



Suggested Pages – Investigation

| Page Title                        | Description   | Example – An aquarium  | Marks |
|-----------------------------------|---|--|-------|
| <b>Identifying a problem</b>      | This is where you would lay out the overview of your project. You should include any relevant piece on information to help the examiner see that you have considered a variety of angles. You could create a mind map to brainstorm ideas of where you could take your project. You might find one problem that you would like to take forward, then do a bit of research online and notice that it's been solved (Travel pillows! Ear plugs!) and so you need to look at different solutions or at a different problem. The best evidence will be your first-hand experience – take pictures of the problem! | On the first page, you may have explored a wide variety of option that could answer the question. But you may have tapered down to one specific design problem – How to help children interact with marine life. The best evidence would be to go to an aquarium, take plenty of photos where children are not interacting with marine life, in order to prove that it is an issue.  | 8     |
| <b>Proving a problem exists</b>   | This is where you would look in to your customers in more detail. You may question a typical user or buyer in order to gain more relevant information. You may take photos of where your solution would be situated to better understand the needs and expectation.   | If you were creating an aquarium, you may talk to a zoo manager, or an employee who will feed the fish to discuss in detail what they would need. You may talk to customers of the zoo to find out what they would want. You may also research the needs of the fish (Could you out them all in one tank, do they need different living conditions). In addition, you may include a map of the zoo with the footprint of where your aquarium would be situated. It might be a good idea to ask members of the local area how they may be affected – in order to avoid upsetting/offending.                             |       |
| <b>Any relevant research</b>      | This may not be restricted to one page. This is where your projects will start to differ. Include any <b>relevant</b> research.   | If you were designing an aquarium you may look at: <ul style="list-style-type: none"> <li>- What materials you would need to make it out of</li> <li>- How to make things water proof</li> <li>- What objects may go inside, their materials</li> <li>- Which fish can live in harmony with each other, can they be fed at the same time</li> <li>- Anthropometric data for entry to the tank for feeding</li> <li>- Mechanisms that could allow fish to be fed at certain times</li> <li>- Different ways of interacting with animals (Not just fish)</li> <li>- Colour schemes – does it have to be blue?</li> </ul> |       |
| <b>Identifying a stake holder</b> | A stakeholder is someone who has an interest in the solution you are creating.  | The fish – Your user, as they are the ones who will use your solution regularly.<br>The zoo – Your client, they will have asked you to design the enclosure, and so you will need to take in to consideration their needs and wants.<br>The customers of the zoo – They will likely need to interact in some way with the enclosure (like a tunnel through an aquarium so that you can be amongst the fish<br>The zoo staff – They will need regular and safe access in order to feed the fish and/or clean the tank.  |       |
| <b>Design Brief</b>               | Look at your research – what have you learnt? Make no assumptions here. The best evidence will be photos of the problem, which you can annotate with quotes from your stake holders.<br>Once you summarise your research, write a short statement about which direction you are going to take your project  | A photo of the starfish exhibit, with children pressed against the glass. Quotes from parents saying “They’re fascinated”, quotes from children saying “I want to touch one! They look squidgy!”. A summary of the research completed “Only 30% of aquariums have interaction with marine life”. A brief statement saying how you plan to create a starfish exhibit which is interactive, in order to provoke a child's curiosity and help educate them on marine life.  |       |
| <b>Existing Products</b>          | Here you will look at what products are currently on the market.<br>You should have a first-hand experience of these products so that you can discuss the following points in as much detail as possible. Remember you must justify your reasons. Consider – Form, Function , User requirements , Performance requirements, Material and component requirements , Scale of production, Cost, Sustainability   | This would be a great opportunity to visit some aquariums, take lots of pictures and notes.<br>Who visits them? How do you interact with them?   |       |
| <b>Specification</b>              | On this page you will need to outline the specifics of your product and <b>justify</b> why it should be that way. This will be written as a result of your research. Consider – Form, Function , User requirements , Performance requirements, Material and component requirements , Scale of production, Cost, Sustainability  | The path which customers walk along will be a tunnel running through the tank, so that customers will be able to see the fish from a variety of different angles.<br>There will be educational and interactive games so that young children can learn the different species of sea life.   | 8     |