

MODEL SCHOOL

1

What is Architecture?

Lesson Plans:

- 1.1 A discussion about architecture
- 1.2 Paper transformers
- 1.3 Where do we learn?



Model School

1. What is Architecture?



Stage 1 Overview.

The following set of lessons introduces the class to the **Model School** project and raises awareness of the subject of architecture, what it is, and how it affects us, it should engage and involve the class in their built environment.

There are three suggested lessons in this section, each runs for about an hour. We've also suggested in the third lesson that you may want to include a visit to a relevant, exciting, and contemporary building. **Teachers should encourage contemplation on the structures and materials used in any buildings shown in this section, or others that you may like to visit, to engage pupils in issues that will arise in later stages.**

- | | |
|-------------------|---|
| Lesson 1.1 | A Discussion About Architecture
This introduces the class to the subject of architecture. |
| Lesson 1.2 | Paper Transformers
This incorporates a fun and illuminating task to encourage 3D thinking and creativity. |
| Lesson 1.3 | Where Do We Learn?
This session focuses the class to think about the specifics of the project - that is to design their own perfect ideal place to learn. There is a suggested list of buildings the class may wish to visit to inspire them. |

Model School

1. What is Architecture?

Stage 1 Overview, continued.

You can use the images from the information sheets contained in this section to guide this stage or you may want to add your own images or do more research with the assistance from the useful links and reading list.

If you wish to widen your knowledge for this stage or use more material and images:

Interesting reading books,
(for pupils)

Roberto the Insect Architect by Nina Laden,
Iggy Peck Architect by Andrea Bealy and David Roberts,
The Modern Pop-Up: From the Eiffel Tower to the Guggenheim
by Anton Radevsky and David Sakol

Interesting research,
(for teachers)

www.designboom.com
www.scottisharchitecture.com
www.greatbuildings.com
www.urbanrealm.com

50 Architects You Should Know

author: Isabel Kuhl
publisher: Prestel
ISBN: 978-3-7913-4043-2

The Fundamentals of Architecture

author: Lorraine Farrelly
publisher: AVA Publishing
ISBN: 13 978 2940 373 482

The Story of Architecture

author: Jonathan Glancey
publisher: Dorling Kindersly
ISBN: 13 978 07513 988 11

Model School

1. What is Architecture?

Lesson Plan 1.1

A Discussion About Architecture

Location	Classroom
Suggested Duration	45 mins (approx)
Task type	Group discussions, individual creative task
Materials /Equipment	Projector/photocopies for showing images, paper and pens for drawing/writing
Learning intentions	To have an understanding of various types of architecture and their purposes
Record Of Learning Activity	Drawing(s) and/or writing

INTRODUCTION

Begin the session with the following suggested questions:

Questioning

- What is your favourite building? And why?
- Who designs buildings?
- Where do the ideas for buildings come from?
- Why do we need buildings?
- Name different types of buildings and what they are used for?
- Do different nationalities have different buildings?

Show the children images of different buildings. You can supplement the ones we have provided, with your own if you wish. Generate a discussion with the class on the images you show them.

MAIN ACTIVITIES

Writing + illustration

Ask the class to draw their favourite building, and write down what type of building it is and what happens in that building, for example; school, house, playcentre. Also ask them to record in their own words why they like it.

CLOSING THE LESSON

Talking + listening

Display all the drawings and ask each child to talk about their own favourite building. Explain to the class that by the end of the project they will have learnt how to design and make architecture.

Model School

1. What is Architecture?

Lesson Plan 1.2

Paper Transformers

Location	Classroom
Suggested Duration	45 mins (approx)
Task type	Individual creative, then group discussion
Materials /Equipment	A4 paper - coloured or plain white , Sticky tape, plasticine (optional)
Learning intention	To have an awareness of the built environment
Record Of Learning Activity	A small 3D paper sculpture, photos of the collective work

INTRODUCTION

Questioning

Begin the session with the following suggested questions

- Where do ideas for buildings come from?
- Who decides what shape a building should be or how big it is?
- Who decides what streets and landscapes might look like?

There are no right or wrong answers, this should only generate discussion and enthusiasm about the built environment.

MAIN ACTIVITIES

Making

Ask each child to transform a sheet of A4 paper into something that is 3 dimensional. Suggest they can fold, bend, cut, tear, twist the paper in any way they wish. Use sticky tape or glue to fix things. Use the images of the mini paper sculptures on the information sheets to guide and inspire the class. The class can create more than one paper 'transformation' if time allows.

Showing

Place all the paper sculptures on a table to display all the work. Ask the class to talk about the sculptures.

Discussing

Now ask each child to draw a picture of themselves standing up, making it 2cm on a small piece of paper, fold the paper so the figure stands up. You may wish to do this in plasticine instead. Place them on table around the paper objects. You now have an instant architectural model of a village or town complete with people. What might these buildings in this town be used for? Can we recognise building types by their shape? Rearrange the paper sculptures to form streets to extend the discussion. Does your town need a park? Or anything else?

CLOSING THE LESSON

Celebration

Your class has just completed a similar process that an architect might go through when designing a new building or a new town. Congratulate them. Everyone could be an architect.

Model School

1. What is Architecture?

Lesson Plan 1.3

Where Do We Learn?

Location	Classroom. This lesson could be tied to a visit to one of the buildings listed below
Suggested Duration	1.5 hours (approx)
Task type	Group and Individual
Materials /Equipment	A4 paper, projector/photocopies
Learning intention	To identify elements of spaces or places that facilitate learning
Record Of Learning Activity	Drawing(s) or a written piece

INTRODUCTION

Discussing

Use the architectural images provided on the information sheets to generate discussion about the places where we learn for example; school, home, swimming pool, the park, dance studio, a library etc. Use the image of The Cardboard School by Cottrell and Vermeulen to discuss buildings that care about the environment.

MAIN ACTIVITIES

Illustration

Ask the class to think of a **learning** space they like at your school, and draw that space showing the learning activities that happen there. You can widen the scope to include other learning spaces they know outside the school, but they must be real spaces not imagined.

CLOSING THE LESSON

Showing

Display the work together and the class to talk about their drawings. What makes their particular space good to learn and why? Is the teacher the most important? (Hopefully yes). Or is the space a nice place to be? Does it have lots of daylight?

ADDITIONAL ACTIVITIES

To widen your pupils experience of **Learning Spaces** a visit to one of the following buildings is suggested:

- The Lighthouse, Glasgow, *original building by Charles Rennie Mackintosh and new parts by Page and Park*
- Scotland Street School, Glasgow, *by Charles Rennie Mackintosh*
- The Museum of Rural Life, East Kilbride *by Page and Park*
- The Science Centre, Glasgow, *by BDP*
- Museum of Scotland, Edinburgh, *by Benson and Forsyth*
- The Bridge, Easterhouse, Glasgow, *by Gareth Hoskins Architects*
- Scottish Storytelling Centre, Edinburgh, *by Malcolm Fraser*
- Dundee Contemporary Arts, Dundee, *by Richard Murphy*
- Culloden Battlefield Visitors Centre, Inverness, *by Gareth Hoskins*
- Riverside Museum, Glasgow, *by Zaha Hadid*

During the visit ask the class to observe some of the following:

1. What is the building made from?
2. Does it have lots of daylight?
3. Does it need a view to the outside world? Is this important?
4. Are different spaces in the building 'good' or 'bad'?
5. Ask them to consider and give reasons for their opinions.

See **Record Sheet 1.3**, the pupils can use this to record their experience of visiting one of the buildings.



Architecture+DesignScotland
Ailtairachd is Dealbhadh na h-Alba

Model School

1. What is Architecture?

INFORMATION SHEET

Ideas and Architecture



‘The Birds Nest Stadium’, Beijing

by architects, Herzog de Meuron.

The idea for this building came from the texture of the ‘crackle glaze’ on an old Chinese vase, it was nicknamed the ‘birds nest’ by the public as it was being built. Can you name other buildings with nicknames? Gerkin, armadillo etc.



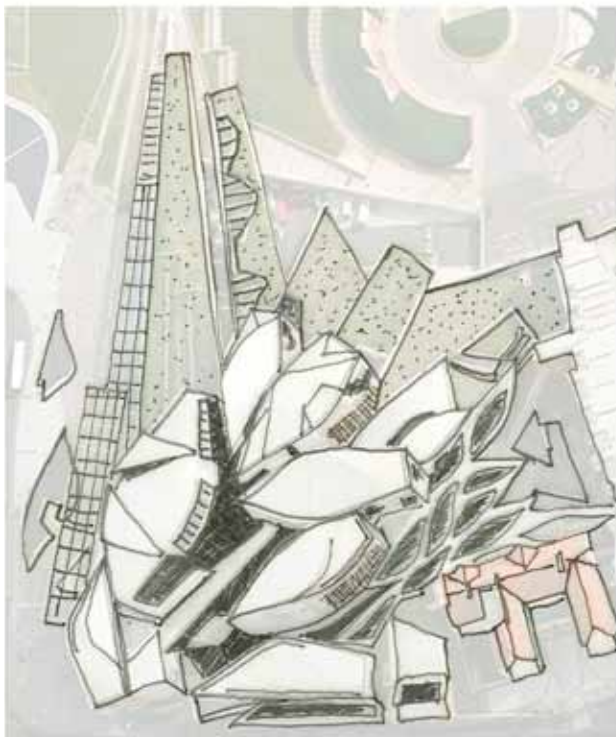
Architecture+DesignScotland
Altaarachd is Dealbhach na h-Alba

Model School

1. What is Architecture?

INFORMATION SHEET

Ideas and Architecture



‘The Scottish Parliament’ Edinburgh

by architects, EMBT + RMJM.

The idea for this building came from the image of upturned boats.



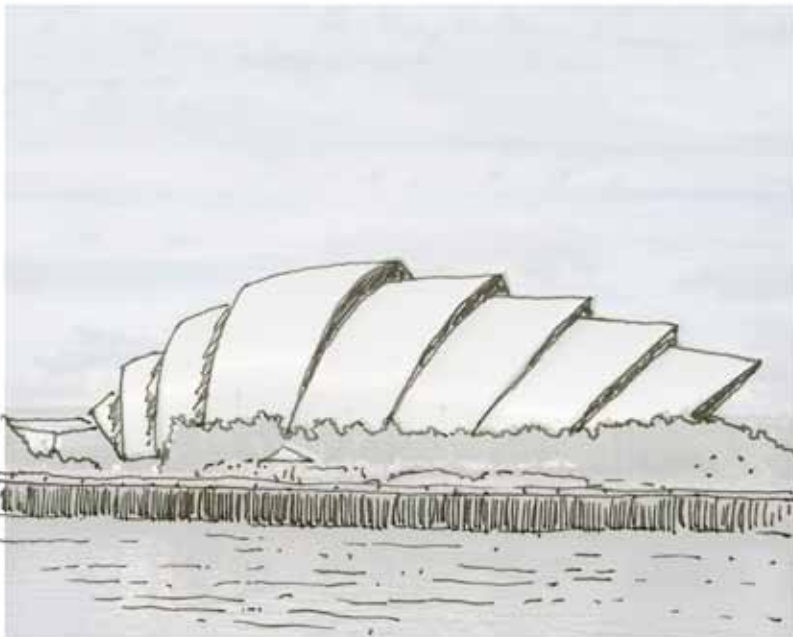
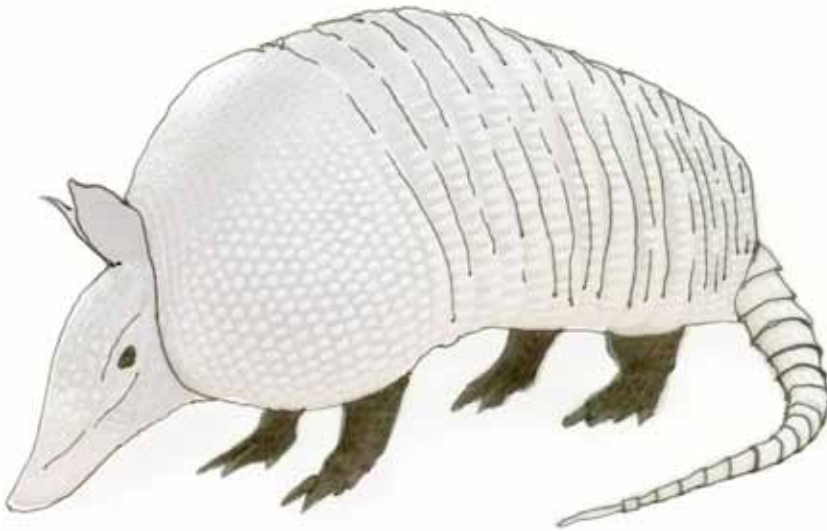
Architecture+DesignScotland
Ailtairachd is Dealbhadh na h-Alba

Model School

1. What is Architecture?

INFORMATION SHEET

Ideas and Architecture



'The Armadillo'
Glasgow
by architect, Foster Associates



Architecture+DesignScotland
Altaarachd is Dealbhadh na h-Alba

Model School

1. What is Architecture?

INFORMATION SHEET

Paper Transformers



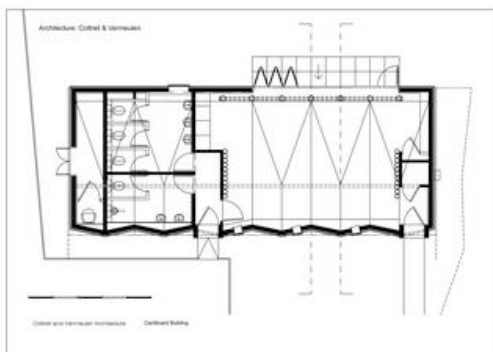
INFORMATION SHEET

Where do we learn?

Example: The Cardboard School



Photograph
by Peter Grant



Cottrell and Vermeulen Architecture

Westborough Primary School is constructed from re-cycled cardboard to create a permanent building, the first of its kind in Europe.

www.cottrellandvermeulen.co.uk



Architecture+DesignScotland
Aithearrachd is Dealbhadh na h-Alba

Model School

1. What is Architecture?

INFORMATION SHEET

Where do we learn?

Example: Baupiloten Alternative Learning Spaces



photographs by Jan Bitter.



more information can be found at:

www.baupiloten.com

Model School

Record Sheet - Exercise 1.3

Building Study Visit

Name of the Building you Are Visiting

Your Name

Date

Can you name of the architect who designed the building?

1 Building Materials

1a What building materials are used to make the outside of the building? For example; stone, brick. Remember to look at the roof too.

1b Which material is used the most?

1c Draw a picture of the outside of the building showing where the materials are located.

1d Name the different types of building materials you see on the inside of the building. For example; wood, carpet, plaster, glass, metal. Record where you see them. Remember to look at the ceilings and floors as well as the walls.

2 Daylight in the Building

2.1 Does the building have lots of daylight coming in?

Where does the light mostly come from? For example; windows, glass block, rooflights (windows in the roof)

3. Views out of the Building

Does the building provide lots of views to the outside world? Explain what is the best view and say which room you can see this from.

4. Good and Bad spaces

4.1 Which is the best space in the building? Explain why you think it is the best.

4.2 Which is the worst space in the building? Explain why you think it isn't good.

5 **Draw your favourite part of the building. Explain why it is your favourite?**