

Criterion A: Inquiring and Analysing

Maximum: 8

At the end of year 9, students should be able to:

- i. explain and justify the need for a solution to a problem
- ii. construct a research plan, which states and prioritizes the primary and secondary research needed to develop a solution to the problem
- iii. analyse a group of similar products that inspire a solution to the problem
- iv. develop a design brief, which presents the analysis of relevant research.

Achievement level	Level descriptor
0	The student does not reach a standard described by any of the descriptors below.
1–2	The student: <ol style="list-style-type: none"> i. states the need for a solution to a problem ii. states some of the main findings of relevant research.
3–4	The student: <ol style="list-style-type: none"> i. outlines the need for a solution to a problem ii. states the research needed to develop a solution to the problem, with some guidance iii. outlines one existing product that inspires a solution to the problem iv. develops a basic design brief, which outlines some of relevant research.
5–6	The student: <ol style="list-style-type: none"> i. explains the need for a solution to a problem ii. constructs a research plan, which states and prioritizes the primary and secondary research needed to develop a solution to the problem, with some guidance iii. describes a group of similar products that inspire a solution to the problem iv. develops a design brief, which outlines the findings of relevant research.
7–8	The student: <ol style="list-style-type: none"> i. explains and justifies the need for a solution to a problem ii. constructs a research plan, which states and prioritizes the primary and secondary research needed to develop a solution to the problem independently iii. analyses a group of similar products that inspire a solution to the problem iv. develops a design brief, which presents the analysis of relevant research.

Criterion B: Developing ideas

Maximum: 8

At the end of year 9, students should be able to:

- i. develop a design specification which outlines the success criteria for the design of a solution based on the data collected
- ii. present a range of feasible design ideas, which can be correctly interpreted by others
- iii. present the chosen design and outline the reasons for its selection
- iv. develop accurate planning drawings/diagrams and outline requirements for the creation of the chosen solution.

Achievement level	Level descriptor
0	The student does not reach a standard described by any of the descriptors below.
1–2	The student: <ol style="list-style-type: none"> i. lists a few basic success criteria for the design of a solution ii. presents one design idea, which can be interpreted by others iii. creates incomplete planning drawings/diagrams.
3–4	The student: <ol style="list-style-type: none"> i. constructs a list of the success criteria for the design of a solution ii. presents a few feasible design ideas, using an appropriate medium(s) or explains key features, which can be interpreted by others iii. outlines the main reasons for choosing the design with reference to the design specification iv. creates planning drawings/diagrams or lists requirements for the chosen solution.
5–6	The student: <ol style="list-style-type: none"> i. develops design specifications, which identify the success criteria for the design of a solution ii. presents a range of feasible design ideas, using an appropriate medium(s) and explains key features, which can be interpreted by others iii. presents the chosen design and outlines the main reasons for its selection with reference to the design specification iv. develops accurate planning drawings/diagrams and lists requirements for the creation of the chosen solution.
7–8	The student: <ol style="list-style-type: none"> i. develops a design specification which outlines the success criteria for the design of a solution based on the data collected ii. presents a range of feasible design ideas, using an appropriate medium(s) and annotation, which can be correctly interpreted by others iii. presents the chosen design and outlines the reasons for its selection with reference to the design specification iv. develops accurate planning drawings/diagrams and outlines requirements for the creation of the chosen solution.

Criterion C: Creating the solution

Maximum: 8

At the end of year 9, students should be able to:

- i. construct a logical plan, which outlines the efficient use of time and resources, sufficient for peers to be able to follow to create the solution
- ii. demonstrate excellent technical skills when making the solution
- iii. follow the plan to create the solution, which functions as intended explain changes made to the chosen design and the plan when making the solution.
- iv. present the solution as a whole

Achievement level	Level descriptor
0	The student does not reach a standard described by any of the descriptors below.
1–2	The student: demonstrates minimal technical skills when making the solution ii. creates the solution, which functions poorly and is presented in an incomplete form .
3–4	The student: i. outlines each step in a plan that contains some details, resulting in peers having difficulty following the plan to create the solution ii. demonstrates satisfactory technical skills when making the solution iii. creates the solution, which partially functions and is adequately presented iv. outlines changes made to the chosen design or plan when making the solution.
5–6	The student: i. constructs a plan, which considers time and resources, sufficient for peers to be able to follow to create the solution ii. demonstrates competent technical skills when making the solution iii. creates the solution, which functions as intended and is presented appropriately iv. outlines changes made to the chosen design and plan when making the solution.
7–8	The student: i. constructs a logical plan, which outlines the efficient use of time and resources, sufficient for peers to be able to follow to create the solution ii. demonstrates excellent technical skills when making the solution iii. follows the plan to create the solution, which functions as intended and is presented appropriately iv. explains changes made to the chosen design and plan when making the solution.

Criterion D: Evaluating

Maximum: 8

At the end of year 9, students should be able to:

- i. describe detailed and relevant testing methods, which generate accurate data, to measure the success of the solution
- ii. explain the success of the solution against the design specification
- iii. describe how the solution could be improved
- iv. describe the impact of the solution on the client/target audience.

Achievement level	Level descriptor
0	The student does not reach a standard described by any of the descriptors below.
1–2	The student: <ol style="list-style-type: none"> i. describes a testing method, which is used to measure the success of the solution ii. states the success of the solution.
3–4	The student: <ol style="list-style-type: none"> i. describes a relevant testing method, which generates data, to measure the success of the solution ii. outlines the success of the solution against the design specification based on relevant product testing lists the ways in which the solution could be improved iv. outlines the impact of the solution on the client/target audience.
5–6	The student: <ol style="list-style-type: none"> i. describes relevant testing methods, which generate data, to measure the success of the solution ii. describes the success of the solution against the design specification based on relevant product testing iii. outlines how the solution could be improved iv. describes the impact of the solution on the client/target audience, with guidance.
7–8	The student: <ol style="list-style-type: none"> i. describes detailed and relevant testing methods, which generate accurate data, to measure the success of the solution ii. explains the success of the solution against the design specification based on authentic product testing iii. describes how the solution could be improved iv. describes the impact of the solution on the client/target audience.

MYP DESIGN COMMAND TERMS

Term	Definition
Analyse	Break down in order to bring out the essential elements or structure. To identify parts and relationships, and to interpret information to reach conclusions.
Construct	Display information in a diagrammatic or logical form.
Create	To evolve from one's own thought or imagination, as a work or an invention.
Define	Give the precise meaning of a word, phrase, concept or physical quantity.
Demonstrate	Prove or make clear by reasoning or evidence, illustrating with examples or practical application.
Describe	Give a detailed account or picture of a situation, event, pattern or process.
Design	Produce a plan, simulation or model.
Develop	To improve incrementally, elaborate or expand in detail. Evolve to a more advanced or effective state.
Evaluate	Assess the implications and limitations; make judgments about the ideas, works, solutions or methods in relation to selected criteria.
Explain	Give a detailed account including reasons or causes.
Identify	Provide an answer from a number of possibilities. Recognize and state briefly a distinguishing fact or feature.
Justify	Give valid reasons or evidence to support an answer or conclusion.
List	Give a sequence of brief answers with no explanation.
Outline	Give a brief account.
Present	Offer for display, observation, examination or consideration.
Prioritize	Give relative importance to, or put in an order of preference.
State	Give a specific name, value or other brief answer without explanation or calculation.
Summarize	Abstract a general theme or major point(s).

Total of criteria for all subjects is **32**

The MYP Grade boundaries are as follows:

Boundaries	1 - 5	6 - 9	10 - 14	15 - 18	19 - 23	24 - 27	28 - 32
Grade	1	2	3	4	5	6	7