

# Design assessment criteria: Years 4 and 5

## Criterion A: Inquiring and analysing

Maximum: 8

At the end of year 5, students should be able to:

- i. explain and justify the need for a solution to a problem for a specified client/target audience
- ii. identify and prioritize primary and secondary research needed to develop a solution to the problem
- iii. analyse a range of existing products that inspire a solution to the problem
- iv. develop a detailed design brief, which summarizes the analysis of relevant research.

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

7–8	The student: <ol style="list-style-type: none"> <li>i. <b>explains</b> and <b>justifies</b> the need for a solution to a problem for a client/target audience</li> <li>ii. <b>constructs a detailed</b> research plan, which <b>identifies</b> and <b>prioritizes</b> the primary and secondary research needed to <b>develop</b> a solution to the problem independently</li> <li>iii. <b>analyses a range of</b> existing products that inspire a solution to the problem in detail</li> <li>iv. <b>develops a detailed</b> design brief, which <b>summarizes</b> the analysis of relevant research.</li> </ol>
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## Criterion B: Developing ideas

### Maximum: 8

At the end of year 5, students should be able to:

- i. develop design specifications, which clearly states the success criteria for the design of a solution
- ii. develop a range of feasible design ideas, which can be correctly interpreted by others
- iii. present the chosen design and justify its selection
- iv. develop accurate and detailed planning drawings/diagrams and outline the requirements for the creation of the chosen solution.

Achievement level	Level descriptor
0	The student <b>does not</b> reach a standard described by any of the descriptors below.
1–2	The student: <ol style="list-style-type: none"> <li>i. <b>lists some basic</b> design specifications for the design of a solution</li> <li>ii. <b>presents one</b> design, which can be interpreted by others</li> <li>iii. <b>creates</b> incomplete planning drawings/diagrams.</li> </ol>
3–4	The student: <ol style="list-style-type: none"> <li>i. <b>lists some</b> design specifications, which relate to the success criteria for the design of a solution</li> <li>ii. <b>presents a few</b> feasible designs, using an appropriate medium(s) <b>or</b> annotation, which can be interpreted by others</li> <li>iii. <b>justifies</b> the selection of the chosen design with reference to the design specification</li> <li>iv. <b>creates</b> planning drawings/diagrams <b>or lists</b> requirements for the creation of the chosen solution.</li> </ol>
5–6	The student: <ol style="list-style-type: none"> <li>i. <b>develops</b> design specifications, which <b>outline</b> the success criteria for the design of a solution</li> <li>ii. <b>develops a range of</b> feasible design ideas, using an appropriate medium(s) <b>and</b> annotation, which can be interpreted by others</li> <li>iii. <b>presents</b> the chosen design and <b>justifies</b> its selection with reference to the design specification</li> <li>iv. <b>develops accurate</b> planning drawings/diagrams and <b>lists</b> requirements for the creation of the chosen solution.</li> </ol>
7–8	The student: <ol style="list-style-type: none"> <li>i. <b>develops detailed</b> design specifications, which <b>explain</b> the success criteria for the design of a solution based on the analysis of the research</li> <li>ii. <b>develops a range of</b> feasible design ideas, using an appropriate medium(s) <b>and detailed</b> annotation, which can be <b>correctly</b> interpreted by others</li> <li>iii. <b>presents</b> the chosen design and <b>justifies fully and critically</b> its selection with <b>detailed</b> reference to the design specification</li> <li>iv. <b>develops accurate and detailed</b> planning drawings/diagrams and <b>outlines</b> requirements for the creation of the chosen solution.</li> </ol>

## Criterion C: Creating the solution

### Maximum: 8

At the end of year 5, students should be able to:

- i. construct a logical plan, which describes 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
- iv. fully justify changes made to the chosen design and plan when making the solution.

Achievement level	Level descriptor
0	The student <b>does not</b> reach a standard described by any of the descriptors below.
1–2	The student: <ol style="list-style-type: none"> <li>i. <b>demonstrates minimal</b> technical skills when making the solution</li> <li>ii. <b>creates</b> the solution, which functions <b>poorly</b> and is presented <b>in an incomplete form</b>.</li> </ol>
3–4	The student: <ol style="list-style-type: none"> <li>i. <b>constructs a plan</b> that contains some production details, resulting in peers having difficulty following the plan</li> <li>ii. <b>demonstrates satisfactory</b> technical skills when making the solution</li> <li>iii. <b>creates</b> the solution, which <b>partially</b> functions and is <b>adequately</b> presented</li> <li>iv. <b>outlines</b> changes made to the chosen design and plan when making the solution.</li> </ol>
5–6	The student: <ol style="list-style-type: none"> <li>i. <b>constructs a logical plan</b>, which considers time and resources, sufficient for peers to be able to follow to create the solution</li> <li>ii. <b>demonstrates competent</b> technical skills when making the solution</li> <li>iii. <b>creates</b> the solution, which functions <b>as intended</b> and is presented <b>appropriately</b></li> <li>iv. <b>describes</b> changes made to the chosen design and plan when making the solution.</li> </ol>
7–8	The student: <ol style="list-style-type: none"> <li>i. <b>constructs a detailed and logical plan</b>, which <b>describes</b> the efficient use of time and resources, sufficient for peers to be able to follow to create the solution</li> <li>ii. <b>demonstrates excellent</b> technical skills when making the solution.</li> <li>iii. follows the plan to <b>create</b> the solution, which functions <b>as intended</b> and is presented <b>appropriately</b></li> <li>iv. fully <b>justifies</b> changes made to the chosen design and plan when making the solution.</li> </ol>

# Criterion D: Evaluating

**Maximum: 8**

At the end of year 5, students should be able to:

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

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