**Design & Technology**

**AQA A-Level** Logo

Description automatically generated with low confidence

**Safety in products and services to the customer**

**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.** What is the key focus of the Consumer Rights Act (2015)?

**A** Ensuring products are sold at the lowest possible price

**B** Guaranteeing products are of satisfactory quality, fit for purpose, and as described

**C** Requiring all products to be made from sustainable materials

**Q2.** What principle is central to the Sale of Goods Act (1979)?

**A** Products must be returned within 14 days of purchase

**B** Manufacturers must offer lifetime warranties

**C** Goods must match their description and be of merchantable quality

**Q3.** What does the BSI Kitemark symbol indicate about a product?

**A** It has met British safety and quality standards

**B** It is made entirely in the UK

**C** It is exempt from EU safety regulations

**Q4.** How might a children’s toy be tested to comply with British Standards?

**A** By ensuring it is sold at a low cost

**B** Through rigorous safety checks for choking hazards and toxic materials

**C** By using only recyclable packaging

**Q5.** Explain how a manufacturer of children’s toys would ensure that their product is safe for the consumer **(6 marks)**

**Q6.** Explain how BSI certification impacts on the purchase of a child’s car seat by a consumer **(6 marks)**

**Answers**

**Q1**. B

**Q2**. C

**Q3**. A

**Q4**. B

**Q5**.

* The manufacturer should ensure the shape and form of the product is safe with no sharp corners or features that may cause entrapment.
* The toy should have been initially designed to meet international standards such as British Standard BS EN 71 or ‘The European toy safety directive’.
* Appropriate choice of materials, fixings and fittings and finishes selected based on the desired mechanical and physical properties.
* A range of testing would take place on all aspects of the toy including the form, the materials, its function and finish.
* ‘Sharp point detection’ and ‘cutting edge’ test could take place to ensure that no harm comes to the user when interacting with the toy.
* Detachment tests could take place and ‘small parts cylinders’ could be used to ensure that any small parts such as wheels or figure heads would not pose a choking hazard.
* ‘Flammability testing’ would take place on the toy to ensure that the child has time to move away from the toy should it catch fire.
* ‘Toxicity’ tests would take place on the material and surface finish to ensure that no harm would come to the child if a part of the toy was ingested.
* Frequent sample testing would take place throughout manufactured batches to ensure consistent quality of manufacture.
* The toy and the packaging would clearly display safety information, graphical symbols and user guidance such as suggested age ranges.
* They would ensure that their product is sold with instructions for use and relevant safety information.

**Q6**.

* BSI certification shows that the car seat has been rigorously tested before being able to be sold.
* Consumers will want to ensure that their child’s seat is safe and fit for purpose.
* BSI certification will increase a brand’s reputation by it becoming synonymous with a company that invests in testing and produce high quality safe products for transporting children.
* It will allow the company to display the kite mark on its seat and packaging, which consumers will associate with a safe and secure product and its presence is often a deciding factor when making a purchase over other car seat brands or models.
* It reassures consumers that the child’s seat will undergo ongoing tests and faulty products recalled providing piece of mind to parents.
* It reassures the consumer that the seat will be up to date and meet current safety regulations such as rear facing requirements etc.
* BSI standards are updated periodically, which will reassure parents that current legislation is being met and this in turn will ensure the child seat is fit for purpose.