



St. Bede's Catholic School &
Byron Sixth Form College

Title: Design Specification

SOAR words:

Add these cumulatively throughout the cycle.

**Impairment
Specification**

Target Market

Rendering

Representation

Ethical

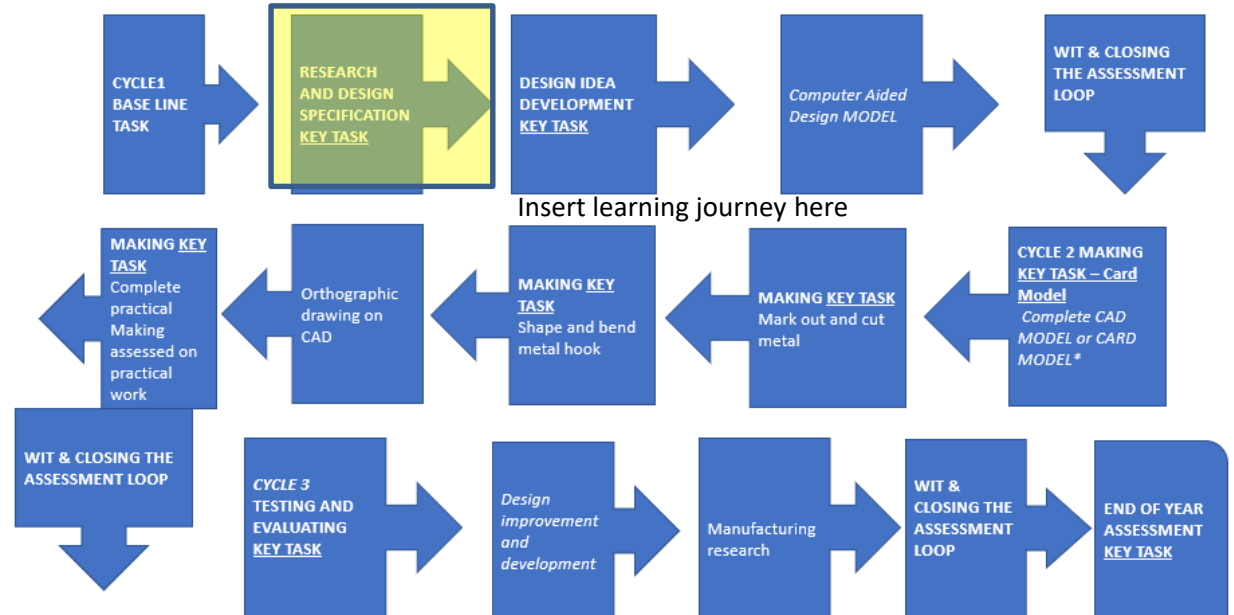
Justification

Criteria

What outstanding progress in this lesson will look like:
(Be ambitious and specific when writing outcomes)

Lesson Objective: Analyse the task and understand the brief.

Y9 Cycle 1-3 Mapping



'With the Lord's help'

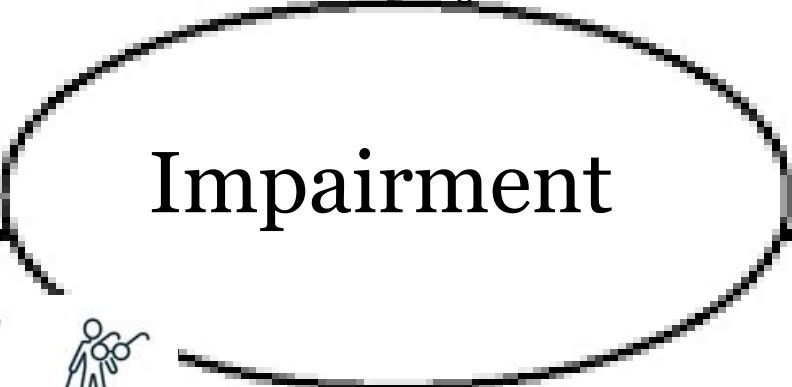
Faith, Excellence, Determination

Definition

noun
the state or fact of being impaired, especially in a specified faculty.
"a degree of physical or mental impairment"

Facts/Characteristics

Impair (v.) late 14c., a re-Latinizing of earlier *ampayre*, *apeyre* "make worse, cause to deteriorate" (c. 1300), from Old French *empeirier* "make worse" (Modern French *empirer*), from Vulgar Latin. In reference to driving under the influence of alcohol, first recorded 1951 in Canadian English.²



Impairment

Examples



Non-examples

- Not linked to making pairs of things.

Definition

noun

1.
an act of identifying something precisely or of stating a precise requirement.
2.
a detailed description of the design and materials used to make something.

Facts/Characteristics

specification (n.)
1610s, "act of investing with some quality," from Medieval Latin *specificationem* (nominative *specificatio*), noun of action from past participle stem of Late Latin *specificare* "mention particularly," from Latin *specificus*, (see *specific*).

Specification

Examples

Parameter	Specification
Engine Type	Multi Cylinder DI, Water cooled
No of cylinder	03
Rated Power	27.9kW,1500rpm
Displacement	3300cc
Bore * Stroke Length	110mm x 116mm
Compression Ratio	18:1
Orifice Diameter	50mm
Orifice Coefficient of Discharge	.60
No of Nozzel Holes	5
Dynamometer Arm Length (mm) , Hydraulic	350.09mm

Non-examples

- Not linked to just electrical products.

Design Specification

You have been tasked with designing and making a coat hook for a customer with a visual impairment.

Task 1

Write a design specification for your product. Use the prompts and P.E.E. chains to complete a list of points that your product must meet. The sheets are to be completed on the next two slides. This may take longer than one lesson.

POINT: It must/should/will....

EVIDENCE: This is due to....

EXPLAIN: This is because....

Word Bank

Appearance
Colour
Shape
Size
Safety
Materials

Success Criteria

Write in full sentences.

Give specific details of your product.

Make it specific.

“Write Like A...” Glossary of Key Terms



Audience	Who is the writing aimed at? This might be indicated in the task wording, but, generally, students are writing for you/an adult audience so should write formally.
Clause	Building blocks of sentences – can be main or subordinate
Conjunction	A word used to connect clauses or sentences (e.g. and, but, if).
Devices	Techniques that writers use to achieve certain purposes – for example, to describe, or persuade their reader.
Grammar	The standard rules for writing, including sentence structuring and the order of words etc.
Homophones	Words that sound the same but have different spellings and meanings: Hair/hare Their/there
Purpose	The aim of the writing: Is it an analysis? Is it descriptive? Is it explaining a process? Students should understand the purpose that they are aiming to achieve.
Rhetorical devices	Devices used by writers to convince or persuade their readers – for example, rhetorical questions, hyperbole, emotive language etc.
Main clause	A sentence will contain at least one main clause that can stand alone. It contains a subject and main verb but can also have additional parts such as an object. I took a bath (main clause) I took a bath <i>after eating dinner</i> (subordinate clause added)*
Standard English	Formal writing that is different to the way we usually speak, and avoids using slang/dialect words
*Subordinate clause	Additional clauses that can be added to the main clause to give further information, often conditions or explanations using subordinating conjunctions such as ‘if’, ‘as’ ‘because’ etc. This type of clause cannot stand alone as a sentence. James searched for his dog (main clause) <i>Despite the awful weather</i> , James searched for his dog (subordinate clause added)
Suffix	A letter or group of letters added at the end of a word to make a new word: In the word "quickly," "-ly" is a suffix, as is “-er” in “quicker”. Suffixes develop the meaning of the original word.
Tense	Any of the forms of a verb which show when something happened: "I sing" is in the present tense and "I sang" is in the past tense. Students often have to stay within one tense in a piece of writing.

Research and Design Specification

KEY TASK 1

Your job is to design a coat hook for a child with a visual impairment. Before you start designing you must complete the **Product Specification** on this page. A specification is basically a list of **rules** of what your final product should be like. It should also give reasons **WHY** you think that rule should be there (see *the example*). You should write in **FULL** sentences and think hard about how your product should be. Your coat hook will be bought by the school for use in their classrooms and needs to be suitable for their students who are aged 5-11 years old.

Aesthetics	POINT: It must/should/will....
	EVIDENCE: This is due to....
	EXPLAIN: This is because....
Cost	P How much will it cost?
	E
	E
Customer	P What age, gender, themes will your customer be or be interested in?
	E
	E

Key words:
Profit
Age
Gender
Theme
Interests
Evidence
Explain

Research and Design Specification

KEY TASK 1

Environment	P	Where will it be used or will it be recyclable ?	
	E		POINT: It must/should/will....
	E		EVIDENCE: This is due to....
Safety	P	How will your product be safe?	EXPLAIN: This is because....
	E		
	E		
Size	P	What size will it be? Height x Width x Length	
	E		
	E		
Materials/ Manufacture	P	What materials will you use?	
	E		
	E		

Key words:
Environment
Recycle
Dimensions
Mild Steel
Plywood
MDF