

4.4.4.3 Section C: Generating design ideas (20 marks)

Students should explore a range of possible ideas linking to the contextual challenge selected. These design ideas should demonstrate flair and originality and students are encouraged to take risks with their designs. Students may wish to use a variety of techniques to communicate. Students will not be awarded for the quantity of design ideas but how well their ideas address the contextual challenge selected. Students are encouraged to be imaginative in their approach by experimenting with different ideas and possibilities that avoid design fixation. In the highest band students are expected to show some innovation by generating ideas that are different to the work of the majority of their peers or demonstrate new ways of improving existing solutions

Mark band	Description
16–20	<p>Imaginative, creative and innovative ideas have been generated, fully avoiding design fixation and with full consideration of functionality, aesthetics and innovation.</p> <p>Ideas have been generated, that take full account of on-going investigation that is both fully relevant and focused.</p> <p>Extensive experimentation and excellent communication is evident, using a wide range of techniques.</p> <p>Imaginative use of different design strategies for different purposes and as part of a fully integrated approach to designing.</p>

Student guide - Initial Ideas

Introduction- Have you:

- Explained what you intended to do on this page and why you are ready to start designing.

Designs – Have you:

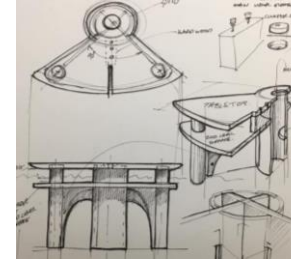
- Created 6 designs which are imagine, creative, innovative and varied.
- Used jack straws and inspired designs as strategies when designing (*you must do this to reach the top two mark bands*).
- Added the inspirational image next to inspired designs.
- Added your jack straws drawing and indicated which shapes have inspired your designs (e.g. numbered them).

Annotation – does your writing:

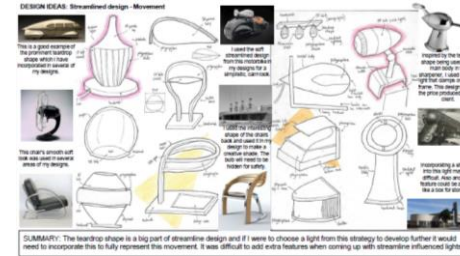
- Explain your idea in enough depth that it would make sense to someone if you were not there to explain it?
- Explain how your design links to your client or intended user?
- Use specific vocabulary e.g. plywood, pine or oak rather than plywood.
- Presented so it is easy to read and does not cover your sketching.

Possible extra ideas for inclusion:

- Add multiple views to help show your design idea in further detail.



- Use colour or line to guide the viewer to look at the designs you are most interested in developing at this point.



- Gain client feedback on your design ideas, discussing positives and areas for improvement, and recoding these on your sheet.

Summary- Have you:

- Explained which design is your favourite and why, and suggested specific ways you might develop your favourite 2 ideas e.g. *I need to add legs to the lamp to give it a more lightweight feel.*

Student guide - Initial Ideas – Annotation support

<u>Potential Annotation Questions</u>	<u>Key Vocabulary</u>
What style is the product? Why have you chosen this style? How does the style of your product meet your customer's preferences?	Aesthetics, Modern, Traditional, Contrast, Complimentary, Neutral, Eye-catching, Unique, Pattern, Texture, Simple, Complex, Original.
How much do you think this product would cost? Budget, mid range, luxury? Why do you think it would cost this much?	Cost, Low, Cheap, Mid, Expensive, High, Unique, Original, Innovative, Affordable, Luxury.
How will your design appeal to your customer? How does it meet their specific needs?	Customer, Client, User, Lifestyle, Needs, Wants.
Is the product safe / unsafe? Have you included any safety features? How could your product be made safer?	Safety, Risk, Hazard, Smooth, Sharp.
How big is your product? Give rough dimensions in mm, not large / small / medium	Adjustable, Transportable, Collapsible, Portable,
What does your product do? How does it do this / how does it function? Does your product have any special features? How will this function help your client?	Function, Functionality, Ergonomics, Comfort, Context, Multifunctional, Accessibility, Ease of use, Reuse, Performance, Storage, Transport, Secure.
What materials does the product use? Why have you chosen these materials? Ask your teacher for a materials textbook to support you with this. Do not state the materials as wood, metal or plastic, this is not specific enough.	Materials, Environment, Sustainability, Polymer – acrylic, mylar, polypropylene, Manufactured board – laser plywood, flexible plywood, Styrofoam, Aesthetics, Function, Use, Disposal.
What processes could you use in a prototype? Why have you chosen these processes? Use your processes sample board from Year 10 to support you.	Processes, Environment, Sustainability, Line bending, Convection oven, Pillar drill, 2D Design, Laser cutter, CAD/CAM, File forming, Lamination, Beating, Scroll saw, Modroc, Vacuum forming.
How does this design meet / not meet your design brief?	Client, needs, limitations, aspirations, function, safety, cost, size, materials, aesthetics, context

Parent guide – Initial Ideas

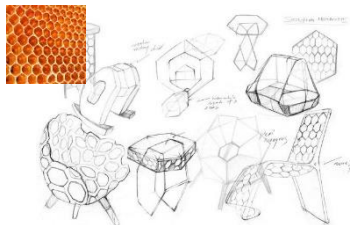
Introduction to this page

This page is students' first opportunity to begin to generate designs that could address the issues or challenges identified by the client.

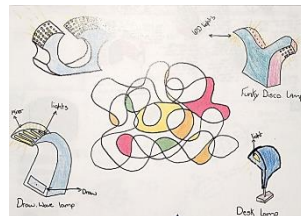
Students should generate a wide range of innovative and imaginative design concepts, showing variety across all areas of ACCESSFMM e.g. a range of different aesthetics, sizes, materials etc. Students' designs should take design risks and be as imaginative as possible. Designs can be refined and made more simple during the design process and so students shouldn't create 'safe' designs.

To help ensure students demonstrate a range of design strategies we ask them to use 'inspired designs' and 'jack straws' to generate some of their ideas.

The designs on this page should include inspiration from all of the research completed so far and all be relevant for the Design Brief and Specification.



Inspired
Designs



Jack Straws



How can you support your child at home?

Look over your child's page:

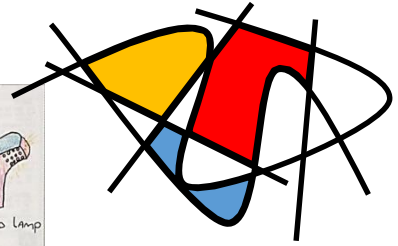
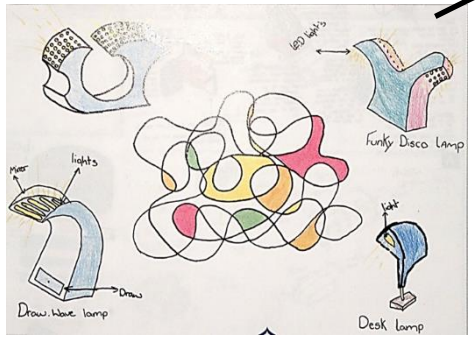
- Have they created a range of innovative design ideas that address the issues or challenges identified by their client?
- Are any design ideas too similar to another one?
- Is it obvious where Jack Straws and Inspired Designs have been used?
- Is all design work relevant to their context, the research they have completed and their clients needs and wants?
- Do the design ideas make sense to you if you read it without your child being able to explain them to you?
- Is the page well laid out and easy to follow?

Look over your child's work and discuss what they have designed, could you help them to see design opportunities they have missed that would address their client's needs and wants in a more creative way? Could you suggest additional shapes, patterns or textures they could add to their sketching work? Is annotation at the standard described e.g. could they add more subject specific vocabulary?

Could you encourage them to add in the extra ideas for inclusion (in green) to help them gain more marks.

Initial Ideas – Examples

Jack Straws



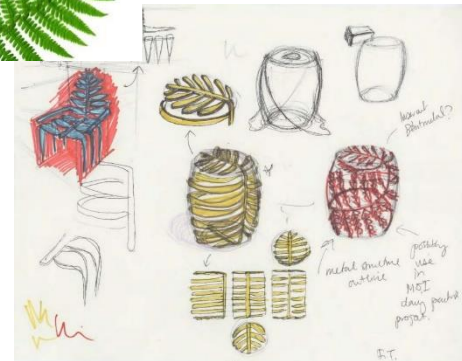
How to design using the 'jack straws technique'

- Draw 6-10 straight and curved lines which overlap. This will create new abstract shapes which are interesting and exciting.
- Colour in the new shapes which you find most interesting.
- Use these shapes can help you to create different parts of your product e.g. the overall form / shape of your product, the pattern or texture on the surface of your product or even just a small element such as a collar or handle.

This strategy helps designers to move away from simple or easy shape such as squares, circles, cubes and cylinders.

Inspired designs

Inspired designs is using existing images and patterns as a source of inspiration when designing. For example using shapes found in nature to create in interesting shape for a garden water fountain or the additional examples below:



Examples of presentation

