

## A Design Process

This resource was developed as part of a Graphics webinar which aired on the 1<sup>st</sup> of April 2020 and can be viewed on [jct.ie](https://www.jct.ie) within the CPD supports tile under the elective workshops tab.

Webinar Link:

[https://www.jct.ie/technologies/cpd\\_supports\\_graphics\\_elective\\_workshops](https://www.jct.ie/technologies/cpd_supports_graphics_elective_workshops)



This webinar entitled “*Graphics in Action*” focused on how two teachers developed a unit of learning with a focus on the rationale as a lens to move forward. Throughout the webinar the teachers involved discuss the thought process which explored the teaching and learning of the unit. As part of this process the teachers discussed how students developed and generated ideas. The “*My Design Guide*” was central to this process and scaffolded the students through this aspect of the unit of learning.

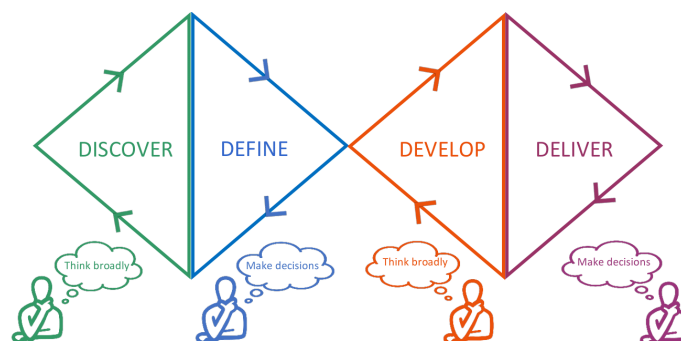


### What is included in this PDF?

#### 1. Design process scaffolding

Included in this PDF are two A3 pages that students engaged with to help scaffold the design process from generating ideas, making decisions, exploring solutions and finally delivering a solution.

These pages use questions found in “My Design Guide” and follow the Double Diamond design process shown below. The list of questions within the design guide are non-exhaustive and other design processes can be used.



A big thank you to the teachers involved for making these resources available to the JCT4 team.

**Note:** It is recommended that you watch the webinar in conjunction with using this resource to contextualise the resource and make a better connection between resource and learning outcomes.


**Why is it designed and made in this way?**

**How does it work?**

**What do you need to know more about?**

**Where can I look for more information? Are there other sources?**

**What solutions already exist? Sketch an existing solution.**



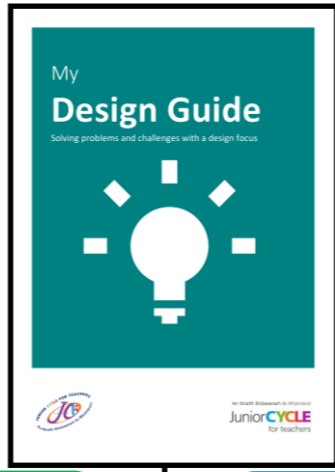
**Tips for... Better Research**

Ask Questions. Be curious. Be open to new ideas. Test and experiment with new ideas.

Use a broad range of primary and secondary sources. Reference your sources and question whether they are reliable sources

Sketch any ideas or solutions that come to mind all the way through your project, no matter how basic.

Look at people and notice how they use and access the spaces and products in the world around them.



**What materials and resources are available?**

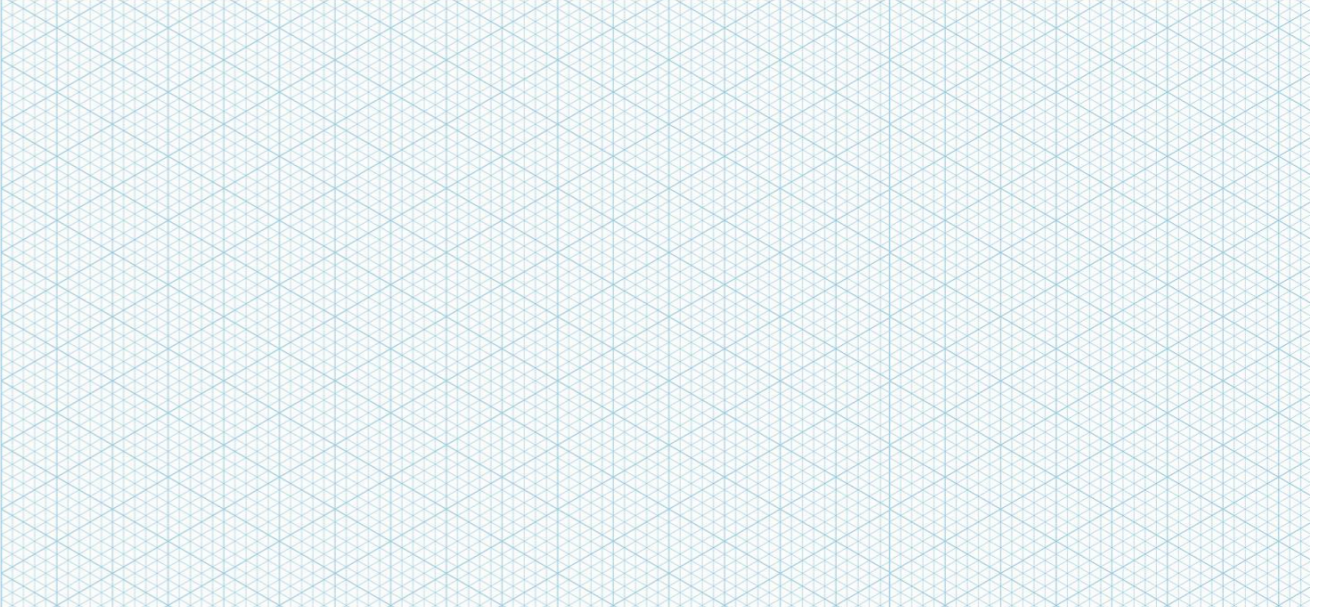
**How much time is available to complete the project?**

**How might I organise my project and record the decisions I make?**

**Are there any features it must include?**

**What is the success criteria for the project?**

**From your research and analysis sketch possible solution/s that can be discussed with your peers.**





What is the design idea?

(Use notes/sketches to explain all aspects of your thinking)

How will I realise (make) my solution?



Gather Feedback

What do you like and dislike about my design idea/solution?

How might I improve my idea?

(You might focus this question on a key area of your project)

Are there any changes or improvements I could make to the design?



Use a range of drawing materials to sketch and communicate your design thinking.

Choose a method to quickly record your thoughts and key decisions you make as design ideas develops.

Further Research – When you start exploring design solutions you might find that you need to research more about materials, components or control systems. Note how this research has helped you develop your final solution.

DESIGN IDEAS - Explore solutions. HOW DO I START DESIGNING? HOW CAN I THINK OF MORE THAN ONE IDEA? HOW CAN I BRING MY IDEAS TO LIFE?

My Design Guide. Solving problems and challenges with a design focus.

FINAL DESIGN - Delivering a solution. Think about the details of your final design. PLAN. TIME. MAKE.

Plan – (Plan the stages to make my solution)

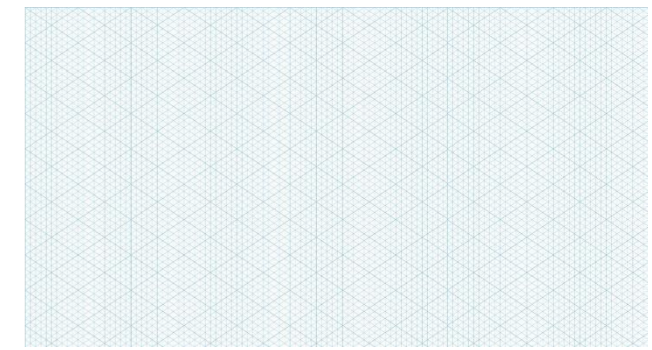
Time— (Develop a timeline for the stages of manufacture of my project)

Make—(Will group members have specific roles in the making process?)

On reflection...

What changes did I make during my project?

Why did I make these changes?



(Include a picture or sketch of final artefact)



Don't delay in starting to make or solve your final design or solution! Be organised! Think ahead to your next lesson and what you might need.

Talk to your classmates and your teacher about your project and how it is progressing. Ask for their opinion and listen to their advice.

Record the stages you go through in making your project or solution. When things don't go to plan, record why and how you solved the problem. Making mistakes and learning from them is