

Design & Technology

AQA GCSE

The work of others

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. Which of the following companies is most closely associated with minimalist technology products and sleek user interfaces?

- A** Apple
- B** Dyson
- C** Alessi

Q2. Which company is best known for kitchenware and playful, functional Italian design?

- A** Braun
- B** Zara
- C** Alessi

Q3. Which fashion company is known for affordable, fast fashion and trend-driven collections?

- A** Dyson
- B** Zara
- C** Under Armour

Q4. Which company is known for innovative home appliances like bladeless fans and powerful vacuum cleaners?

- A** Braun
- B** Dyson
- C** Primark

Q5.

Alessi	Apple	Braun	Dyson
Gap	Primark	Under Armour	Zara

Choose one of the companies from the table. Outline the design features and/or manufacturing techniques that have made your chosen company successful. You should refer to specific products in your answer. **(6 marks)**

[illegible]

Q6. Choose a designer of your choice.

Outline the design features and/or manufacturing techniques that have made your chosen designer successful. You should refer to specific products in your answer. **(6 marks)**

Answers

Q1. A

Q2. C

Q3. B

Q4. B

Q5.

Alessi

Unique products produced with a distinctive design flavour. Heavy focus on kitchen products and products for the household. Products make extensive use of stainless steel mixed with brightly coloured polymers.

Artistic design A focus on high quality – hand crafted objects made with the help of machines Fun design imprinted with characterful features Products designed to be aesthetic as well as functional with varying degrees of success:

- Whistling bird kettle 1985 by Michael Graves
- Juicy Salif 1990 by Philippe Starck
- Anna G corkscrew 1994 by Alessandro Mendini
- Condiment set 1978 by Ettore Sottsass

Apple

Computers, portable music and phones:

- Apple 2 and 3 PCs in the 1970s
- Apple Macintosh computers in 1980s
- Macintosh mouse 1984
- iMac G3 1998 designed by Jonathan Ive with cases in distinctive and various colours to catch attention
- Mini desktops – the Power Mac cube 2000
- PowerBook 100 1991 – miniaturised parts of the desktop range to create a lap top with integrated mouse
- iPod Generation 1 2001 with click wheel technology for ease of track selection
- iPod shuffle 2005 – random track selection
- MacBook Pro 2006 with aluminium case. The benchmark for all other manufacturers
- iPhone 2007 with touch screen technology. Apps from the Apple shop

Braun

A company forever linked with the work of German industrial designer Dieter Rams and his 10 principles for good design:

1. Innovative

2. Useful
3. Aesthetic
4. Understandable – good design that does not need an instruction booklet!
5. Unobtrusive
6. Honest
7. Long lasting
8. Design down to the last detail
9. Environmentally friendly
10. As little design as possible

A range of electrical and electronic products designed with simple lines, function in mind and intuitive design:

- Portable radios
- Digital bedside radio/alarm clocks
- Battery powered/electric shavers eg Braun sixtant razor 1962
- Hair and skin care products eg hairdryers
- Health products eg blood pressure monitors

Dyson

Electrical and electronic products using imagination and innovation to create stylish products that are also highly functional

- DC01 – the first dual cyclone vacuum cleaner 1993.
- Washing machine CR01 2000 with twin opposing drum technology for a quicker more thorough wash supposedly.
- Dyson digital motor 2004 – with high speed impeller. Used in later iterations of cleaners for improved efficiency.
- Dyson ball vacuum cleaner DC15 2005 – for improved manoeuvrability.

Traditional cleaners have fixed wheels and only go in straight lines.

- First Hand held cleaner 2006 – DC16 using root cyclone technology.
- Airblade AB01 2006 – hand dryer with airblade technology. Works by scraping water off washed hands, hygienic and drying hands in 10 seconds approx.

- Air multiplier fan AM012009 – no blades and multiplies air flow by 15 times.
- Dyson digital slim cordless vacuum cleaner 2018 – no cord connectivity.

Power provided by high output lithium ion batteries effective for whole house cleaning.

Gap

Established in the late 1960s (American fashion) in response to different fashion requirements for customers between childhood and adulthood – the gap:

- Men – trousers, shirts, shorts
- Women – dresses, maternity
- Children – baby and kids

Empowering women – PACE (Personal Advancement and Career Advancement) launched 2007. Used to support women in the apparel industry where barriers to education have impacted on progression and development into leadership and management in the workplace and also personal and professional growth. Used as appositional promotional point for gap product.

Products designed and marketed with sustainability in mind – great durable products designed using new technology and product innovation, reducing the impact on people and the planet of what we wear. By 2020 eliminate the use of wood derived fabrics sourced from ancient and endangered forests. By 2021 100% of cotton will be from sustainable cotton sources including Better Cotton Initiative (BCI). By 2020 80% of Athleta materials will be made from sustainable fibres. By 2020 25% of Athleta's products will be made using techniques that save water.

Primark

A focus on 'fast fashion' designed for rapid change beyond seasonal but also social, especially for teenagers and young adults.

Clothes are marketed as cheaply as possible and this has led to complaints about irresponsible design as some items are worn only once.

Products made sell themselves ie little advertising.

Manufactured products don't use expensive hangers, tags or labels that add to the product cost. Suppliers are asked to pack clothes like t-shirts so they are ready to go on shelves straight away.

Designs and products go beyond just clothing.

- Homeware
- Sweets and confectionary

Under Armour

A primary focus on sportswear and footwear. Designed originally to enhance performance by keeping athletes comfortable and cool.

Origins based in the identified need of sports tops that did not become wet during exercise- led to the development of a synthetic 'moisture wicking' fibre that kept the participant dry

Has moved into the design and manufacture of casual clothing. Examples of specific materials used in products like shorts, socks, trainers, tops are:

- Heatgear – Original product. Regulates body temperature, keeps you cool.
- Coldblack – reflects heat when it is hot
- Coolswitch – pulls heat away from the body during exercise
- Iso-chill – dissipates heat from the body to keep you cool.

Zara

A focus on 'fast fashion designed for rapid change beyond seasonal patterns, but also social change for particularly young girls and teenage girls.

Prides itself on keeping up with fashion, high quality at reasonable prices.

Products sold based on customer trends

- Men's clothing
- Women's clothing
- Kids clothing (Zara kids) Life label (Join life) – recycling scheme. Home pick up of unwanted clothes. Clothes they go for recycling and /or reuse to finance social projects.

Use of REFIRRA – a fibre made from recycled cotton and wool from sustainable forests.

Working to ensure all products are sustainable throughout raw materials used, design and production. Accept other valid responses.

Q6.

*This mark scheme uses **Philippe Starck** as an example, but there are 28 possible designers to choose from in total. Any of the listed designers could be used, as long as the answer includes relevant design features, techniques, and specific product examples.*

- Known for innovative and unconventional designs that combine form and function.
- Often uses humour and surprise in everyday objects (e.g. *Juicy Salif* lemon squeezer).
- Incorporates organic and sculptural shapes that are visually striking.
- Embraces mass production techniques, making his designs widely accessible.
- Uses a wide range of materials including plastic, aluminium, and glass, often pushing boundaries of conventional use.
- Works across a variety of products — furniture, homeware, hotels — showing versatility.
- Designs often have aesthetic impact as well as practical use, appealing to both consumers and critics.
- *Ghost Chair* made from a single piece of moulded polycarbonate, showcasing modern materials and industrial techniques.

Mark Scheme (6 marks total):

- 1–2 marks: Basic statements with limited reference to a designer or their work.
- 3–4 marks: Some relevant features or techniques identified, with at least one specific product mentioned.
- 5–6 marks: Clear, well-developed answer including multiple design features/techniques and specific product examples, showing understanding of what made the designer successful.