



# Product Manufacturing Specification

## Design Brief

I can conclude that I will be making a pull along toy for the summer and/or winter. It will also have a detachable or moving part. My design should meet the following specification points:

Specification Point	Description	Justification/ Reason
<b>Function</b>	My product must safely be able to sledge along swiftly in snow.	The results from my questionnaire concluded that my sledge needs to be fast; they also wanted it to be safe.
<b>Performance</b>	The sledge must be durable for at least three years and must perform at a high standard.	This is so it is made at a high standard and will be a quality product.
<b>Target Audience</b>	My target audience will generally be families of adults and young children.	This is because from my responses; people wanted an adult and child to fit on the sledge. Though other audiences may buy the product.
<b>Time scale</b>	I must manufacture my product in the school workshops in no more than 25 hours.	This is the time allowed for the controlled assessment in Technology.
<b>Ergonomics</b>	I have designed my sledge with a pole for the riders feet to rest on while sledging. I have also sanded it down with aluminium oxide abrasive paper and finished it with varnish. This prevents splinters that are likely to occur in the wood.	From my research my sledge must be comfortable enough to create a fun experience while riding in the snow.
<b>Materials</b>	My sledge will be made from a traditional wooden material, mostly hardwood– Ash. The metal structure and pole made with mild steel.	From my results 50% of my target audience wanted a wooden sledge.
<b>Aesthetics</b>	Although my sledge will be modern it will follow a traditional design.	From my results most people wanted a more traditional looking sledge as it represents a better quality product.
<b>Quantity of manufacture</b>	My sledge will be bespoke produced, there will only be one produced.	This is because the school has set me the project to make just one product.
<b>Quality of manufacture</b>	QA and AC. My sledge has to be at a high standard by meeting the specification of lasting at least three years. It has been made durable enough due to the quality controls and checks. E.g. Making sure the marked measurements are accurate before continuing the next step.	My target audience wanted a durable sledge, this is so the sledge will last longer and to a better quality.
<b>Cost</b>	It must be priced in a price range of £20-£30.	From my model I know my clients will be prepared to pay this price for a quality version of my design. Making my sledge this price is so the sledge will be in most people's price range. More people will therefore buy the product.
<b>Weight</b>	My sledge needs to be light enough to carry up a hill.	My audience wanted a sledge that would have to be light enough to carry back up the hill after sledging down the hill.
<b>Sustainability</b>	My sledge has been made out of sustainable woods.	Using this sustainable material is more environmentally friendly and more durable through cold weather.
<b>Reliability</b>	My sledge will have secure joints and be able to last in cold conditions.	This will make my sledge more reliable because the sledge will be trustworthy enough to use without breaking.