Design & Technology
(Product Design)

DTBase©

OCR A-Level

Testing Design Solutions with Stakeholders (8.1b)

Materials required for questions

- Pencil
- Rubber
- Calculator

Instructions

- Use black ink or ball-point pen
- Try answer all questions
- Use the space provided to answer questions
- Calculators can be used if necessary
- For the multiple choice questions, circle your answer

Advice

- Marks for each question are in brackets
- Read each question fully
- Try to answer every question
- Don’t spend too much time on one question

Good luck!

Q1. Testing with stakeholders during the design development phase is important because:

A It ensures the final product aligns with user, client, and market expectations

B It guarantees the product will be the cheapest on the market

C It replaces the need for any functional testing

Q2. Which method would be most appropriate for gathering feedback from stakeholders early in the design process?

A Focus groups or interviews with prototypes

B Final product durability testing

C Manufacturing cost analysis

Q3. Stakeholders in a design project can include:

A Only the designers and engineers

B Users, clients, investors, and manufacturers

C Only the marketing team

Q4. Testing a product's success with stakeholders after launch might involve:

A Collecting sales data, customer reviews, and return rates

B Running stress tests on pre-production prototypes

C Calculating the raw material costs

Q5. Identify two methods of exploring stakeholder requirements and describe when each method would be used in the iterative design process. **(4 marks)**

Q6. A designer is testing a new kitchen utensil with a group of elderly users. State two methods they could use to gather stakeholder feedback during the testing session. **(2 marks)**

Q7. A company has developed a new foldable electric scooter aimed at urban commuters. They plan to test the scooter's success with stakeholders after its launch.

Explain three different methods the company could use to assess the product’s

success, and for each method, describe what specific feedback or data it would provide. **(6 marks)**

Answers

Q1. A
Q2. A
Q3. B
Q4. A

Q5.
Possible responses may include:

- Initial models could be created and shown to stakeholders for feedback (1). This could be done throughout the design process to increase usability / interest or funding (1).
- Focus groups could be set up to discuss consumer needs (1). This could be done at the beginning of the design process to test the feasibility of an idea (1).
- Questionnaire (1). This could be done to gather interest in the product before it is launched (1).
- Any other valid suggestion.

Q6.

- Observing users as they try to complete a task with the utensil
- Conducting a short interview after they use the product
- Asking users to complete a structured questionnaire/rating scale

Q7.

- Analysing sales data and repeat purchase rates.
  Feedback/Data: Quantifies market acceptance and commercial success; indicates if the product is meeting sales targets.
- Monitoring online customer reviews and ratings (e.g., on Amazon, specialist forums).
  Feedback/Data: Provides qualitative insights into user satisfaction, common praises, and recurring complaints (e.g., comfort, battery life, folding mechanism).
- Tracking product return rates and warranty claims.
  Feedback/Data: Highlights potential design, quality, or durability issues that were not caught during pre-launch testing.
- Conducting post-launch user surveys or focus groups.
  Feedback/Data: Gathers detailed feedback on usability, safety perceptions, and how well the scooter fits into daily commuting routines.

- Observing scooter usage in public (with permission) or via GPS/data logs (if connected).
  Feedback/Data: Reveals real-world usage patterns, average trip distance, frequency of folding/unfolding, and potential ergonomic issues.