

Learning  
from  
Architecture



Your Neighbourhood



## Project Summary

### Title: Your Neighbourhood

This project was created in connection with the Architecture in Schools project led by Open City and supported by Canary Wharf Group. It is designed to be used either in the classroom or at home.

In this project pupils have the opportunity to research their local areas, plan and explain the elements that they would like to add to their area and build a model in response.

This project steps can be done individually or as a complete project.

Lesson 1: Explore

Lesson 2: Experiment

Lesson 3: Design

Lesson 4: Make



### Learning Objectives

- To develop an understanding of architecture and design.
- To see how architecture affects daily lives and consider the impact on how people use and interact with an area.
- To develop design skills and research skills.

### Curriculum Links

Architecture is an area of learning that children are exposed to in the early years, through their indoor and outdoor play and by exploring local streets, their own home, parks and playgrounds. Learning how our cities are designed and made, and the way they are shaped and adapted involves looking across the curriculum, as well as focusing on core subjects.

This project is relevant to the following National Curriculum subjects:

- Design and Technology
- Art
- Geography
- Literacy
- Maths



# Lesson 1

## EXPLORING



One hour

Fact Sheet

Word Definitions page 4  
London's Buildings page 6

Activity Sheet

See page 5 & 7  
for Activity Sheets

Materials

You'll need:

- Pen or pencil
- Paper
- Colouring pens and pencils
- Mobile phone camera

## Setting the Scene

An architect designs buildings and places. You are the architect and you have been given a brief, a list of instructions, to redesign a building in your neighbourhood and create a model of your building.

Let's first understand what an architect does and take a look at some of London's iconic buildings.

### Activity 1: What is architecture

Do some research to learn more about architecture:

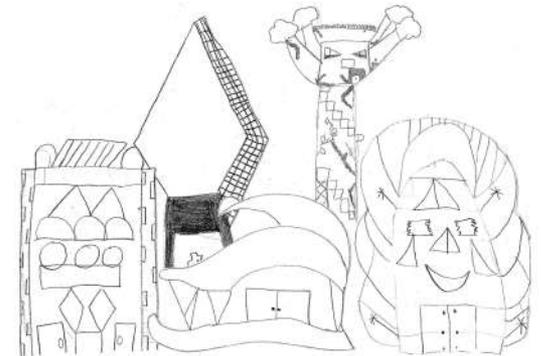
Watch this [BBC Video](#) about being an architect.

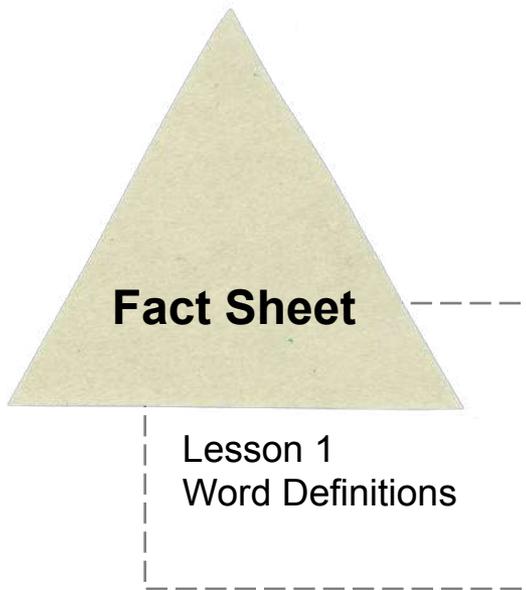
**amazingarchitecture.com:** A collection of the best contemporary architecture, visualisation, sketches, future architecture and students' projects from all over the world.

**drawingmatter.org:** The Drawing Matter Collection has been assembled over the last 21 years and focuses on architectural drawings as works of exploration and discovery, particularly through sketches, sketchbooks, models, study and presentation drawings.

Write down what you think an architect does.

Extension: Choose an architect and write a fact sheet about them and the buildings they have designed. Explain why you have chosen this architect.





Architecture - a process of designing buildings

Architect - someone who designs buildings

Column – an upright support, sometimes cylinder, which holds up the roof or the front of a building

Decoration - added to make the building look attractive

Design - process of developing ideas

Detail - a small piece of a whole

Elevation view– the front, back and side view of a building

Function – use or purpose

Front elevation - the front view of a building

Material – what something is made out of

Plan view– similar to a birds eye view looking down into the building

Scale – the size of one thing compared to another

Section view - a cross-section, like a slice through a cake or the building

Texture - the feel of a surface

Three-dimensional - not flat, but with height, width and depth

# Activity Sheet

## Lesson 1 Activity 1



30 minutes

Materials

You'll need:

- Pencil
- Paper

## London's Architecture

### Step 1

London is full of some amazing buildings, old and new.

Have a look at the London buildings Fact Sheet.

Questions:

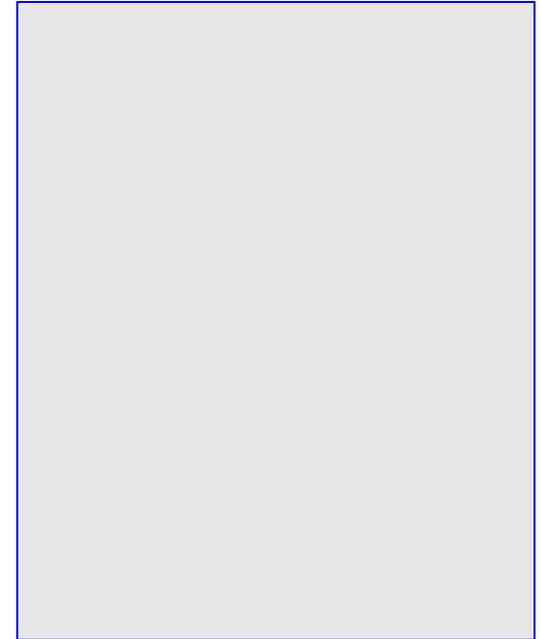
1. Which buildings are old and which are new?
2. What do you think are the different purposes of these buildings?
3. Describe the buildings you can see: patterns, shapes, materials they are made of, etc.
4. Write down words that describe the buildings? Grand, historic, beautiful, intimidating...
5. What do you like or don't like about the buildings.



### Step 2

Choose your favourite building.

Draw your favourite feature of that building.



# Fact Sheet

## Lesson 1 London's Buildings



### St Paul's Cathedral

- Designed by Sir Christopher Wren and completed in 1675.
- Designed in English Baroque style, meaning imperfect pearl, a complicated design.
- The dome weighs 65,000 tonnes, the same as 10,000 elephants.



### One Canada Square, Canary Wharf

- When completed in 1991, One Canada Square was the tallest office building in Europe with a height of 800 feet (244 metres) and 50 storeys.
- Lifts travel from ground level to the top in 40 seconds.
- Total of 3,960 windows
- Built so it can sway 35cm from side to side in strongest winds.



### Barbican

- Made up of 2000 flats, towers, schools, galleries, cinemas, library, restaurants and cafes.
- Completed in 1982, it took 30 years of planning
- Brutalist style, meaning raw concrete.
- The architects wanted it to be difficult to find your way around.



# Activity Sheet

## Lesson 1 Activity 2



One hour

Materials

You'll need:

- Pen or pencil
- Paper
- Colouring pencil
- Optional: camera on mobile phone.

**Now that you have an understanding of what architecture is. It is time to explore your neighbourhood.**

### Step 1

#### Start a journal

Where do you live?

Explore your local area. Take pictures, sketch and write down what you see in your neighbourhood.

Key questions:

- What type of buildings can you see?
- Do you live in the countryside or city?
- Are there any buildings in your area that are special?
- Where do you like to go in your neighbourhood?

Ask your family and friends what they like about the neighbourhood.

Extension: If you want, do some research into the local history of your area. What did your neighbourhood look like 100 years ago?

### Step 2

After exploring your neighbourhood, is there anything missing in your area or a building that could be redesigned? What do you wish you could have in your neighbourhood?

For example:

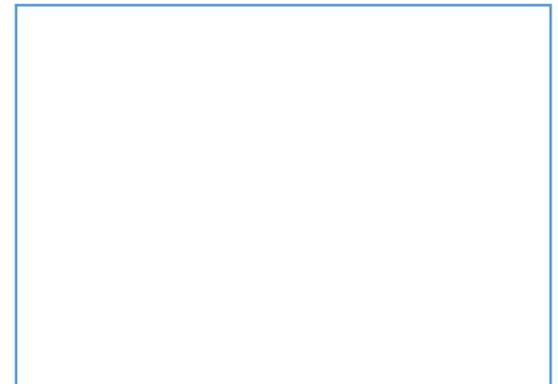
Your school: Is there something that it needs, more playgrounds?

Park spaces: what is included in your local park? What would your park include? Green areas, lakes, water parks with fountains, a farm, community garden, cafes, playgrounds?

### Step 3

Choose a building in your neighbourhood that you want to redevelop. Why?

Draw a picture of your building or take some photographs.



# Lesson 2

## EXPERIMENTING



One hour

Activity Sheet

See pages 9 - 10 for Activity Sheets

Materials

You'll need:

- Pen
- Paper

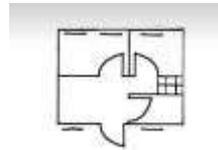
## Setting the Scene

Now it is time to start thinking like an architect. Check out our Top Tips section [‘Think like an architect’](#), and learn about all the things that architects think about when designing a building. Have a go at drawing like an architect.

### Step 1

**A Plan view is a bird’s eye view from above – like cutting the roof off the building and looking down into the rooms.**

**Draw a plan view of the room you are in.**



### Step 2

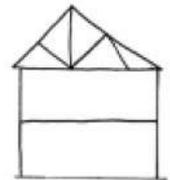
**An Elevation view is like looking at the one side of the building from the outside.**

**Draw an elevation view of the building you live in from the outside.**



### Step 3

**A section view is like a slice through the building. Draw a section drawing of the room you are in.**



# Activity Sheet

## Lesson 2 Think like an Architect



One hour

Materials

You'll need:

- Pen or pencil
- Paper
- Colouring pencils

### Step 1

Look at your notes, pictures and drawings of your chosen building.

Draw an elevation view of your chosen building from the outside.



Write down three words that describe your first impressions of your building.

- 1.
- 2.
- 3.

### Step 2 Appearance

What a building looks like.  
Now think about the appearance.

Describe what the building looks like from the outside.

- Colours
- Materials
- Shapes
- Size

### Step 3 Materials

What a building is made of.

Tick which ones you can see:

Plastic  
Concrete  
Glass  
Wood  
Metal

If you are allowed to, make a rubbing of the texture of the building.

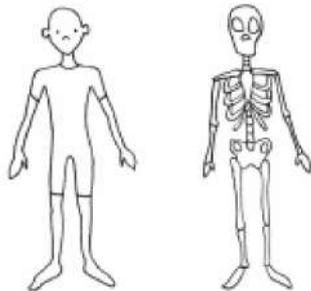


# Activity Sheet

## Lesson 2 Think like an Architect

### Step 4 Structure

How a building stands up.  
The structure of the building is like a skeleton. Without it the building wouldn't stand up.



How do you think your building stands up, can you spot any clues?

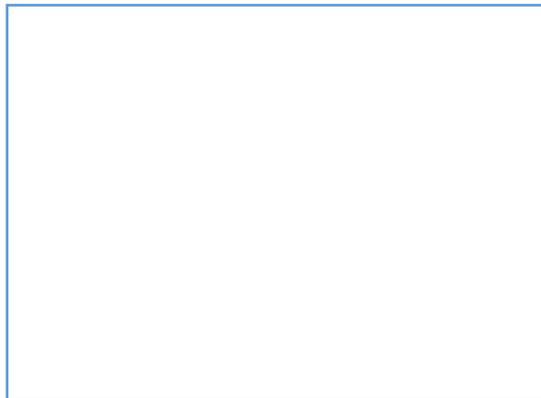
### Step 5 Function

What is the building being used for?  
If there are people there what are they doing?

### Step 6: Light

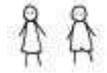
How a building gets light.  
How many windows can you see?

How many different types of windows can you see?  
Draw a window



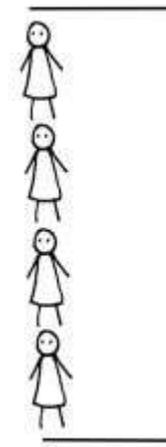
### Step 7: Scale

The size of the building.

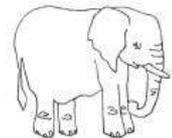


Ask an adult to measure you.  
What is your height?

How many of you would it take to reach the top of the building?



How many elephants do you think?



# Lesson 3

## DESIGN



One hour

Activity Sheet

See page 12 for Activity Sheet

Materials

You'll need:

- Pen
- Paper

## Setting the Scene

Now it is time to design your building. Take your notes and drawings of the building you are going to redesign.

### Step 1

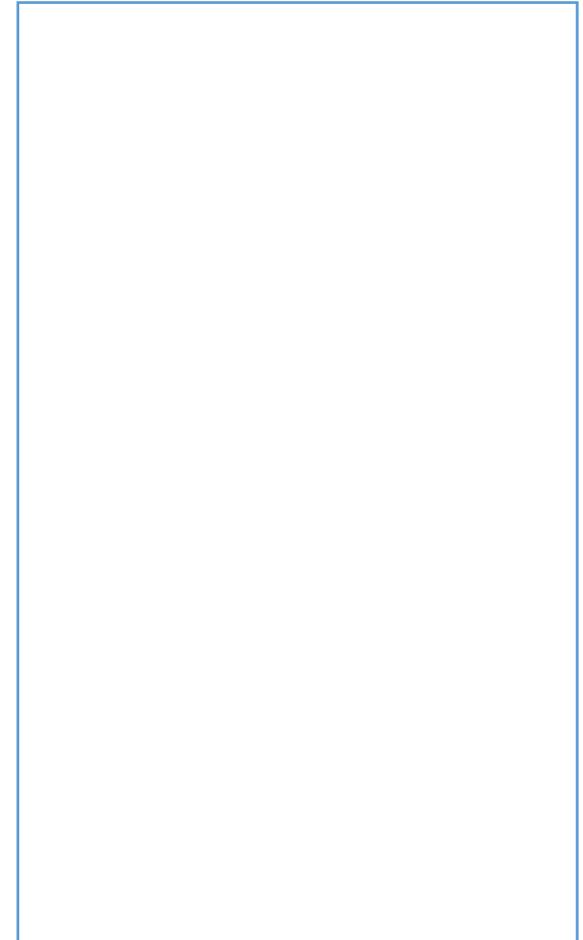
Think about the function of your building. Does it have one use or many uses?

Write down all the uses:

What are the main features of your building? Write down all the features:

### Step 2:

Draw an elevation plan of your new building and label the key features.

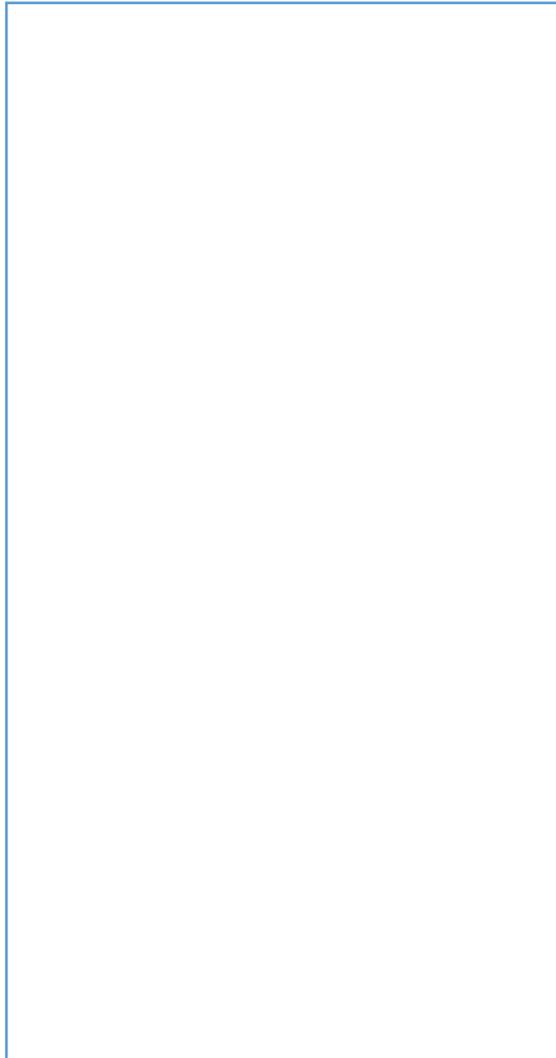


# Activity Sheet

## Lesson 3 Design

### Step 3

Refer back to your elevation drawing in the last activity. Create a cross-section of your building and label the key features.



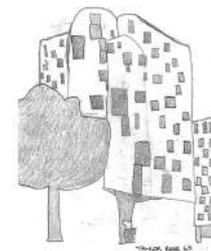
### Step 4

Share your design with family and friends. Ask them what they like or do not like. Is there anything they would add? Make any changes to your design.

**Now you have your design it's time to make your building!**

**Have a look around your home and think about what materials you have to create your building.**

Sketches of the library exterior



Floor Plan of interior



# Lesson 4

## MAKE



Two hours

Fact Sheet

Examples page 14

Activity Sheet

See pages 15 - 16 for Activity Sheets

Materials

No need to buy stuff, be creative and see what you can find around your home and in the recycling.

Other tools: pencil, glue, scissor, skewers, ruler, tape

Optional: paint, coloured pencils

## Setting the Scene

By now you will have gathered all the information you need about your building and it is time to create your model.

Before you start you will need to assemble all your building materials.

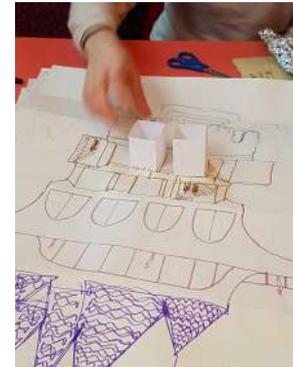
Cardboard - for walls, roofs, floors (flattened cereal packets, delivery boxes etc).

Plastic - for windows, glass door panels (fruit containers, biscuit packets)

Coloured and textured paper - for details (old magazines, wrapping paper, silver foil)

Collect more than you need - sometimes things don't go quite to plan and sometimes we discover exciting things in the making process through trial and error.

Tip: keep a box for interesting scraps of paper and materials for future projects.



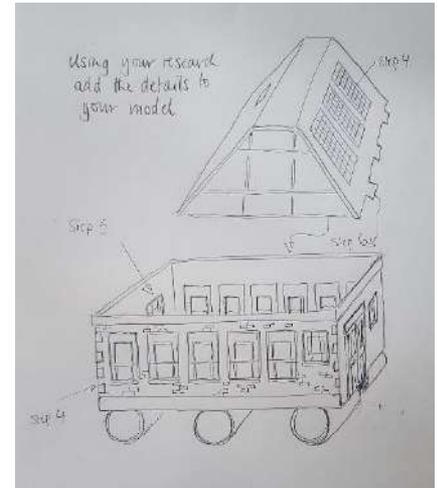
**Fact Sheet**

Lesson 4  
Examples



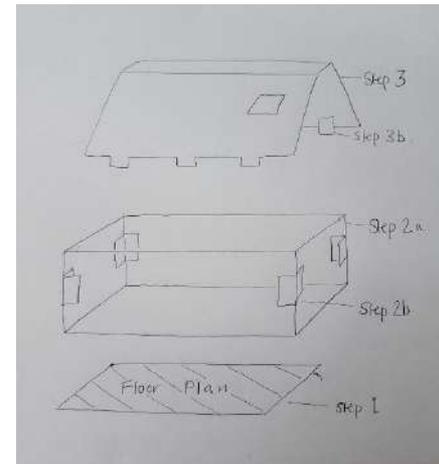
The Old Natwest Bank ,Walworth

Transformed into a floating cafe wildlife observatory for the lake in Burgess Park



A Model Building based on SPACE ARTIST Studios in London SE15

Made by Rosa Beck aged 13



# Activity Sheet

## Lesson 4 Make



Two hours

### Step 1

Make a floor plan.

Buildings are usually built from the ground up.

Using a piece of old newspaper draw the 'footprint' of your building (this is the area of land your building will stand on). This will be your guide for the size of your model as you construct it.

### Step 2

Constructing the walls.

Using a strong material i.e. cardboard cut your walls to the height you want them. Your building may not have square corners so you will need to decide if you need to roll, fold, bend or cut your construction material to shape it. It is really important to make this part of your model strong. You can do this by reinforcing the corners with folded card. Fold a piece of piece of card into a right angel (if you have square walls) and stick firmly into the corner on the inside of the model. (See diagram in Fact Sheet

### Step 3

Make the roof.

All the information you need is in the drawings and research you collected earlier about your building. Follow the shapes to create your roof structure. Remember to attach some tabs to the edge of the roof structure so you can attach the roof to the main building.

### Step 4

Decorate the building.

What is the 'real' building made of? How are you going to create the surface. You may want to use a technique called FROTTAGE. This is done by placing thin paper (copy paper or newspaper is good) over a surface and rubbing it with a soft pencil or crayon. This will create an impression of the surface underneath. (Wood, stone, metal gratings and floor mats make great surface for frottage - why not give it a try!)

Alternatively you could use collage, paint or pencils.



# Activity Sheet

## Lesson 4 Make



### Step 5

Is your model going to have an inside?

Now is the time to create that. Floors can be supported using wooden skewers or paper straws. You can make your own paper straws by rolling a page of old magazine paper around a pencil and striking it along the edge (don't forget to take the pencil out!)

### Step 6

Completing the model

If you are having a fixed roof attach it now using the glue tabs.

Now your building is complete you may want to place it in a landscape....there is no limit to your model making!

