



## **S3 Design and Manufacture: Specifications**

**In the previous tasks we have looked at researching a design brief to find out key information from the target market (the people you want to buy the product) before you start designing.**

**The results from your research are used to create a Product Specification. This is a list of things the product must do in order to meet the needs and wants of the target market.**



**Task: On the following slides you will be shown answers to research already carried out. You will need to look at this and create lists of "It must..." statements about the product.**

## Example: Pram

I have been asked to design a pram. In order to start the design process I would have created a questionnaire for parents to work out what they need and want from the product. The questionnaire is shown below and the results are given on the next slide.

### Questionnaires

**Q1: How old would your child be when you first start using this product?**

- 0-3 months       3-6 months       6-12 months

**Q2. How old would your child be when you stop using this product?**

- Approx 6months       Approx 12months  
 1.5 years       2years

**Q3. Would you prefer the product to have:**

- Modern look       Traditional look

**Q4. Would you like the product to have:**

- Neutral colours       Bright colours  
 Gender specific colours

**Q5. Is it important that the product folds down for storage?**

- Yes       No

**Q6: How long would you expect this product to last for?**

- 0-1 yrs       1-2 yrs       2-3yrs       3yrs+

**Q7. How much would you expect to pay for a product like this?**

- Under £200       £200-400       £400-600       £600+

**Q8. how often would you expect to use this product?**

- Daily       Twice a week       Once a week  
 Once a fortnight       Monthly

## Example: Pram Results – Results are shown in red

Q1: How old would your child be when you first start using this product?

**90%** 0-3 months      **7%** 3-6 months      **3%** 6-12 months

Q2. How old would your child be when you stop using this product?

**0%** Approx 6months      **5%** Approx 12months      **75%** 1.5 years      **20%** 2years

Q3. Would you prefer the product to have:

**83%** Modern look      **17%** Traditional look

Q4. Would you like the product to have:

**87%** Neutral colours      **7%** Bright colours      **6%** Gender specific colours

Q5. Is it important that the product folds down for storage?

**96%** Yes      **4%** No

Q6: How long would you expect this product to last for?

**3%** 0-1 yrs      **28%** 1-2 yrs      **34%** 2-3yrs      **35%** 3yrs+

Q7. How much would you expect to pay for a product like this?

**3%** Under £200      **6%** £200-400      **17%** £400-600      **74%** £600+

Q8. how often would you expect to use this product?

**62%** Daily      **31%** Twice a week      **5%** Once a week      **2%** Once a fortnight      **0%** Monthly

## Example: Pram Results – Specification based on results

To create the specification I look at the most popular answers from my questionnaire and use these to create “It must...” statements fro the product

### Specification

- The product must be suitable for children from birth to at least 1.5 yrs
- The product must have a modern look
- The product must have a neutral colour scheme
- The product must fold down for storage in a cupboard or car.
- The product must last for at least 3 years
- The product can cost over £600
- The product must withstand daily use.



## Task 1: Create a specification for the bed using the questionnaire results shown below

Q1: What age range should this product be aimed at?

3% 2-8yr olds      12% 8-16yrs olds      47% 16- 25yr olds      21% 25-40yrs olds      17% 40+

Q2. What is the most important factor for you when buying a new bed?

5% Style      13% Size      65% Comfort      17% Price

Q3. What material would you like it to be made from:

27% Wood      4% Metal      23% Leather      46% Fabric

Q4. What size would you like the product to be:

7% Single      67% Double      23% Queen      3% King

Q5. Is it important that the product includes storage?

2% Yes      98% No

Q6: How long would you expect this product to last for?

0% 1-3yrs      6% 3-5yrs      12% 5-8yrs      82% 8yrs+

Q7. How much would you expect to pay for a product like this?

2% Under £200      4% £200-400      61% £400-600      33% £600+

Q8. How long would you be willing to spend to assemble this product

67% Up to 1 hours      31% Up to 2 hours      2% Up to 3hrs      0% Not willing to assemble

## Task 2: Create a specification for the bike using the questionnaire results shown below

Q1: What age range should this product be aimed at?

0% 2-4yr olds      0% 4-8yrs olds      9% 8-16      14% 16- 25yr olds      77% 25+

Q2. What will be the main purpose of the bike?

0% Learning to cycle      24% Exercise      64% Commute      12% Hobby

Q3. What material would you like it to be made from:

0% Wood      50% Metal      50% Carbon Fibre

Q4. Where will the product be used:

57% Roads      43% Off - Road

Q5. What colour scheme appeals to you most?

57% Black/Yellow/orange      28% Blue/green/silver      0% Pink/purple/green      15% Black/grey

Q6: How long would you expect this product to last for?

0% 1-3yrs      23% 3-5yrs      38% 5-8yrs      39% 8yrs+

Q7. How much would you expect to pay for a product like this?

1% Under £500      24% £500-800      48% £800-1300      27% £1300-2000

Q8. How would you like the product to be operated.

49% Fully manual      51% Electric/hybrid

## Task 3: Create a specification for the cooker using the questionnaire results shown below

Q1: What type of cooker would you prefer?

72% Gas      20% Electric      8% Dual Fuel

Q2. Should the design be suitable for built in or free standing?

58% Built in      42% Free standing

Q3. How many rings on the hob would you expect:

0% 2      2% 3      50% 4      30% 5      18% 6

Q4. What features should the oven include (you may tick more than one):

100% Grill      85% Timer      15% Split oven

Q5. What colour scheme appeals to you most?

57% Silver      Black 28%      White/cream 5%      Coloured 10%

Q6: How long would you expect this product to last for?

0% 1-3yrs      23% 3-5yrs      46% 5-8yrs      31% 8yrs+

Q7. How much space would you require in the oven?

1% Small – 1 rack big enough for a single baking tray      37% Medium – 2 racks big enough for 2 baking trays  
40% Large - 2 racks suitable to hold 4 trays total      Extra large – 3 racks big enough for 6 trays total  
22%

Q8. Should the oven and grill be together or separate.

35% Together      65% Seperate