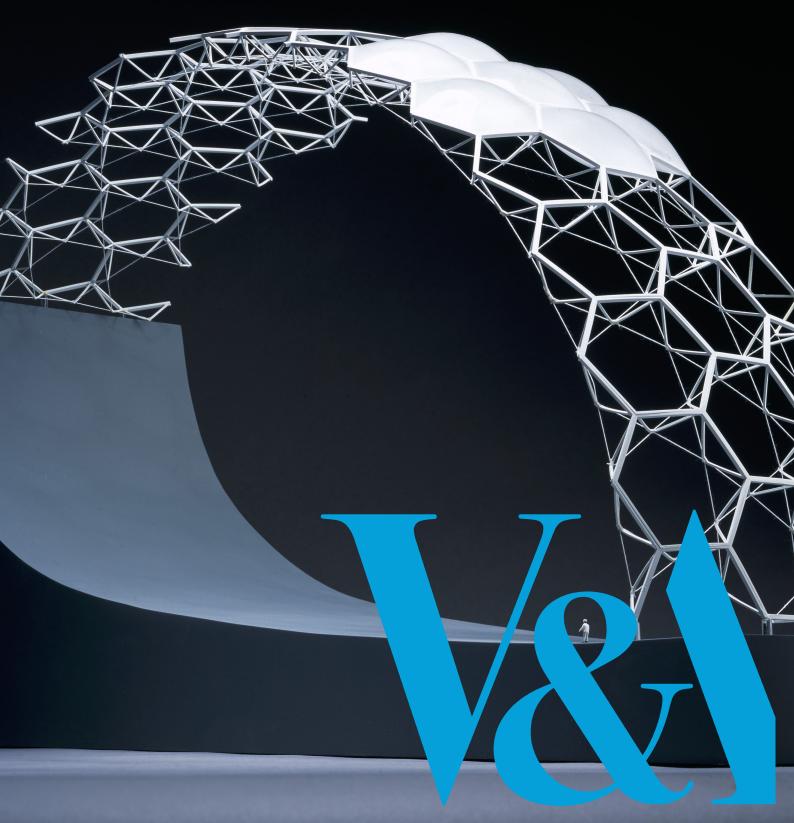
DESIGN PROCESSES TEACHERS' RESOURCE

Explore Design Processes at the home of creativity

Key Stages: 3-5 Art & Design and Design & Technology



Design Processes Teachers' Resource

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Introduction

This resource explains the design processes used in architecture and shows how they can inspire and facilitate other design projects. It draws on the V&A collections and the Royal Institute of British Architects (RIBA) archive of architectural drawings, manuscripts and models. These collections provide an exceptional resource for learning and inspiration, both at the Museum and in the classroom. Suggested activities in this resource will develop students' design knowledge and skills. With reference to major building projects including 30, St Mary's Axe (The Gherkin), students will learn about working to a client brief and how to translate ideas and inspiration into practical designs. They will also learn how to present their designs in sketches, scale drawings and models.

This resource was created as part of the V&A+RIBA Architecture Partnership education programme.

Pre-visit activities

Give students a design brief to work from and explain that they will be visiting the Museum to find design inspiration and learn more about professional design processes. Here are two suggested briefs:

- Design a product (for example, a bag) that could be sold in the V&A shop
- Design a shelter for a site specific area in your local community or school

The Museum visit

Visit the Museum to see original architectural designs, from initial sketches to final presentation models, and gather ideas for your design brief.

Book a visit to the Prints & Drawings Study Room and request the Design Processes Resource Box, to look at sketchbooks, drawings and plans for iconic designs including the GPO telephone kiosk and the Odeon cinema in Leicester Square. Find out more about booking by visiting the V&A's website: vam.ac.uk

Designing buildings

Architects design buildings and structures, from the Sydney Opera House to shop fronts and conceptual installations. They make drawings and 3-D models to represent their ideas at each stage in the design process. An architectural design is developed through a series of gradual modifications, explorations, investigations and experiments. New digital technologies have helped to speed up this process, but buildings and structures still take a long time to plan and design. They must be practical and

efficient as well as visually interesting. Most importantly, they must meet the needs of the people who will use or live in them. Each design project involves fresh problems and new opportunities.

Where do architects get their ideas from? Architects and designers get their inspiration for their ideas from looking at a variety of sources: their environment and experiences, natural and man-made forms, their imagination, other designers' ideas and through experimentation. Architect Jorn Utzon's design for the Sydney Opera House was inspired by the sails of the yachts on the harbour, palm leaves, cloud forms and mandarin segments. The main Eden Project complex consists of a series of connected geodesic domes (biomes). The design of the biomes was inspired by soap bubbles. The Swiss-French architect Le Corbusier (1887-1965) described the architectural design process as 'looking, observing, seeing, imagining, inventing, creating.' (Le Corbusier, 1965).

Who do architects work with?

Designing and creating a building is a team effort. Architects work closely with clients, builders, engineers and other specialists. First, the client will put forward a design brief outlining their requirements. The architect will analyse the brief and identify how the building must function to meet its users' needs. They will develop their design ideas and present them to the client for approval in the form of drawings, models or computer visualisations. This process may be repeated several times before the final design is decided, and more detailed plans can be drawn up to guide the builders.

How do architects communicate their ideas? Drawing and model making are central to the architect's design process from initial idea to finished plan. Some architects might start drawing after choosing keywords to inspire ideas, or shapes and colours that will be central to their design. The Eden Project was designed by architects Nicolas Grimshaw and Partners, and Grimshaw's first ideas for the project were sketched on a napkin.

Follow-up activities/find out more

- Use the architectural model activities in the activity pack to experiment with designing in 3D.
- Explore the local area to observe and record everyday structures and details that could be used to inspire your design brief.
- Create and annotate an inspiration board using visual recordings made at the V&A or in your local area. Look for and record colours, textures, shapes and forms that you could use.