

## Design assessment criteria: Year 3

### Criterion A: Inquiring and analysing

**Maximum: 8**

At the end of year 3, 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 <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</li> <li>ii. <b>states some of</b> the main findings 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</li> <li>ii. <b>states</b> the research needed to <b>develop</b> a solution to the problem, <b>with some guidance</b></li> <li>iii. <b>outlines one existing</b> product that inspires a solution to the problem</li> <li>iv. <b>develops a basic</b> design brief, which <b>outlines some of the findings of</b> 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</li> <li>ii. <b>constructs</b> a research plan, which <b>states and prioritizes</b> the primary and secondary research needed to <b>develop</b> a solution to the problem, <b>with some guidance</b></li> <li>iii. <b>describes</b> a group of similar products that inspire a solution to the problem</li> <li>iv. <b>develops</b> a design brief, which <b>outlines the findings of</b> relevant research.</li> </ol>
7–8	The student: <ol style="list-style-type: none"> <li>i. <b>explains and justifies</b> the need for a solution to a problem</li> <li>ii. <b>constructs</b> a research plan, which <b>states and prioritizes</b> the primary and secondary research needed to <b>develop</b> a solution to the problem <b>independently</b></li> <li>iii. <b>analyses</b> a group of similar products that inspire a solution to the problem</li> <li>iv. <b>develops</b> a design brief, which <b>presents the analysis of</b> relevant research.</li> </ol>

## Criterion B: Developing ideas

### Maximum: 8

At the end of year 3, 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 <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</b> a few basic success criteria for the design of a solution</li> <li>ii. <b>presents</b> one design idea, 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>constructs</b> a list of the success criteria for the design of a solution</li> <li>ii. <b>presents a few</b> feasible design ideas, using an appropriate medium(s) <b>or explains</b> key features, which can be interpreted by others</li> <li>iii. <b>outlines the main</b> reasons for choosing the design with reference to the design specification</li> <li>iv. <b>creates</b> planning drawings/diagrams or <b>lists</b> requirements for the chosen solution.</li> </ol>
5–6	The student: <ol style="list-style-type: none"> <li>i. <b>develops</b> design specifications, which <b>identify</b> the success criteria for the design of a solution</li> <li>ii. <b>presents a range of</b> feasible design ideas, using an appropriate medium(s) <b>and explains</b> key features, which can be interpreted by others</li> <li>iii. <b>presents</b> the chosen design and <b>outlines the main</b> reasons for its selection with reference to the design specification</li> <li>iv. <b>develops</b> accurate 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</b> a design specification which <b>outlines</b> the success criteria for the design of a solution based on the data collected</li> <li>ii. <b>presents</b> a range of feasible design ideas, using an appropriate medium(s) <b>and annotation</b>, which can be correctly interpreted by others</li> <li>iii. <b>presents</b> the chosen design and <b>outlines</b> the reasons for its selection with reference to the design specification</li> <li>iv. <b>develops</b> accurate 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 3, 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
- iv. explain changes made to the chosen design and the 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>outlines</b> each step in a plan that contains some details, resulting in peers having difficulty following the plan to create the solution</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 <b>or</b> plan when making the solution.</li> </ol>
5–6	The student: <ol style="list-style-type: none"> <li>i. <b>constructs</b> a plan, which <b>considers</b> 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>outlines</b> changes made to the chosen design <b>and</b> plan when making the solution.</li> </ol>
7–8	The student: <ol style="list-style-type: none"> <li>i. <b>constructs a logical</b> plan, which <b>outlines</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. <b>explains</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 3, 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 <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>describes a testing 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>describes a relevant testing 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>lists</b> the ways in which 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>describes relevant testing methods</b>, which generate data, to measure the success of the solution</li> <li>ii. <b>describes</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>describes</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>describes detailed and relevant testing methods</b>, which generate <b>accurate</b> 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>authentic</b> product testing</li> <li>iii. <b>describes</b> how the solution could be improved</li> <li>iv. <b>describes</b> the impact of the solution on the client/target audience.</li> </ol>