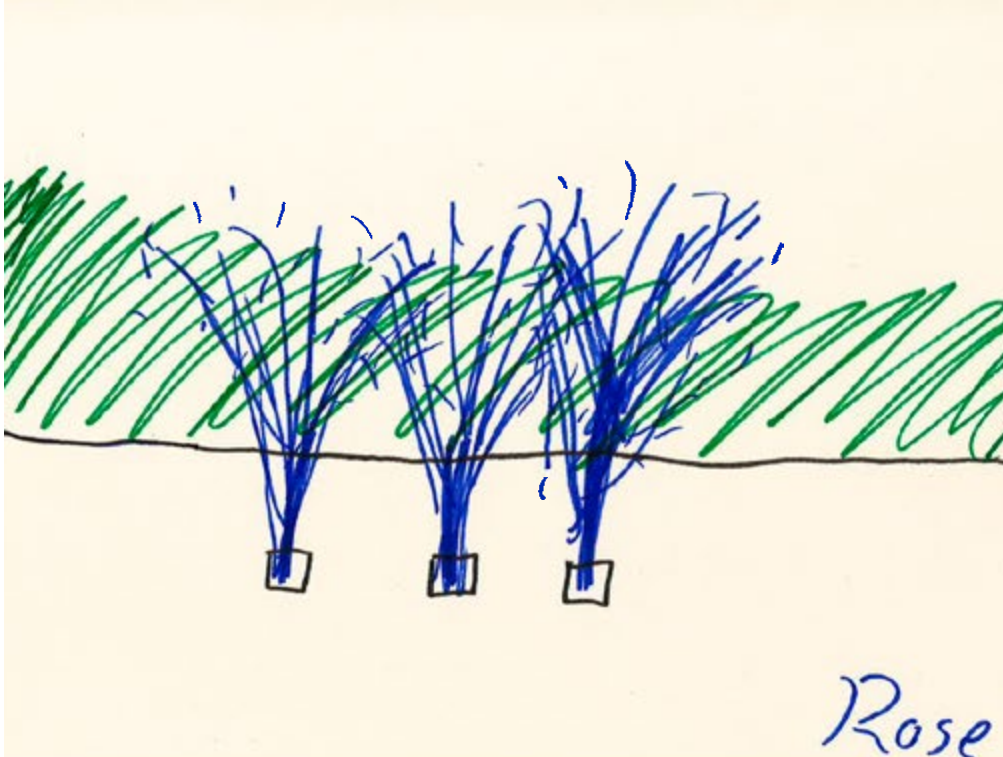
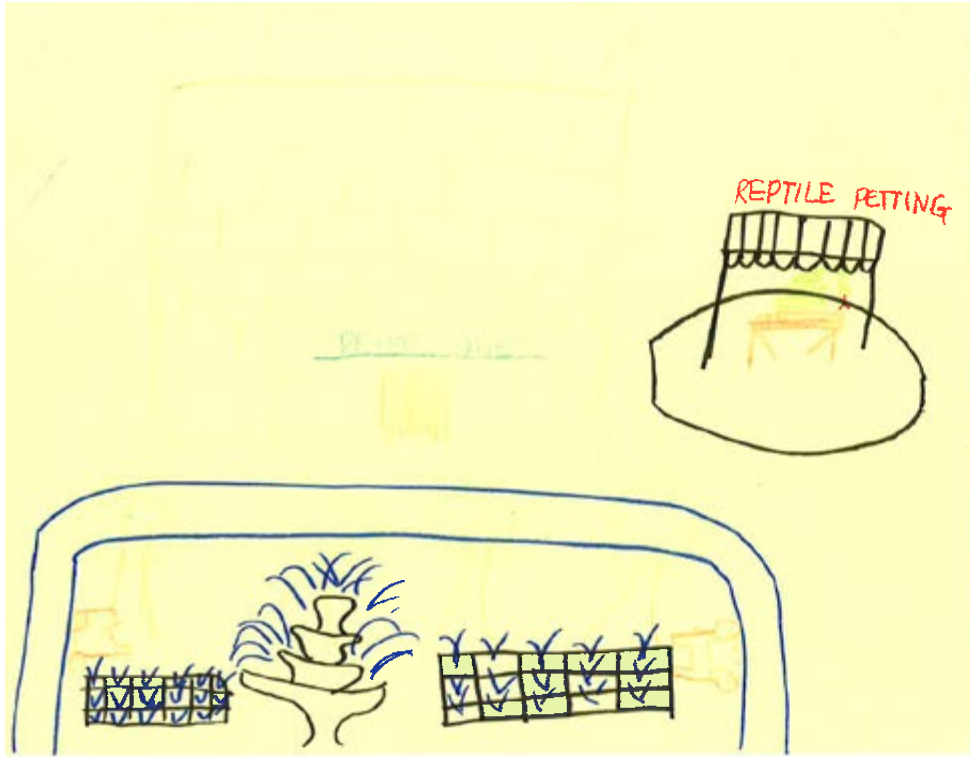
Right: Members of Foster + Partners team presenting to the class about urban spaces.



Full of ideas, questions and reflections, at the end of their visit, the girls were asked to reflect on their visit, think about all that they learnt and draw ideas that they 'loved' 'disliked' or 'wished' for. The drawings were clever, insightful, and fun and made for an enjoyable end to a wonderful morning.

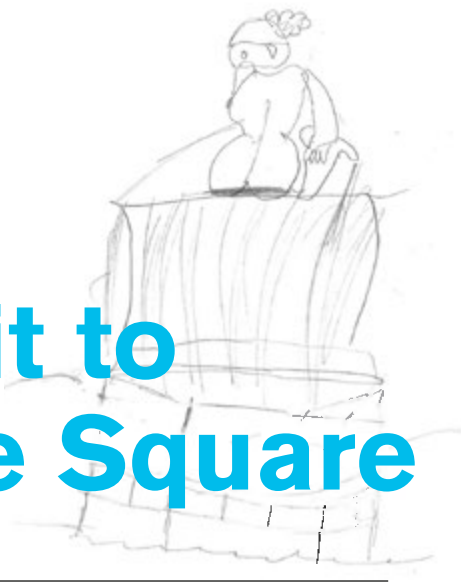


Below: A variety of drawings from the reflection activity





Site visit to Sloane Square



Despite a rainy start to the day, the sun briefly made an appearance as Y5 embarked on a local walk of the Sloane Square area on Monday 27th September.

The aim of the walk was to familiarise themselves with their surrounding buildings and to get a sense of what the area has to offer. Activities included describing what they could see, identifying services, sharing how the square makes them feel, finding different shapes in the various façades and surfaces, and sketching some of the buildings and street views.

The children were also encouraged to begin to dream about what the square could become. Their ideas ranged from the very practical such as adding an extra pedestrian crossing to turning the square in to a water play park with a giant slide!



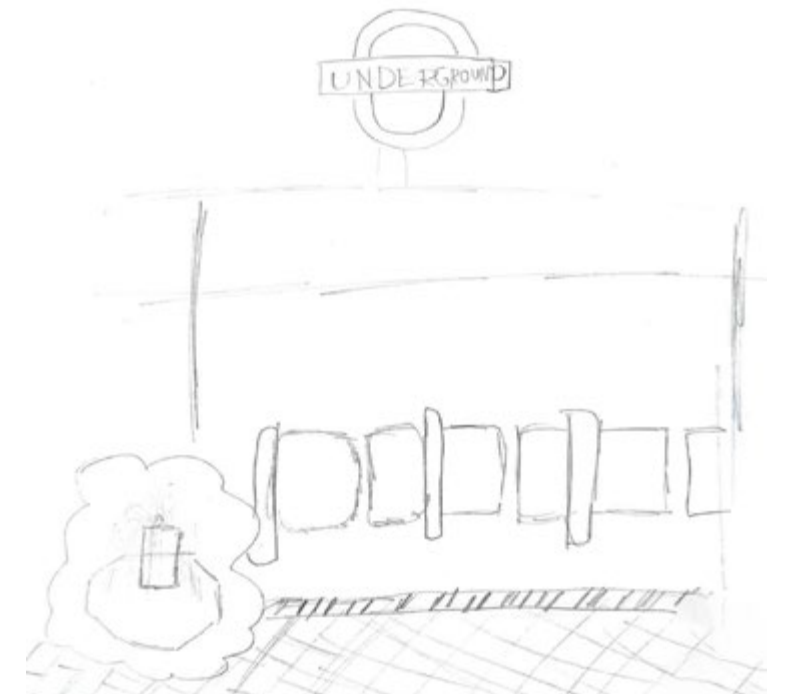
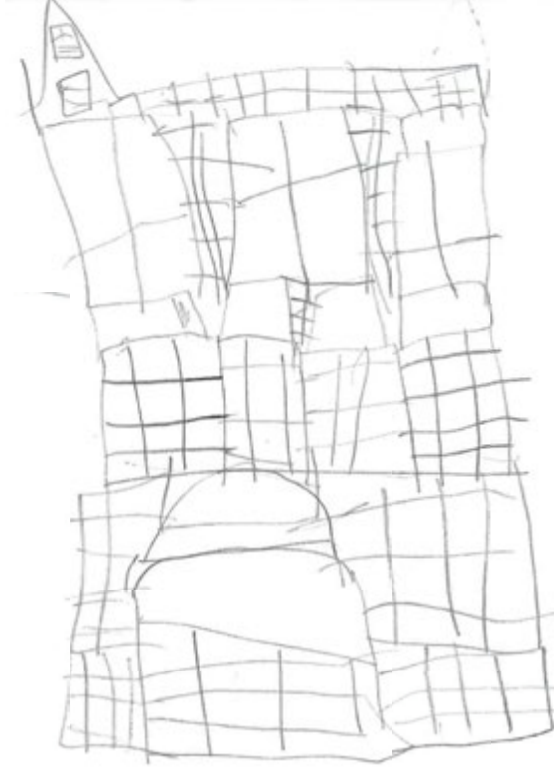
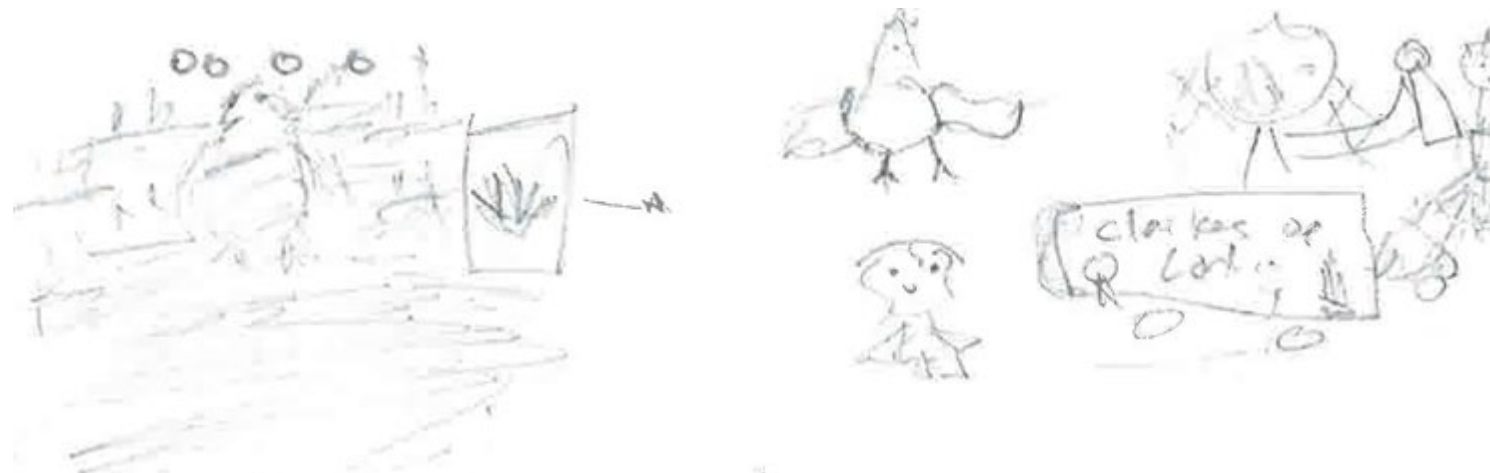
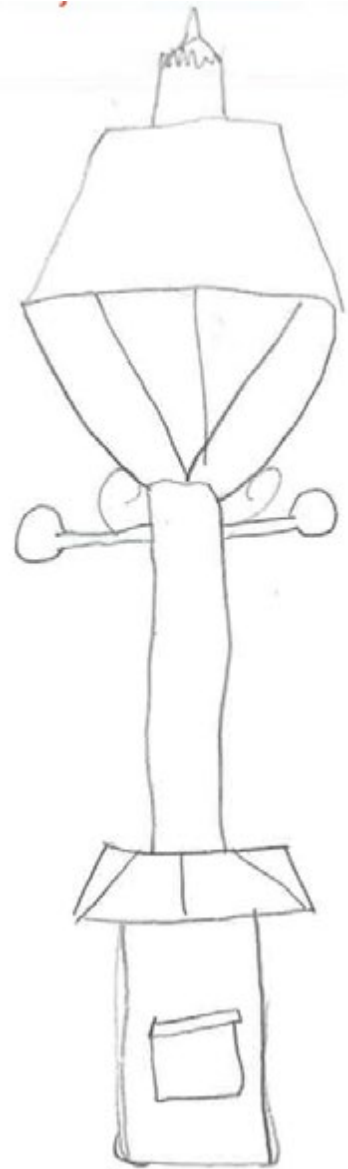
Left: Y5 analysing Sloane Square.

How does the square make you feel?

happy, crazy

It makes me feel adventurous

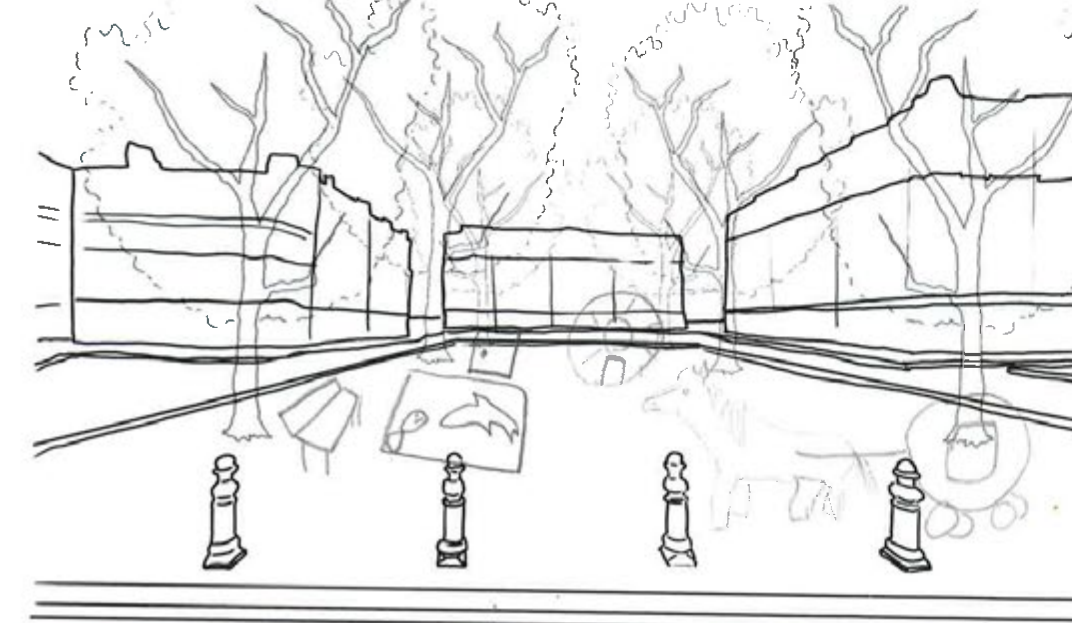
My highlight was seeing all the buildings and filling in the activity sheet with my friends.

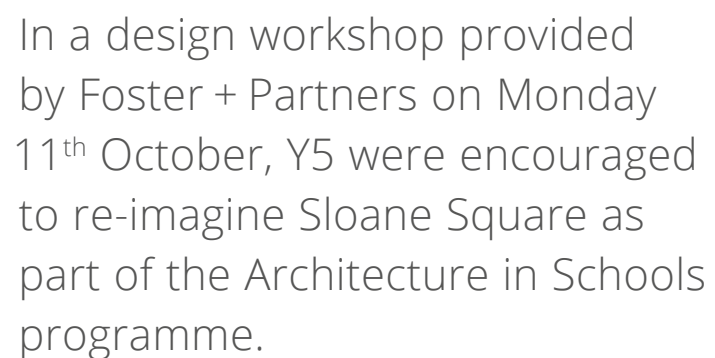


1 Street View



2 Perspective View



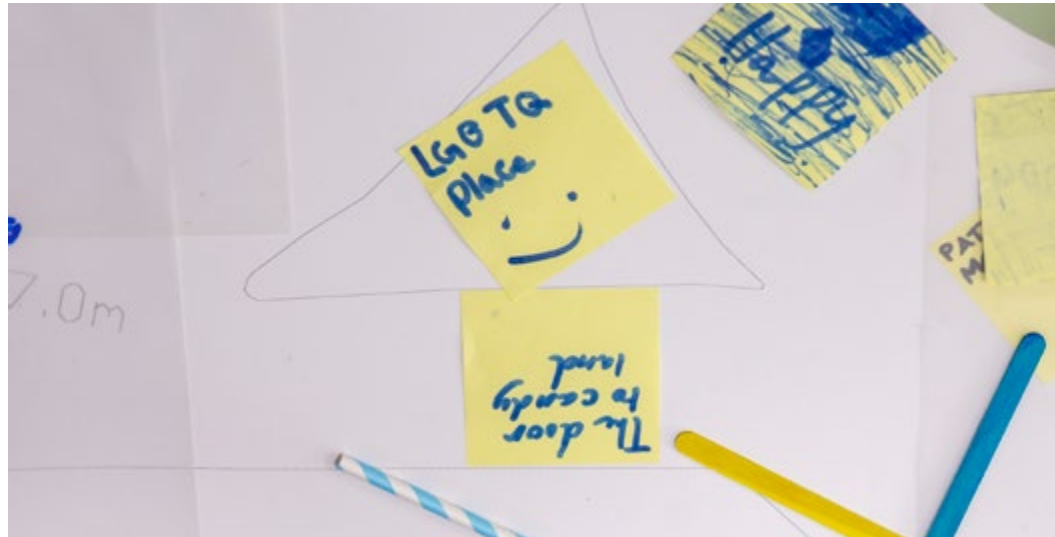


Enthusiastic and full of ideas, the girls were divided in to 4 groups - each group acted as the leading architect/designer of a corner of Sloane Square.



The girls used 'post it' notes to draw or write their ideas and collaboratively positioned them on to the plan of Sloane Square.

While their initial focus remained on making Sloane Square a colourful, fun place for 'everyone' to come together and 'celebrate' they also suggested lovely ideas on how to make the design, eco friendly, free of cars, green and clean, animal friendly and sustainable.





Each group was also led by a member from the Foster + Partners' team who showed the girls various 3D modelling techniques using materials ranging from card to pipe cleaners!



Below: Models made by the class during the workshop





They worked collaboratively to create a Go Ape inspired collection of ropes and swings, a Ferris Wheel, a water park and animal enclosure, and a delightful array of stalls for a food market. What a celebratory, lively and fantastical square it will be!

Clockwise from top left:
 Team SE: Ferris wheel, swings
 Team SW: Holland's Adventures
 Team NE: Animal enclosure, water park
 Team NW: Magic tree, fairy swings, ice cream stall



Design development



Having explored various concepts and design ideas with the children, Foster + Partners delivered a workshop on Friday 12th November focusing on drawing their final designs in plan, in preparation for the big build.

In the concept design workshop, Y5 had previously agreed to keep some of the existing features of the square including the station, Colbert (café/restaurant), the Venus fountain, Peter Jones and the war memorial and work their design around them .



Left: Design development workshop in progress.

Through conversations and discussions in previous workshops the school group had also established that Sloane Square was to be re-imagined as a 'car free' Family Park or Urban Centre.

The overall concept was to transform it into an exciting, accessible and celebratory destination where families, friends, children, grandparents and babies could enjoy a variety of activities. Different parts of Sloane square were to have different activities – each based around the overall theme 'celebration city'. Some of the activities and ideas for these zones included a street food market, a theatre, a fairy swing, rope swings, a reptile petting enclosure, green forests, orchards and a water/splash park.



Below: Second workshop with the class.



In a short presentation at the beginning of the design development workshop, the girls were encouraged to think about making their designs enjoyable for 'everyone', and to suggest surface materials, outdoor 'urban' elements and landscape features that would make the spaces warm and welcoming

Two additional challenges were to think about ways to make the designs 'edible' i.e. grow food within Sloane Square and to incorporate ways to power their designs using 'renewable sources of energy' (connecting back to their geography lessons).



Below: Second workshop with the class.





To facilitate the design process Sloane Square was divided up into various zones based on the childrens conceptual ideas. Using the central theme of each zone as inspiration, the zones were named Fairy Gate, Dancing Gate, Adventure Gate, Animal Gate, Fountain Gate and Green Gate.

The children were allocated a zone and worked in groups of 3 or 4. Once they were happy with their plans, they then had to join their zone to a neighbouring zone to work out how they would connect with each other – a real collaborative experience!

We assembled all the zones together and each group then presented their ideas and final designs to the rest of the class with each child explaining what they had contributed and why.



Sloane Square Re-imagined by Year 5

Animal gate

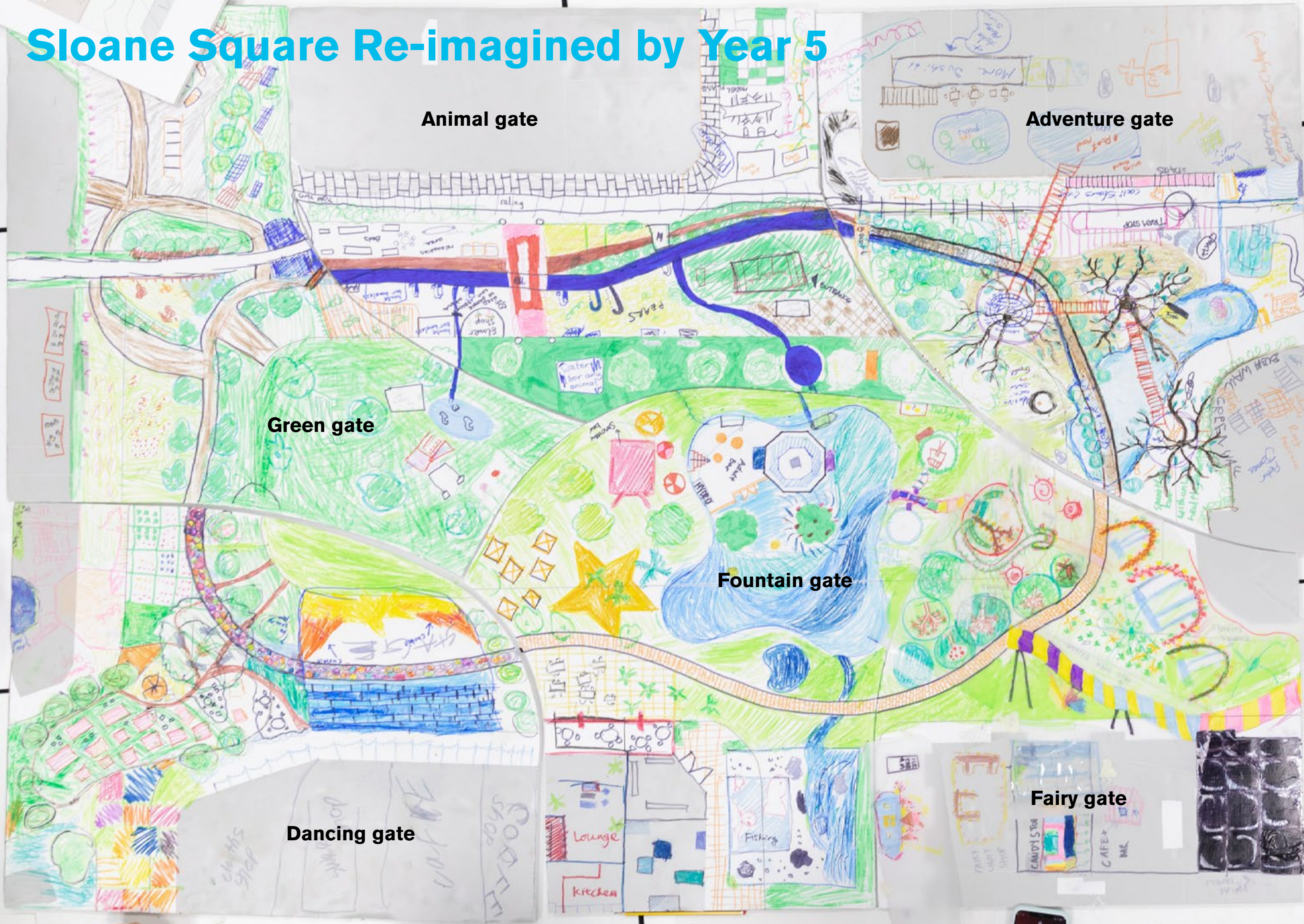
Adventure gate

Green gate

Fountain gate

Fairy gate

Dancing gate



Design Presentations by Year 5



Key design ideas in each zone



- GREEN WALLS + FLOWERS
- BEEHIVES
- VINEYARD
- APPLE ORCHARD
- BENCHES
- DIG ROUND PAVILION WITH BAR
- SQUARE FARM + BIOMASS
- DOG FARM
- CHICKEN HOUSE
- BIG CENTRAL FOREST
- SWING
- ICE SCREAM TAN
- POND
- FAIRLY LIGHTS
- SLIDS
- TRAM LINE
- FLOWERS
- BRIDGE
- FENCE
- PATHWAYS

Green gate

- Reptile hut
- hydro station
- playground
- obstacle course
- romance bridge
- house for homeless people
- sand pit
- rasberry strawberry blackberry
- Field
- relaxation rooms
- model plane
- tram
- water fountains
- stream (50cm deep) to gain
- slower shop
- pear tree
- water for animals

Animals

Animal gate

Eloise, Evelyn, Minty and Catherine

ADVENTURE

- JUNGLE (FIRST AIDS)
- GO-APPE (WITH RED BRIDGES)
- GREEN WALL (ALSO CACTUS)
- STAIRS AND RAMPS
- LAKE
- POOLS ON ROOFTOP + ENERGY SOLAR
- RESTAURANTS ON ROOFTOP WITH GREEN AGRICULTURE
- Wall of cacti
- Flying Pig Graphic

Adventure gate

After completing their plan drawings and presentations, each of the groups noted down all the important ideas from their respective zones.

Year 5 were all excited and looking forward to converting their ideas into a 3D model in the next workshop.

- Stage: Angels (lighting in stage/seating for stage)
- Farmer's Market
- Studio / VIP lounge
- Alotments (grow food)
- Ice skating
- Souvenir Shop
- Restaurant
- Solar panels
- Landmark viewpoint
- Shops / coffee shop / sweet shop / clothes
- Seating areas
- Patus
- Big Tree!
- Lot of trees.
- Restrooms
- Ferry lights
- Rainbow path (main path)
- Benches under the tree
- Seating area in Farmer's Market
- Ice cream shop

DANCING

Dance gate

- Lounge - buffet
- 2. Fishing area
- 3. Splash park
- 4. Smoothie Bar
- 5. Aquarium
- 6. Sand - pond
- 7. Outside cafe
- 8. Organic garden
- 9. International shops / food market.
- 10. Tree house
- 11. Fountain

Fountain

Fountain gate

- Fairy tree + Fairy tree house
- Fairy swings
- Candy shop
- Ice cream van
- Fairy Paddle Pool
- Fairy light shop + Fairy sinkers for the pool
- Pass over Bridge
- solar PANELS
- Cafe + Bar for adults
- Peppermint trampoline
- Flower arch
- sprinklers
- lights sticking out of the grass
- Fireworks
- Fruit Orchard

Fairy gate



Bringing Celebration City to life (model-making)



The Y5 Architecture in Schools project culminated in an exhilarating 3 hour final building/model making workshop delivered by Foster + Partners on Tuesday 23rd November.

Working from their drawings and plans created in the previous session, Y5 used a variety of materials and 3D skills to problem solve and creatively construct a range of structures and landscapes.

The children continued to work in their allocated groups and were led by a member of the Foster + Partners model making team, who inspired and encouraged them to take ownership of their individual structures and mini projects within their zones. There were tram tracks made from art straws, a blue cellophane slide, benches made from lollipop sticks, an outdoor amphitheatre made from card and rope swings fashioned out of pipe cleaners and string.





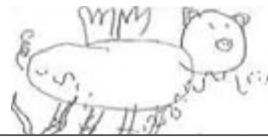
The energy in the room was palpable and the intensity of the girls focus was evident in their spectacularly joyful and colourful final model of Sloane Square. Year 5 had transformed Sloane Square into a colourful, vibrant, celebratory and inclusive destination that includes activities including an outdoor theatre, adventure park and splash fountain, to a farmers market, allotments to grow your own fruit and vegetables, and fairy swings. The roof tops and facades of the surrounding buildings were transformed into green roofs, cafes, pools and parks and all of sloane square was powered by a host of solar panels, hydro power stations, water falls and windmills. Their individual contributions and collective designs were imaginative, sustainable and inclusive-a year round wonderland created for all.

It really has been a steep and rich learning experience for the children. The project has encouraged them to think outside of the box and taught them the importance of working together as a group and as a class!





Core curricular links

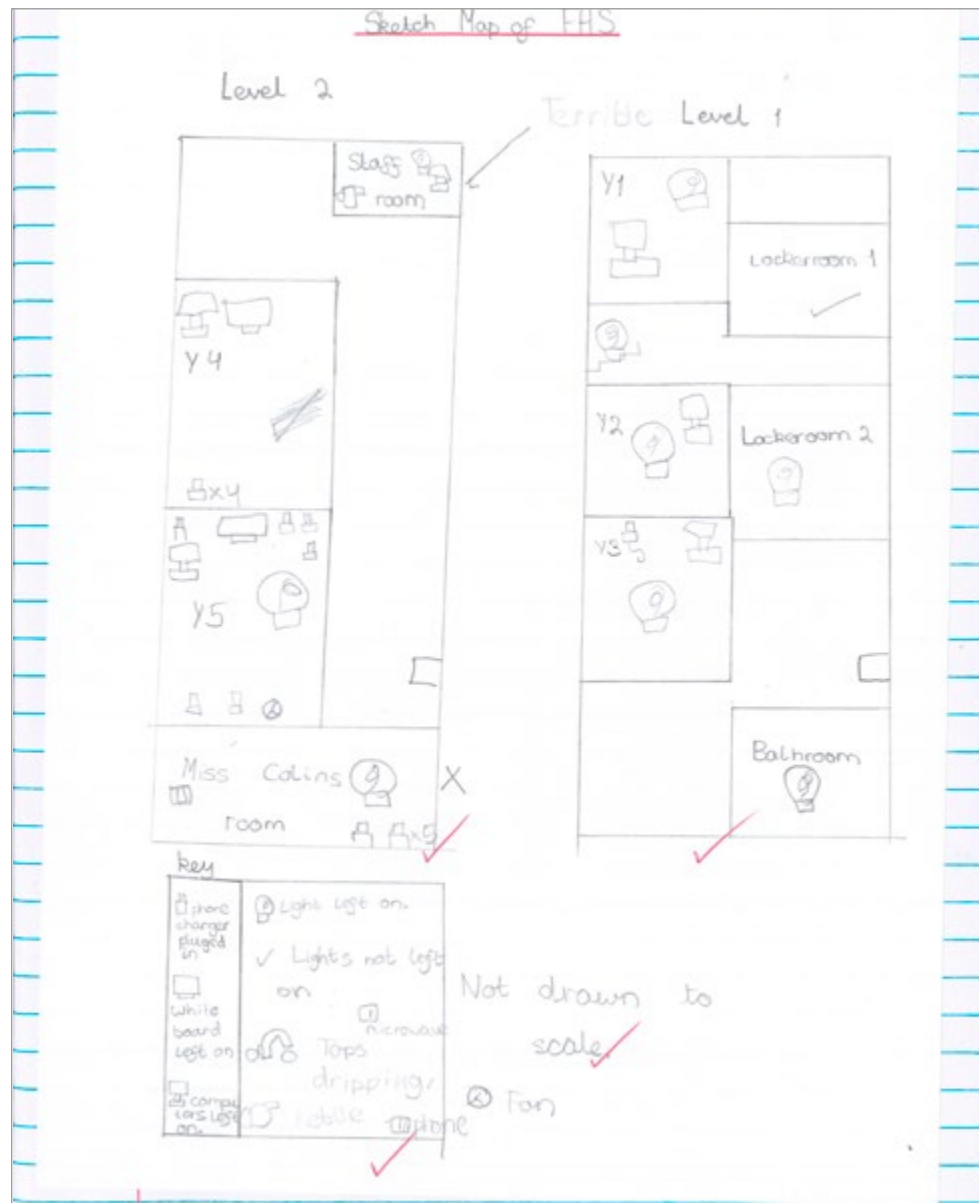


Y5 have been learning about renewable energies in their sustainability module in Geography. They have explored the different renewable energies available, investigated the advantages and disadvantages of renewable and non-renewable energies (and even played a game of Top Trumps), explored the UK's energy consumption and investigated Francis Holland's energy use.

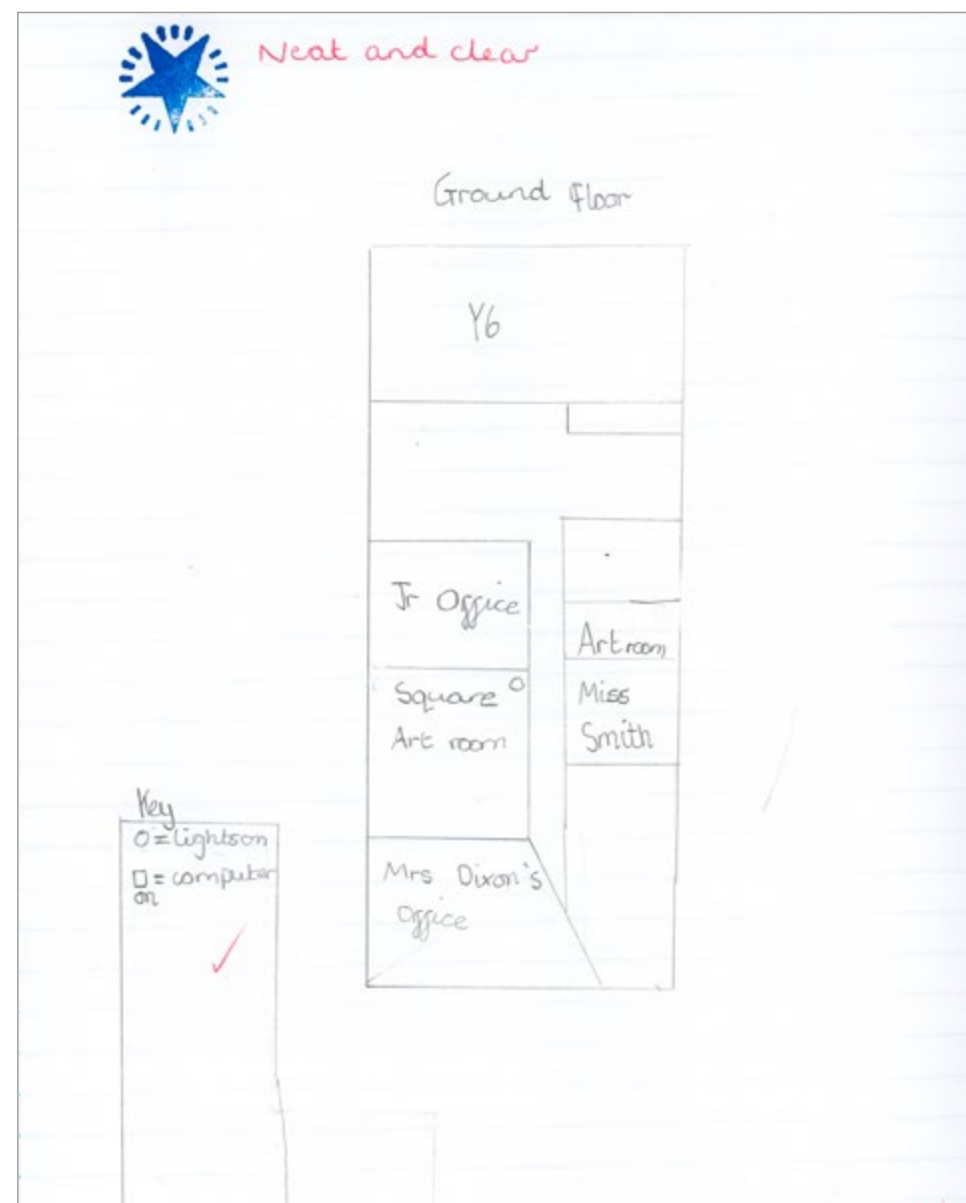
Through these various activities, Y5 have developed an understanding of how intrinsic energy is in our modern lives – it powers our homes and classrooms, it fuels our vehicles, powers our computers and prepares our food – and why there's a need to move from non-renewable energy sources to a cleaner, greener future!



Geography works



Non-renewable Energy Source	Advantages	Disadvantages
Coal Energy	Cheap	Bad for the world
Oil Energy	Can use it anywhere	Produces carbon dioxide
Nuclear Energy	Uses natural sources We can rely	Non-renewable Produces very dangerous waste and chemicals
Gas Energy	Efficient	Produce carbon dioxide



Renewable Energy Source	Advantages	Disadvantages
Wind Energy	Creates energy Doesn't affect the earth	You can't rely on it Expensive
Solar Energy	No fossil fuel	Could be cloudy
Hydropower Energy	Can generate electricity	Expensive
Geothermal Energy	You can rely on it	Expensive
Biomass Energy	Natural material	Produces carbon dioxide

Friday 15th October 2021 LA out - cover

LO: To analyse the school's use of energy.

Francis Holland School
39 Graham Terrace
Belgravia
London
SW1W 8JF

Francis Holland School
39 Graham Terrace
Belgravia
London
SW1W 8JF

Friday 15th October 2021

Dear Mrs Dixon,

I am writing to you to explain why the school needs to save electricity and some suggestions on how to.

Did you know that in every classroom in the junior school, a whiteboard, computer, charger or light is left on every day. In addition, our school uses too much electricity. We don't need so many lights on in the classrooms, in fact, we don't even need the lights on because the windows bring in so much light.

Last week, in geography, we went around the junior school and saw horrific things, and worst of all, the staff room was terrible. We were monitoring the school to see where the electric appliances were being switched off.

Non-renewable Energy Source	Advantages	Disadvantages
Coal Energy	produces lots of energy, cheap.	One day we will run out of it. Too much pollution (carbon dioxide)
Oil Energy	You can use it anywhere	Carbon dioxide Very expensive
Nuclear Energy	Doesn't produce much waste reliable	Produces very dangerous waste
Gas Energy	Very efficient Can be used anywhere	Produces too much Carbon dioxide

Different Renewable Energies

Geothermal Energy



Geothermal energy is energy using the earth's heat like a friendly hearing. They mostly use it to heating.

renewable energy source

we use solar panels to generate the energy

energy from the sun

Solar Energy

reliable

natural energy source

never runs out

Wind Energy

What?
you make it out of scraps.

Biomass Energy

Why?
Makes energy

What?
you dig down and use heat from the earth

Geothermal Energy

Why?
Makes energy and is renewable

What?
Solar Energy is a renewable source of energy that comes from

Solar Energy

Why?
We use it because it produces no carbon-dioxide.

What?
It is when you use a turbine to create energy.

Wind Energy

Why?
They give us energy and they are good for environment.

Solar Energy

Solar energy is a renewable source using the sun. It is better for the planet but isn't always reliable in London.

Biomass Energy

Biomass energy is using scraps like plants, and animal poo and burning it to make energy

Sketch your
space and
renewable
energy
source here!



Car Free Zone

In your design, you have decided that you want Sloane Square to be a car free zone...

Sloane Square is a busy transport hub so where will all the cars go?

They can go on the roundabout bridge.

How will people access the square if they cannot come by car? What alternative is available to them?

We should introduce bikes.



Environmental Impact

Thinking about the various renewable energies that you have learnt about, how can we power Sloane Square?

Using biomass to power up lights and solar panels. Solar panels on the roofs of the buildings. Biomass using the leaves.

Can we use more than one type of energy?

Yes, it's possible.

Environmental Impact

Thinking about the various renewable energies that you have learnt about, how can we power Sloane Square?

We can use biomass by burning down leaves and use animal waste.

Can we use more than one type of energy?

Yes we can use solar energy and purchase solar panels.

Car Free Zone

In your design, you have decided that you want Sloane Square to be a car free zone...

Sloane Square is a busy transport hub so where will all the cars go?

On the bridge and on the roundabout.

How will people access the square if they cannot come by car? What alternative is available to them?

Shuttle / from



Sketch your
space and
renewable
energy
source here!



Following on from the geography lessons, the children looked at how they could incorporate the use of renewable energies into their designs for their 'Celebration City'. Based on the children's design ideas, Sloane Square was divided up into six different zones – Fairy Gate, Dancing Gate, Adventure Gate, Animal Gate, Fountain Gate and Green Gate – and the children were challenged to think about how each of their zones could be powered using renewable energy.



Learnings and reflections



What a wonderful ride it's been. This project has encouraged the children to think big and bold, and yet at the same time focus on others and their many individual needs to bring their local neighbourhood to life in quite a spectacular way. It has also given them the opportunity to work collaboratively and allowed them to dream about what the future of their city could be.

The children have been able to draw from their many experiences as well as core curricular links to create something that really celebrates community and all the things that are important to them, both individually and collectively. What has been particularly great about this project is that every single child in Year 5 has made a valued contribution to the design of Sloane Square, and they all feel a real sense of ownership over the finished work.

They have had the chance to explore and develop skills within a large range of disciplines – generating initial ideas, deconstructing buildings into shapes, sketching, planning, making models. All this has really opened their eyes and their minds to a future of possibilities and life-long interests. Seeing their initial ideas and concepts transform into a final model has been such a unique experience, and it has also empowered the children to think ‘I can make a difference’.

We have immensely enjoyed this wonderfully rich and thoroughly engaging learning experience. Children bring

a positive energy and enthusiasm to create a better, cleaner future in such abundance that even when a project seems overwhelmingly complex, it is achievable when we all work together!

We have been delighted and feel so privileged to be given the opportunity to work with and learn from the team at Foster + Partners. They have been invaluable in helping to steer the project and deliver outstanding sessions and workshops! A big thank you to them from all of us at Francis Holland!

Ninette Van Kamp
Teacher of Art (Junior School)



Opposite and above: Photos captured throughout the project.

Can granny come here?

No, she can't walk much. What could we add? Maybe some travel things like you have at airports.

So what is a model?

It's a small version of the buildings that architects design.

If you removed all the buses and cars from Trafalgar square, what would happen to them?

They will have to go around from a different route.

Ohhhhhhh!

Look what's under the bench.

There is air coming out.

What is it for?

This area (area around Albion) is not fun, there is no play area, but I can ride my scooter here.

What could we add?

I think there is another floor underneath, maybe like a basement? Maybe there is a parking lot in the basement.

Maybe a soft play area? Maybe some fountains and splash areas. I like fountains.

This my reptile centre and shop. People will come here to have fun, but also for 'educational' purposes. To learn about animals.

For the environment we have put lots of green and water.

It has lots of lamp posts too! We don't need those in the daytime. But we do need them when it's dark.

Sloane square is not Green, it just has some trees. Can we make it green like this?

Let's keep Colbert Café. It's great! We go there every Saturday. I want to keep it.

I want the floor to be mosaic and colourful.

It can be magical with a magical tree.

I want a roof top restaurant. I want the roofs to be green too.

Let's hide amenities underground.

Can we have some vines that grow on the walls?

I think the station can stay. All the tunnels are underground anyway. They won't ruin my design.

Everything here is eco-friendly, and we recycle everything.

We wanted Sloane Square to be less urban!

Maybe a soft play area? Maybe some fountains and splash areas. I like fountains.

This is HORSE crossing, and this is Human crossing!



Final Model







FRANCIS HOLLAND SCHOOL
SLOANE SQUARE

OPEN
CITY

Foster + Partners