



BUILD YOUR OWN PAVILION

YOUNG ARCHITECTS CHALLENGE

Bloomberg
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SERPE  NTINE
PAVILION

Serpentine Pavilion 2016 designed by
Bjarke Ingels Group (BIG)



BUILD YOUR OWN PAVILION: YOUNG ARCHITECTS CHALLENGE TEACHERS PACK

To celebrate the 15th anniversary of the Serpentine Galleries Pavilion commission in 2015, we launched the Build Your Own Pavilion Young Architects Challenge for 8-14 year olds; inviting young people to build models of their own Pavilions and enter them into a competition.

The Challenge aims to:

- Promote design and architecture in the classroom.
- Engage young people in a practical design process, by responding to a creative brief.
- Facilitate creative idea generation, sketching, orthographics, model making, 3D CAD and 3D Printing skills.
- Provide free tutorials in architectural processes and design software.

To support the Challenge we have programmed a national workshop tour utilising the resources found in this pack and on our platform buildyourownpavilion.serpentinegalleries.org :

- [Learning resources on past Serpentine Pavilions](#)
- Idea generation activities around 'What is a Pavilion?'
- Build Your Own Pavilion design brief.
- Recommended list of architectural model materials.
- 3D CAD software and tutorials.
- Build Your Own Pavilion Young Architects Challenge poster.

Serpentine Gallery Pavilion 2007
designed by Olafur Eliasson & Kjetil
Thorsen.



JOIN THE BUILD YOUR OWN PAVILION: YOUNG ARCHITECTS CHALLENGE!

Running until 9 October 2016, the Build Your Own Pavilion Young Architects competition aims to inspire young people to participate in a creative architectural challenge and learn through making.

There are also some fantastic prizes to be won for entrants including an iPad and design toolkits packed with materials and books. The project and winners will be promoted on the Serpentine Galleries website and in national media. Designs will be judged by a panel of experts including the Serpentine Galleries directors and this year's Pavilion architects Bjarke Ingels Group (BIG).

We have built an online platform to allow children from all over the world to express their creativity and submit their designs. Over the next few months, we will be running Pavilion design workshops across Britain with Kidesign founder Dejan Mitrovic. Kidesign is an educational programme that combines creative games and workshops to develop kids' constructive thinking and design engineering skills by learning through playing.

The workshops are a combination of sketching, model making, 3D CAD and 3D Printing and will be documented on the platform where submissions will also be shared.

The following pages include resources that can be used in the classroom to support the Challenge and be integrated into Art & Design programmes.

Serpentine Gallery Pavilion 2001
designed by Daniel Libeskind with Arup



BUILD YOUR OWN PAVILION: YOUNG ARCHITECTS CHALLENGE

ANTICIPATED LEARNING OUTCOMES

Through the workshops young people should:

- Understand what a pavilion is, what it is used for and the role of architects in designing the structure.
- Understand the creative design process from brief through to prototype.
- Develop their creative thinking skills by responding to the Build Your Own Pavilion brief through drawing, 3D Modelling and CAD.
- Experiment with a variety of different physical materials to express their ideas.
- Develop more sophisticated visual thinking by translating ideas into drawings in four views.
- Extend their understanding of geometrical forms and how they can be combined to create structures in CAD.
- Evaluate and analyse their own work, that of young people in their group and the work of the world's leading architects in terms of both function and aesthetics.
- Develop the ability to work as a team through mutual support, cooperation and democratic processes.
- Expand communication skills by sharing their thoughts about what makes good design, including using appropriate architectural language to describe structures.

Serpentine Gallery Pavilion 2003
designed by Oscar Niemeyer



Serpentine Gallery Pavilion 2007
designed by Olafur Eliasson & Kjetil
Thorsen.



Serpentine Gallery Pavilion model 2014
designed by Smiljan Radic'



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BEFORE THE WORKSHOP

The following information can be used to help prepare students for the workshop. You could use them to start a discussion with your group.

What is a Pavilion?

A Pavilion is a flexible architectural open space that invites people to come in and spend time in it. It could be temporary or permanent and might even change its form and function. A Pavilion might be used as a: shelter, seating, meeting point, cafe, theatre, or for lectures, events, exhibitions, sports, play, relaxation, work and much more.

How is the Serpentine Pavilion made?

Each year the Serpentine Galleries invites a leading architect to design a Pavilion for the front lawn of the Serpentine Gallery. The process is unique, with only six months between invitation and completion for the architects to complete their vision.

What is a Pavilion used for?

The Serpentine Pavilion contains a cafe and space for people to meet and sit. Events, including talks and performances, are held inside the Pavilion over the summer.

How have architects responded to the Pavilion brief?

Take a look at the [summary of our previous Serpentine Pavilions](#), which have been compared to a cloud, a shell, smoke drifting between trees and a secret garden. This can be downloaded from our digital platform where further ideas generation activities can be found.

buildyourownpavilion.serpentinegalleries.org

Serpentine Gallery Pavilion 2012
designed by Herzog & de Meuron and
Ai Weiwei



BUILD YOUR OWN PAVILION: YOUNG ARCHITECTS CHALLENGE DESIGN BRIEF

DESIGN

Make an iconic, innovative design. Look for inspiration, in architecture, objects, nature, animals.

USE

Who will be visiting it? How will the space be used for different functions? How will people access it?

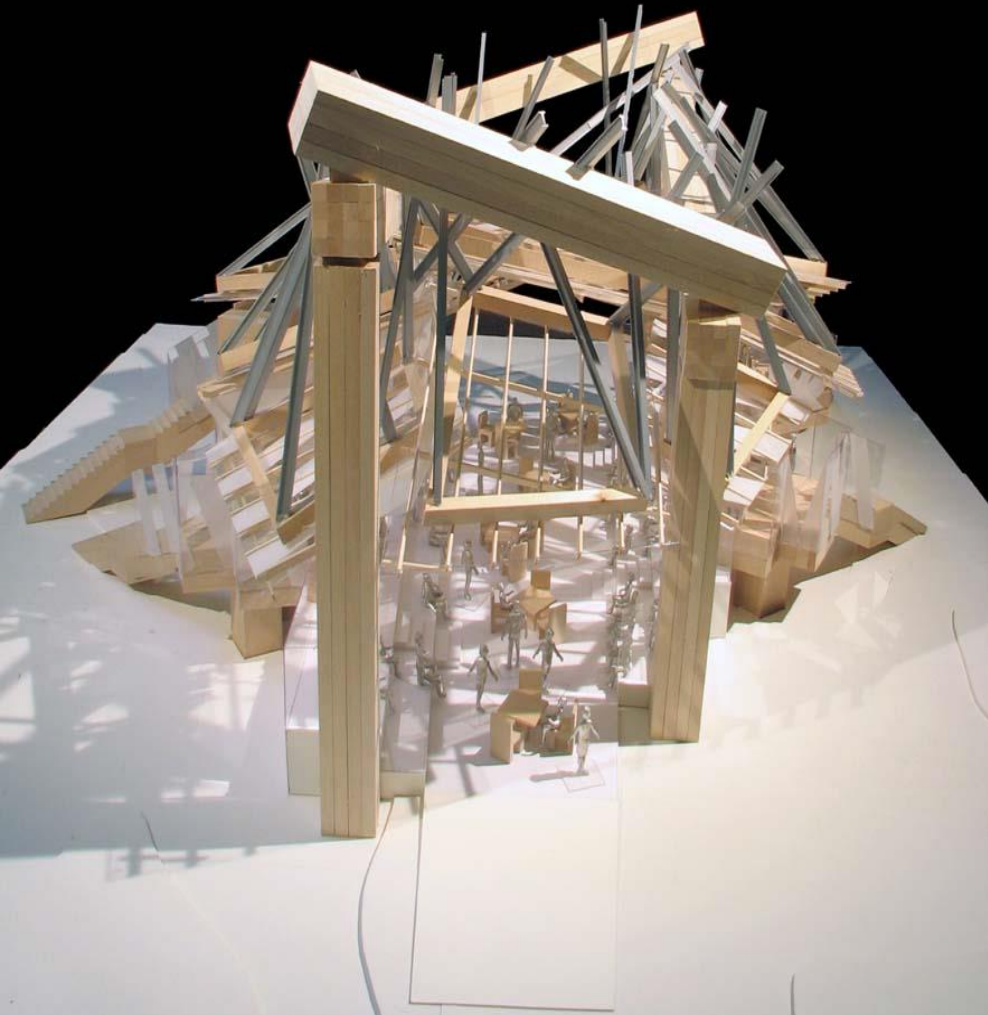
TIME

How long will people stay in it and what will they do? How will the Pavilion change over time? During the day, every week/month/season?

BUILD

Make a model of your design using the suggested materials. Create a model that looks good and explains itself. Think about human scale when making the model.

Model of Serpentine Gallery Pavilion
2008 designed by Frank Gehry.



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SKETCHING & MODELLING

When sketching their Pavilions ask students to think about what their buildings will look like from the front and from the side. This is called orthographic drawing. It's also helpful to think about a bird's eye view of the Pavilion to encourage a 3D appreciation of their design.

A recommended list of materials for use when making the models is below. This is a selection of materials that professional architects use but at the same time can be found in schools. Try using a maximum of two to three materials to ensure clarity of design.

To maintain parity within the competition the final models should be no bigger than a football and no smaller than a tennis ball.

A6 (postcard sized) base (foam cardboard is best but normal card will work too)

A3 and A4 white paper

Card

Plasticine

Acetate

Cork sheets

Felt

Foam

Wooden sticks

Wire

Thread

String

Cable ties



Design your own Pavilion and win our competition



The Competition

Design your own Pavilion and enter our competition for 8-14 year olds to win one of our fantastic prizes



Latest

Architecture Glossary Part 2
7th Jul 2015



What is a Pavilion?



Your Pavilions

A selection of competition entries



Touring Workshop

Find out about the Build Your Own Pavilion workshops taking place across the country

[Find out more](#)



Instagram

Tag your Pavilion images with #DIYPavilion



BUILD YOUR OWN PAVILION: YOUNG ARCHITECTS CHALLENGE PLATFORM

<http://buildyourownpavilion.serpentinegalleries.org>

#DIYPavilion

Along with promoting the Build Your Own Pavilion Young Architects Challenge via the Serpentine Galleries website, there is a standalone digital platform.

This platform is an online space where young people can upload their designs for a Pavilion as well as gaining insight about the architectural process from the world's leading architects and follow the Build Your Own Pavilion UK tour. It also includes step-by-step instructions in how to design and build your own Pavilion model with online tutorials from Dejan and his team about model making and design tools including CAD programmes.

We want to encourage teachers and parents to share these designs and models via Instagram and Twitter to help build a community of young architects around the country. This platform will extend the entrants' learning by enabling them to experience what their peers are producing both within the classroom and outside of it.

On social media we will be documenting the UK tour under the hashtag #DIYPavilion. Please share the photographs of your students' models using this hashtag to get their designs out to as many people as possible and begin to build an online network for the future.

Hans Ulrich Obrist, Julia Peyton-Jones, Smiljan Radic and David Glover at the Press Conference for the 2014 Serpentine Pavilion



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HOW TO SUBMIT A DESIGN

Once the students have made their models it is really easy to upload photographs of them onto the Build Your Own Pavilion platform and enter the challenge. Your school will be placed front and centre alongside work of internationally acclaimed architects.

The competition is divided into four categories: Hand-made Models and Digital Design, each with 8-10 years and 11-14 years classes. Entry closes on 9 October at 19:00. Each student can enter up to five Pavilion designs, with one form submitted for each design. For Hand-made models, they will need to take a clear photograph of their model and attach this to their entry form, which can be found at the 'Submit Your Entry' page on our platform.

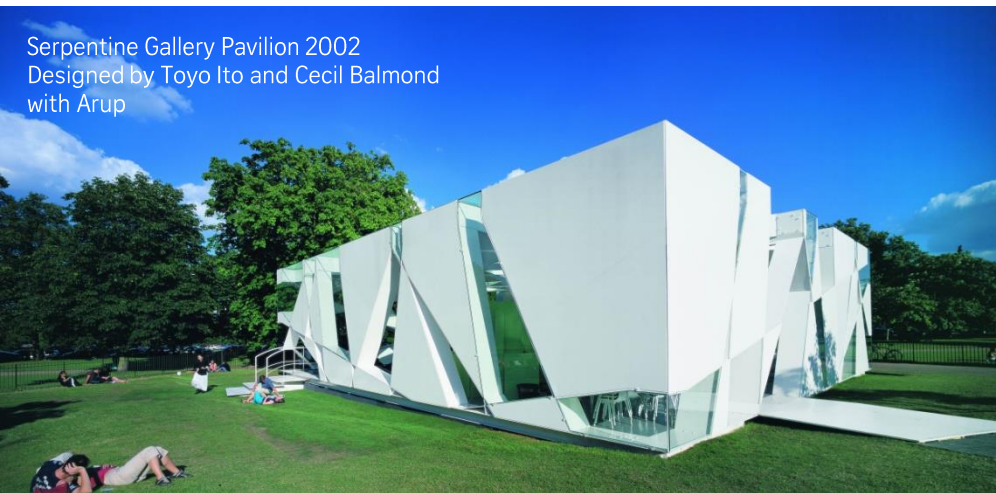
An adult will be required to approve the entry and agree to the competition Terms and Conditions on behalf of each child.

The competition gives young architects the chance to get their work in front of some of the world's most renowned industry experts with the judging panel including architects of the 2016 Pavilion, Bjarke Ingels Group and the directors of the Serpentine Galleries.

Full details on how to enter:

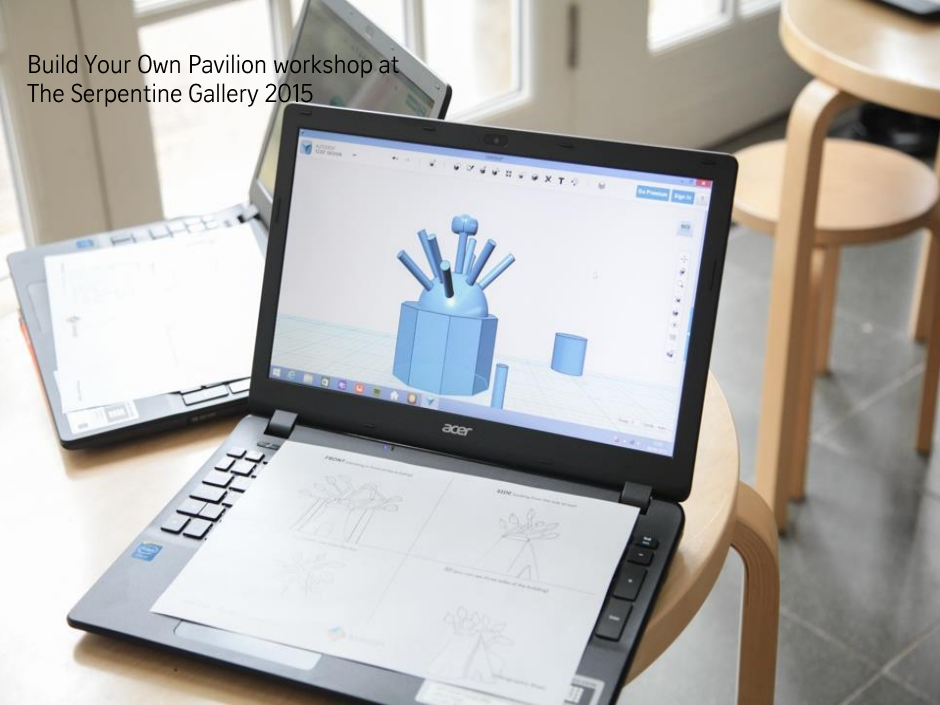
buildyourownpavilion.serpentinegalleries.org/how-to-enter

Serpentine Gallery Pavilion 2002
Designed by Toyo Ito and Cecil Balmond
with Arup



Kideville, a KIDESIGN project
founded by Dejan Mitrovic.





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EXTENSION ACTIVITY: 3D CAD & PRINTING

"I really enjoyed making the models on the laptops."
Shathuryan, age 9

As an extension activity you could get your class to put their hand sketches into CAD software to produce 3D drawings of their models. The software used in the workshop is Autodesk 123D Design. It is free to download and is PC, Mac and iPad compatible.

<http://www.123dapp.com/design>

We also have step-by-step video tutorial on how to use this software on the Build Your Own Pavilion online platform:

buildyourownpavilion.serpentinegalleries.org/teachers

If your school has a 3D printer you can use it to print either all or one of these designs to go alongside the hand-made models.

To submit models designed using 3D design software into the competition, students can upload design files in STL format or submit a link to their design on Tinkercad.



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BUILD YOUR OWN PAVILION: YOUNG ARCHITECTS CHALLENGE FLYER

If you would like to display the official Build Your Own Pavilion Young Architects Challenge workshop flyer around your school you can download [high resolution print copies](#) from our website

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