

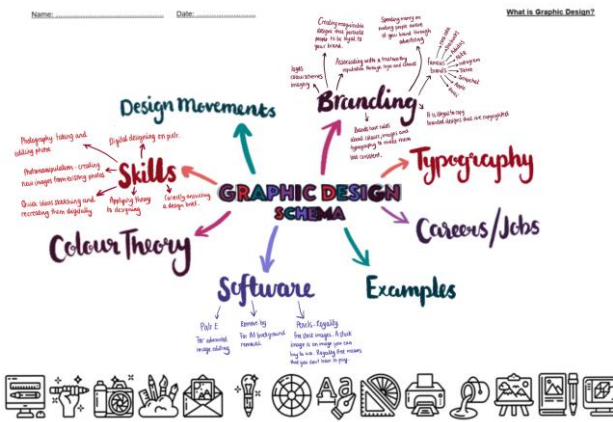
# KS3 ASSESSMENT IN D&T

In Design and Technology, each unit of work takes place over 12 lessons, with assessment built in throughout.

At the very beginning of the year, students complete a schema of their Design and Technology knowledge, enabling them to show how much knowledge they have retained and how it links together throughout the subject. This is then added to throughout the units of work students complete.

## INITIAL FORMATIVE ASSESSMENT

- Students add knowledge to their schema and link it to the other knowledge already written there.
- Students also receive a personal Learning checklist (PLC) This outlines the substantive and declarative content of the unit. They are asked to self-assess by RAG rating their current level of skill and knowledge at the start of the unit.
- Students are provided with a list of skills learned and other subject links, plus any links to extracurricular activities.



### Personal Learning Checklist

1. I can successfully use the computer aided design (CAD) program, 2D Design, to create a product. Assessment: [R] [A] [G]	2. I can successfully communicate multiple design ideas using annotated sketches. Assessment: [R] [A] [G]	3. I can identify key information in a design brief and generate suitable ideas in response to this. Assessment: [R] [A] [G]
4. I can successfully design a product which meets the given design brief whilst avoiding design fixation. Assessment: [R] [A] [G]	<b>Pewortham Priory Academy Design and Technology Year 8 Resistant Materials</b>	5. I can modify my original ideas to make them suitable for computer aided design (CAD) and computer aided manufacture (CAM). Assessment: [R] [A] [G]
6. I can evaluate my design to explain: - How it met the brief - What went well - What can be improved Assessment: [R] [A] [G]	7. I can explain how computer aided design (CAD) and computer aided manufacture (CAM) are used in school and in industry. Assessment: [R] [A] [G]	8. I can identify several different examples CAD and CAM and explain what they are used for. Assessment: [R] [A] [G]
<b>Challenge</b> 9. I can use research and exploration to avoid a stereotypical response to the given design brief. Assessment: [R] [A] [G]	<b>Challenge</b> 10. I can explain why the properties of MDF make it a suitable material to manufacture my final product. Assessment: [R] [A] [G]	<b>Challenge</b> 11. I am able to analyse how making products by hand, and using CAM can affect the quality of the final outcome. Assessment: [R] [A] [G]

### Skills Learned

- Designing to a brief, considering client needs and wants.
- How to analyse existing products, identifying strengths and weaknesses to influence your own product development.
- You will develop skills in designing to a given specification.
- You will continue to develop and practice hand sketching techniques.
- You will revisit Resistant Materials knowledge from Year 7 and build on this knowledge.
- You will gain knowledge of computer numerical control within the Engineering industry.
- You will know how to create a computer drawing that can be manufactured on the laser cutter.
- You will explore different careers relating to Resistant Materials.
- You will continue to explore different materials used within the subject.

### Subject Links

- Art – Sketching techniques.
- Computer Science and ICT – Use of specialised computer software and the internet.
- Engineering and Graphic Design – Use of computer software and planning ideas.
- Other areas of Technology – Answering a design brief, designing with a client's needs in mind, following a specification, evaluating the effectiveness of your final product.

### Extracurricular

- Taking part in product design challenges, such as school competitions.

## ONGOING FORMATIVE ASSESSMENT

**1. Categorize** 3 minutes 2 points

Organise the statements so that they correctly describe plywood and MDF.

(a) Plywood, (b) MDF

answer

(a) Plywood

Is made of multiple layers and pressed together.  Has an attractive wood grain finish.

Can be used for boats because it is waterproof.  Can be used for outdoor furniture.

(b) MDF

Can be painted and used for cheap furniture.  Is not waterproof because it's fibres swell when wet.

Has a dull, smooth appearance.  Is pressed into a large board with heat.

**2. Drop Down** 1.5 minutes 3 points

Complete the sentence: MDF is made of wood (a) \_\_\_\_\_ mixed together with an (b) \_\_\_\_\_ called resin. They are then formed into a mat and fed through a hot (c) \_\_\_\_\_ to create the final board. This results in a flat piece of board with a (d) \_\_\_\_\_ surface with no knots or (e) \_\_\_\_\_.

answer choices

<input type="radio"/> fibres	<input type="radio"/> adhesive (glue)
<input type="radio"/> press	<input type="radio"/> smooth
<input type="radio"/> splinters	<input type="radio"/> veneer
<input type="radio"/> layers	<input type="radio"/> grain
<input type="radio"/> peels	<input type="radio"/> debarked

- Low stakes tests using whiteboards to assess knowledge and understanding.
- Multiple choice questions using the quiz platform quizziz.
- Cloze passages
- Comprehension questions following reading texts.
- Hinge questions.
- Homework tasks.
- Adding information to schemas to help knowledge retention.
- Ongoing practical assessments.

## SUMMATIVE ASSESSMENT

- They return to the PLC and update it to show what they can now do and what they have learnt.
- They complete an end of unit test on Microsoft Teams or Quizziz.
- Data is tracked throughout the rotation so that we can a) talk confidently about the progress of individuals and b) pass the data on to the teacher of the next rotation.

