



Rewarding Learning

**ADVANCED SUBSIDIARY (AS)
General Certificate of Education
2012**

History of Art

Assessment Unit AS 2

assessing

Module 2: Architecture, Craft and Design

[AD121]

THURSDAY 14 JUNE, MORNING

**MARK
SCHEME**

AS Generic Mark Scheme

Assessment Criteria	Level 1 0–12 marks	Level 2 13–24 marks	Level 3 25–36 marks	Level 4 37–48 marks	Level 5 49–60 marks
Knowledge Source, select, recall material to demonstrate knowledge effectively (AO1).	Insufficient knowledge. Recall lacking scope, depth, relevance and/or accuracy.	Limited knowledge. Recall problematic in scope, depth, relevance and/or accuracy.	Satisfactory knowledge. Recall mostly satisfactory in scope, depth, relevance and accuracy.	Good knowledge. Recall extensive, relevant and accurate, with minor lapses.	Excellent knowledge. Recall extensive, relevant and accurate.
Understanding Demonstrate understanding through analysis and make substantiated judgements and sustained discussion and/or arguments (AO2).	Insufficient understanding. Any relevant analysis, judgements, discussion and arguments unsubstantiated and/or unsustained.	Limited understanding. Any relevant analysis, judgements, discussion and arguments problematic.	Satisfactory understanding. Analysis, judgements, discussion and/or arguments mostly relevant and satisfactorily substantiated.	Good understanding. Analysis, judgements, discussion and/or arguments relevant, substantiated and sustained, with minor lapses.	Excellent understanding. Relevant and fully substantiated and sustained analysis, judgements, discussion and/or arguments.
Communication Present a clear and coherent response (AO3), addressing Quality of Written Communication requirements.	Insufficient communication. Unclear, incoherent and/or non-extensive, with inaccurate spelling, punctuation and/or grammar, and/or inappropriate vocabulary and/or form/style of writing.	Limited communication. Clarity, coherence, extensiveness, spelling, punctuation, grammar, vocabulary and/or form/style of writing problematic.	Satisfactory communication. Clarity, coherence, extensiveness, spelling, punctuation, grammar, vocabulary and form/style of writing mostly satisfactory.	Good communication. Clear coherent, and extensive, with accurate spelling, punctuation and grammar, and appropriate vocabulary and form/style of writing, with minor lapses.	Excellent communication. Clear, coherent and extensive, with accurate spelling, punctuation and grammar, and appropriate vocabulary and form/style of writing.
Marks available for each AC	1 2 3 4	5 6 7 8	9 10 11 12	13 14 15 16	17 18 19 20

Throughout this mark scheme:

- *insufficient* – clear that minimum required standard for an AS pass has not been achieved
- *limited* and *problematic* – unclear that minimum required standard for an AS pass has been achieved.

AS 2 Mark Scheme

Candidates' demonstrated knowledge and understanding of the indicative content will be assessed against the assessment criteria and performance descriptors within the AS Generic Mark Scheme above.

For each question, candidates must demonstrate some knowledge and understanding of the relevant 'immediate context' – within their historical contexts, closely associated artistic styles, themes, centres, movements and/or practitioners, as identified within the particular subject content section. 'Immediate contexts' shown below reproduce in full content descriptions directly relating to the questions, with the less relevant contextual content shown in summary form. The major part of each answer should not be contextual but, rather, drawn from the subject content to directly address the question.

Principal practitioners and works relevant to the examination question should be dated on first mention. Basic biographies should be provided for these principal practitioners. (To assist examiners, information within the Mark Scheme may occasionally be extensive – more than expected from any single candidate's answer.)

For archiving purposes each question is given a six-digit reference, the first three digits identifying the year (09, 10...) and examination series (1, January; 2, May–June), and the second three the unit (1–4) and section number (01–10).

AS 2 Section 1 – Greek architecture

122.201: Give a broad critical appraisal of either religious or civic Greek architecture, establishing contexts and referring to appropriate practitioners (where known) and works.

Indicative content

Answer should include the following:

KNOWLEDGE

- Immediate context:
 - either
 - **Religious** Development of temple; its religious and social functions; major examples in European Greece, Sicily, Southern Italy, Greek Asia Minor. Ictinus (Iktinus), Mnesicles, Callicrates (Kallikrates).
 - or
 - **Civic** Town-planning; theatre design; major examples.
 - and in summary
 - Classical orders, Materials and methods, Religious and/or Civic, as not already covered.
- Identification of practitioners and works, and descriptions of works:
 - either Religious, e.g.:
 - Parthenon, 448–432 BC.
 - Architects Ictinus (Iktinus) and Callicrates (Kallikrates). Commissioned by Pericles. Architecture and sculpture overseen by Phidias.
 - Athens' main temple, dedicated to the city's patron goddess Athena, and also the city's treasury. On southern side of Acropolis and facing east. Pentelic marble used throughout. Doric peristyle of 8 × 17 columns (overall measurements 33.5 × 72.2 m/110 × 237 ft) with Ionic sculpted frieze high on outside of the cella walls. Portico at each end, two columns deep. The cella divided into two rooms, the smaller, to the west, the *parthenon* or treasury; the main room or naos, opening to the east, housed Phidias's chryselephantine (gold and ivory over wooden core) statue of Athena, some 12 m/40 ft tall. Other sculpture in the two pediments and ninety-two metopes.
 - Propylaea, 437–432 BC (unfinished due to Peloponnesian War).
 - Architect Mnesicles.
 - Generally: ancient Greek term for gateway structure to a sacred site.
 - In Athens. Monumental gateway to the Acropolis. Six-columned Doric porches or facades to west and east, and rooms or wings to north and south. The northern wing considerably larger than the southern one and some scholars believe it to have been used as a picture gallery (pinakothekē). The southern wing provides access to the Temple of Athena Nike. Two rows of three Ionic columns connect the Doric porches.
 - Erechtheum, 421–405 BC (replacement for older temple).
 - Architect Mnesicles (?).
 - Small complex Ionic temple dedicated to Erechtheus, Poseidon and Athena. On northern side of Acropolis. Irregular layout and levels, with three differently sized Ionic colonnades (site slopes from north to south and from east to west); Caryatid Porch (or rostrum; flat roof supported by six columns in the form of maidens) to the south, facing the Parthenon; finely decorated friezes and capitals.
 - Temple of Athena Nike (or Temple of Nike Apteros, the Wingless Victory), c. 427–424 BC.
 - Architect Callicrates (Kallikrates).
 - Very small tetrastyle (four column) Ionic temple, with colonnaded portico at front and rear (amphiprostyle), on prominence immediately to south of Propylaea. Originally housed wooden cult statue of Athena Nike. A parapet, with various carvings of Nike, was added around the temple c. 410 BC.

or Civic, e.g.:

- Town-planning:
 - Boundaries, streets, public spaces, and zones or districts (sacred, public and private); gridded street plans; agoras (open public meeting areas), stoas (long, rectangular, colonnaded municipal halls).
 - Examples: Athens and, in Greek Asia Minor (Turkey), Miletus and Priene.
- Theatre design.
 - Set into a suitable hillside; tiered stone seating, regularly divided by access aisles, radiating up and out from a circular, or almost circular, orchestra where the actors, chorus and dancers performed.
 - Examples: Priene, 5-4th C BC; Epidaurus, c. 350–300 BC; Theatre of Dionysus, Athens, c. 330 BC; Delphi, c. 160 BC.

UNDERSTANDING

- Analysis/interpretation/significance/appraisal:
 - either Religious, e.g.:
 - Parthenon, Erechtheum and the Temple of Athena Nike the principal temples of Athens and the city's patron goddess Athena; Classical masterpieces; enormous expense and care lavished on their construction; in some respects more like great sculptures than buildings.
 - Athenian Acropolis and its buildings highly visible focal point for entire city, reinforcing sense of religious and social cohesion. Western room within the Parthenon also the city-state treasury.
 - Greek religious worship patterns, and the climate, exerted little pressure to accommodate large numbers of worshippers within temples. The religious festival of the annual Panathenaic Procession – up to and through the Athenian Acropolis and its complex of buildings – an example of how the site was used and how Greeks observed their religion and simultaneously promoted social cohesion.
 - The architecture and sculpture of the Acropolis in Athens of unsurpassed influence within western visual culture.
 - or Civic, e.g.:
 - Greek town-planning and theatre designs basis for most later developments, in Roman Empire and beyond.
- Any other valid content to be identified at the standardising meeting and credited.

AS 2 Section 2 – Early Renaissance Italian architecture

122.202: Give a broad critical appraisal of Early Renaissance Italian architecture, establishing contexts and referring to appropriate architects and works.

Indicative content

Answers should include the following:

KNOWLEDGE

- Immediate context:
 - **Classical influence and rise of Humanism** Emergence from Gothic and Byzantine traditions; studying, questioning, challenging; individualism; architect's status rises; enlightened patronage
 - **Technical and aesthetic developments** Structural engineering innovations; interest in mathematics, geometry, proportion; discovery (or rediscovery?) of perspective and its impact
 - **Florence as centre** Isolated examples elsewhere; Filippo Brunelleschi, Leon Baptista (Battista) Alberti, Michelozzi Michelozzo (Michelozzo di Bartolommeo), Giovanni Pisano, Bernardo Rossellino.
- Identification of required practitioners and works, and descriptions of works, e.g.:
 - Filippo Brunelleschi (1377–1446). Florentine goldsmith, sculptor and architect. 1401, lost to Ghiberti competition for north Baptistery doors; thereafter, concentrates on architecture, spending time in Rome studying buildings of antiquity. About 1410–20, (re)discovers linear/scientific perspective. Innovative structural and mechanical engineer.
 - Pazzi Chapel, Santa Croce, Florence, c1433–70.
 - Arched portico with six Corinthian columns fronting domed chapel.
 - Leon Baptista (Battista) Alberti (1404–72). Quintessential “Renaissance man” highly accomplished in a range of the arts and humanities. Born into Florentine nobility but the family expelled from the city for political reasons in 1402; Alberti himself first recorded there in 1434.
 - Santa Maria Novella, Florence, c1456–70.
 - Most notable feature, volute screens uniting narrow upper storey with wide ground storey.
 - Michelozzi Michelozzo/Michelozzo di Bartolommeo (1396–1472). 1417–24, assistant to sculptor Lorenzo Ghiberti. 1425, worked with sculptor Donatello.
 - Palazzo Medici-Riccardi, Florence, begun 1444.
 - Three-storey urban palace, for the Medici, with string-courses and rustication graded from heavy to light, bottom to top.
 - Bernardo Rossellino (b. Settignano, near Florence, c. 1409; d. Florence 1464). Sculptor, architect and town planner; studied under Alberti.
 - Pienza (near Siena), c. 1459–62.
 - Pope Pius II's commission for conversion of his native village of Corsignano into an ideal, papal, town/city. Rossellino responsible for: central piazza, cathedral (Duomo), bishop's palace (Palazzo Vescovile), the Palazzo Piccolomini and the town hall (Palazzo Pubblico).

UNDERSTANDING

- Analyses/interpretation/significance/appraisal, e.g.:
 - Brunelleschi
 - Pazzi Chapel: exemplary Renaissance development of Classical forms and use of mathematical proportioning.
 - Alberti
 - Santa Maria Novella: innovative architectural solution of volute screens uniting narrow upper storey with wide ground storey.
 - Michelozzo
 - Palazzo Medici-Riccardi: influential three-storey urban palace, for the Medici, with Classical string-courses and rustication graded from heavy to light, bottom to top.
 - Rossellino:
 - Pienza: very early realised example of ideal Renaissance town/city; the Palazzo

Piccolomini much influenced by Alberti's Palazzo Rucellai, Florence, 1446–57, on which Rossellino also worked.

- Broad critical appraisal, e.g.:
 - Rise of Humanism.
 - Study of Classical, Gothic and Byzantine legacies and intelligent informed development of aesthetic and structural principles.
 - Competitiveness, between individual architects and patrons and between city states.
 - Enlightened and wealthy patronage.
 - Extensive cross-fertilisation within the visual arts, encouraging experimentation and creativity.
- Any other valid content to be identified at the standardising meeting and credited.

AS 2 Section 3 – European architecture Renaissance to Rococo

122.203: Critically appraise two examples of British architecture – by different architects – from the Renaissance to Rococo period, establishing relevant contexts.

Indicative content

Answers should include the following:

KNOWLEDGE

- Immediate context:
 - **Britain** Reformation; Henry VIII breaks with Rome and establishes Church of England, 1529; period of iconoclasm; resistance to and isolation from Renaissance artistic influences; first colony established in Virginia, N. America, 1607, marking beginning of 300 years of overseas expansion; architectural expression mainly through great country houses; Robert Smythson, Inigo Jones, Christopher Wren, Nicholas Hawksmoor (Hawksmore), John Vanbrugh.
 - And in summary
 - France.
- Identification of required practitioners and works, and descriptions of works, e.g.:
 - Robert Smythson (c. 1534-6 –1614). Trained and worked as a stonemason before becoming leading British architect of his day (the profession of “architect” not yet recognised in Tudor–Elizabethan England). Influenced by Sebastiano Serlio’s (b. Bologna, Italy 1475; d. Fontainebleau, France 1554) *The Complete [or Entire] Works on Architecture and Perspective* (published in instalments 1537–75, in collected edition 1584, and in English edition 1611), as well as Gothic and Flemish architecture.
 - Hardwick Hall, Derbyshire, c. 1590–97.
 - Built for Elizabeth (Bess Hardwick), Countess of Derbyshire, who rose from noble but impoverished circumstances by outliving four husbands (the last of whom was Lord Shrewsbury, hence the carved initials “ES”, for “Elizabeth Shrewsbury”, displayed prominently on the house). Symmetrical plan shows influence of Italian classicism, including Palladio (1508–80). Hall centred and at right angles to main form of the house; no longer was the great hall used for dining, as a dedicated dining room was provided on the first floor. State apartments, a High Great Chamber and a Long Gallery on second floor, where the largest windows were also found. Large windows throughout.
 - and/or
 - Inigo Jones (1573–1652). Architect and designer who, probably more than any other, introduced Italian Renaissance classicism – principally through the architectural treatises of Palladio (1508–80) and Vincenzo Scamozzi (1548–1616) – to Britain. Toured the Continent, including Italy c. 1596–1605. Again visited Italy 1613–14, this time with Thomas Howard, 14th Earl of Arundel, the earliest major English collector and connoisseur of Italian Renaissance art. Jones appointed Surveyor-General of the King’s Works 1615.
 - Queen’s House, Greenwich, c. 1615–19 and 1630–35.
 - Initially commissioned for Queen Anne of Denmark; work halted on her death in 1619; recommenced for Queen Henrietta Maria (queen to Charles I) and completed in 1635; symmetrical plan, classical proportions, restrained ornament.
 - and/or
 - Christopher Wren (1632–1723). Son of the Dean of Windsor. Educated in sciences at Oxford. Appointed professor of astronomy at Gresham College, London c. 1656. Savilian professor of astronomy at Oxford 1661–73. Achieved distinction also in anatomy. Earliest architectural work c. 1662–63; commissions largely for church or crown. 1664–65, consulted on refurbishment of the Old St Paul’s Cathedral, following which he spent several months in Paris, studying major buildings by François Mansart (1598–1666), Louis Le Vau (1612–70) and others, and briefly meeting Gianlorenzo Bernini (1598–1680). Following Great Fire of London in 1666, appointed Surveyor General to the Crown 1669. Involved in designing 51–52 of the city’s churches, c. 1670–86. Saw himself as effectively having to invent a new tradition of church architecture,

AS 2 Section 4 – Architecture 1835–1918

122.204: Give a broad critical appraisal of architecture 1835–1918, establishing contexts and referring to appropriate movements, architects and works.

Indicative content

Answers should include the following:

KNOWLEDGE

- Immediate context:
 - **Arts and Crafts Movement** Structural and decorative integration; contribution to ideas of suburb and Garden City; Philip Webb, Charles F. Voysey, Edwin Lutyens.
 - **Art Nouveau** Painting and plant form influences; influence of Viollet-le-Duc's 'structural rationalism'; Antonio (Antoni) Gaudí, Victor Horta, Charles Rennie Mackintosh.
 - **Wiener Werkstätte and Deutscher Werkbund** Innovative practice in Austria and Germany; tension between 'arts and crafts' and industrial approaches; Adolf Loos, Josef Hoffmann, Peter Behrens.
 - **Independents** Joseph Paxton, Gustave Eiffel, Dankmar Adler and Louis Sullivan, Frank Lloyd Wright.
- Identification of required practitioners and works, and description of works, e.g.:
 - Philip Webb (1831–1915). Architect and designer; close associate of William Morris (1834–96) and one of the founding members of the Arts and Crafts Movement.
 - Red House, Bexley Heath, Kent, 1859–60. Marriage home for Morris and his bride Jane Burden; "L"-shaped plan; red brick construction, left bare; red tile pitched roof, roof-lines varying; doors and windows mostly within pointed arches but varied in shape and size.
 - Antonio Gaudí (1852–1926). Son of a coppersmith. Based in Barcelona, where almost all of his work is found. A unique style, within Art Nouveau, based on organic structures, exuberantly textured and coloured. Influenced by nature, religious belief, Catalan independence movement (political and artistic), Moorish design and the architectural theories of Eugène Emmanuel Viollet-le-Duc.
 - Sagrada Familia (variously referred to as a church, cathedral or temple), Barcelona, 1875–ongoing. In 1883–84 Gaudí replaced Francesco del Villar as architect, continuing to work on the church until his death. His predecessor's modest Neo-Gothic design, with flying buttresses, replaced by a highly complex one, of cathedral proportions, in which the arches, piers and columns are "equilibrated" (self-supporting – tilting, dispensing with the need for internal bracing or external buttressing). Catenary model based on Hooke's Law ("the arch stands as the loaded chain hangs", 1660–75; weighted loops of cord/wire suspended from ground-plan set out on a large board and then inverted, each loop corresponding with the size and loading of a particular arch).
 - Victor Horta (1861–1947). Belgian pioneer of Art Nouveau architecture and, in particular, use of iron as both a structural and decorative element within domestic architecture.
 - Hôtel Tassel, Brussels, 1892–93. Four-storey town house of stone, iron and glass. Cast-iron used both structurally and decoratively. Façade of centred doorway surmounted by bowed windows on first and second floors, and a bowed balcony on third floor; an exposed cast-iron beam at eaves level; stonework relatively restrained. Large octagonal hall and stairwell; the iron staircase and columns given vegetal forms and these carried through into the floor mosaics and wall decorations.
 - Peter Behrens (b. Hamburg 1868, d. Berlin 1940). Highly influential architect, and industrial, corporate identity and furniture designer. 1886–9, studied painting in Karlsruhe. 1890s, worked in Jugendstil (German Art Nouveau) style as painter and designer in Munich. 1893, cofounded Sezession movement of artists, architects and designers. 1899, influenced by J. M. Olbrich to take up architecture. 1903–7, Director of Düsseldorf School of Applied Arts, directing studies away from craft-based approach and towards industrial design and work-based practice. 1907, founding member of Deutscher Werkbund, its aim to modernize German design. 1907–14, design consultant with AEG, the electrical manufacturing company, designing buildings,

products, publicity material, workers' housing and furniture. 1908–11, gave architectural training to, among others, Gropius, Mies van der Rohe and Le Corbusier. 1922, taught at the Prussian Academy of Fine Arts and became head of Architecture Department there in 1936, remaining in the post, during Nazi rule, until his death in 1940.

- AEG Turbine Factory, Berlin, 1908–10. Massive masonry corner pylons, narrowing towards top, with extensive use elsewhere of iron/steel and glass; designed with use and manufacture of very large machinery in mind; well lit functional space.
- Joseph Paxton (1803–1865). Gardener and self-taught landscape architect and architect. 1826, appointed Head Gardener at Chatsworth, Derbyshire, by William Spencer, 6th Duke of Devonshire. In this post for 30 years, overseeing the estate, its gardens and exotic plants, and designing buildings and landscape features. During this time also carried out work for numerous private and public authority clients. Built the 'Great Stove' conservatory at Chatsworth, 1836–40 (destroyed 1920), the largest glass-house in Europe at the time, using a ridge-and-furrow glazing system (invented by John Loudon in 1817) supported by arched laminated-timber frames. 1850, patented an improved ridge-and-furrow glazing system. 1849–50, designed and constructed a special conservatory for a specimen of the enormous Victoria Regia (now Victoria Amazonica) lily, achieving the plant's first flowering in Britain. An illustration of Paxton's daughter Annie standing on one of the lily's floating leaves appeared in *The Illustrated London News* in 1849.
 - Crystal Palace, Hyde Park, London, 1850–51. Large temporary structure (1,848 × 408 × 108 ft/563 × 124 × 33 m) prefabricated from cast iron, wrought iron, glass and timber to accommodate Great Exhibition of 1851. Disassembled and re-erected in enlarged form at Sydenham, South London, 1852, where it was destroyed by fire in 1936. Development of his conservatory ridge-and-furrow glazing system but the rib structure of the Victoria Amazonica lily was also apparently an inspiration.

UNDERSTANDING

- Analysis/interpretation/significance/appraisal, e.g.:
 - Webb.
 - Red House. Unlike symmetrical-façade (Neo)classical buildings, designed essentially from the inside out (form following function), hence its modernist significance. Exterior left as unadorned red brick (giving the house its name), a statement of aesthetic principles ('truth to materials') and (Morris's) socialist principles at a time when a gentleman's residence was expected to be finished in fine cut stone, or at least stucco, again referencing the classical. By Victorian standards, much of the interior – such as the staircase – similarly stark. Gothic references combined with vernacular – locally sourced materials (bricks, tiles, timber...) and building methods. Emphasis on traditional fine craftsmanship at odds with modernism.
 - Gaudí.
 - Sagrada Familia. Prime example of Gaudí's total commitment to his art; fully consistent and coherent throughout. In plan and elevation, eschewing the "Euclidean" geometrical forms (of circles, straight lines and flat surfaces) conventionally used by architects in favour of complex "Non-Euclidean" ones (catenary, hyperboloid, conoid, paraboloid) closer to the organic forms of nature. Arguably "rational" in that large volumes are enclosed with minimal material, but particularly costly, and demanding on the craft skills of his masons, as constructed of cut stone rather than, say, poured concrete. Distinctiveness of the architecture accords with Catalonian drive for independence. The imaginative and "irrational" aspects appealed to Surrealists. Following the decline of International Style Modernism in the 1950s and '60s, his work influenced the architecture of curved surfaces.
 - Horta.
 - Hôtel Tassel. Innovative use of iron as a structural element in domestic architecture; conspicuously expensive/indulgent; emulation of vegetal forms perhaps expressing a desire to reconnect with nature, and/or the irrational, in an age of rapidly expanding science, technology and urban development.

- Behrens.
 - AEG Turbine Factory. Masonry corner pylons point to past, with innovative use elsewhere of iron/steel and glass pointing to Modernist functionalism; new materials and methods.
- Paxton.
 - Crystal Palace. Widely regarded as the most innovative and influential building of the 19th century. Informed by detailed knowledge and understanding of natural forms. Adoption of materials and methods of industry and civil engineering – rather than those of craftsmen, builders and architects. Exploitation of industry and mass production; few elements reproduced in large numbers; prefabrication; unskilled or semi-skilled labour; just-in-time delivery; exploitation of new railway/transport system; rapid assembly and disassembly.
- Any other valid content identified at the standardising meeting to be credited.

AS 2 Section 5 – Architecture 1900–1945

122.205: Give a broad critical appraisal of architecture 1900–1945, establishing contexts and referring to appropriate movements, architects and works.

Indicative content

Answers should include the following:

KNOWLEDGE

- Immediate context
 - **French Avant Garde** Development of reinforced concrete; classical rationalism; the Industrial City; Tony Garnier, Auguste Perret, Le Corbusier.
 - **De Stijl and Bauhaus** De Stijl: Neo-Plasticism; influences of Cubism and the machine-made; Gerrit Rietveld, Jacobus Johannes Pieter Oud. Bauhaus: functionalism; concrete, steel and glass classicism; Walter Gropius, Ludwig Mies van der Rohe.
 - **North American** Innovative practice; informed by and reacting to European modernism; Frank Lloyd Wright, Richard Buckminster Fuller.
 - **Independents** Wells Coates, Alvar Aalto, Berthold Lubetkin.
- Identification of required practitioners and works, and descriptions of works, e.g.:
 - Le Corbusier (b. Charles-Édouard Jeanneret, Switzerland, 1887; d. France, 1965).
 - Villa Savoye, Poissy, 1927–31. Weekend retreat. Severely geometrical flat-roofed concrete dwelling raised off ground on thin columns; horizontal windows; painted white; no applied decoration.
 - Walter Gropius (1883–1969).
 - Bauhaus Building, Dessau, 1925–26. Building complex comprising workshop wing, accommodation and studio block, teaching wing for Dessau Technical College, a ‘flyover’ administrative section, and a block containing an auditorium, theatre and canteen. Constructed of reinforced concrete, steel and glass; no applied decoration.
 - Frank Lloyd Wright (1867–1959).
 - Falling Water, Kaufmann House, Bear Run, Pennsylvania, 1935–39. Weekend retreat for wealthy businessman and his family. Sited in a birch forest, directly over a small waterfall, and built of rough-cut local stone and timber plus reinforced concrete with banded windows. Smoothly finished reinforced concrete platforms are cantilevered out from the walls and chimney of rough-cut local stone, and tied in also to the natural rock.
 - Alvar Aalto (1898–1976).
 - Villa Mairea, Noormarkku, Finland, 1937–38. Commissioned as rural retreat and guesthouse for Maire (or Mairea) and Harry Gullichsen. L-shaped two-storey dwelling of brick, concrete, timber, steel and glass enclosing courtyard with curved swimming pool; large open-plan living area; wooded setting.

UNDERSTANDING

- Analysis/interpretation/significance/appraisal, e.g.:
 - Le Corbusier.
 - Villa Savoye. Defining example of Le Corbusier’s ‘5 points of a new architecture’ (pilotis, free plan, free façade, strip windows and roof terrace/garden); functionalist; idealist and influential but some practical shortcomings; questionable as to ‘homeliness’ of design approach.
 - Gropius.
 - Bauhaus Building. Defining example of modernist non-domestic architecture. Reinforced concrete frame with supporting columns set back from the non-structural ‘curtain walls’ of metal-framed windows. Building system allowing rapid and economical construction of large, well lit, open-plan spaces. Non-symmetrical; functionalist.
 - Wright.
 - Falling Water. Structurally and aesthetically innovative. As typical of his house designs, open-plan for most part and centred on large fireplace. The main living area takes the living rock as its floor, and a small stairway connects directly to the waterfall below. The

cantilevered platforms, horizontal banded windows, and flat roofs echo the modernism of Gropius, Mies van der Rohe and Le Corbusier but the use of local materials and the formal coherence achieved between man-made and natural forms (the cantilevered platforms, for instance, echoing the rock formations) are significantly different. The cantilevered platforms echo his 'Prairie House' use of large overhanging eaves and the flow of space between interior and exterior.

- Aalto.
 - Villa Mairea. Encouraged by his wealthy clients to 'experiment'. Example of Aalto's 'organic modernism'; rich combination of Finnish vernacular and modernist forms. Courtyard and turfed roofs adaptations of traditional Finnish farmyard and buildings. Much use of natural forms and materials – such as rattan-wrapped poles within the entrance hall – and varied textures.
- Any other valid content to be identified at the standardising meeting and credited.

AS 2 Section 6 – Three-dimensional craft and design 1850–1918

122.206: Which movement* do you consider made the single greatest contribution to three-dimensional craft and design 1850–1918? Establish contexts, refer to appropriate movements, practitioners and works, and give reasons in support of your choice.

*For the purpose of this question, Shaker, Early industrial design, Arts and Crafts Movement and Art Nouveau will all be considered ‘movements’.

Indicative content

Answers should include the following:

KNOWLEDGE

- Immediate context:
 - **Shaker** Anonymous, elegantly functional, well crafted interiors, furniture, boxes and other household artefacts; reflecting religious commitment and values.
 - **Early industrial design** Great Exhibition of 1851 highlights poor state of British product design; widespread debate, design reforms; from craft- into batch- and mass-production; Michael Thonet, Christopher Dresser, Josef Hoffmann.
 - **Arts and Crafts Movement** Led by textile designer William Morris; reaction to industrialism; craft as art; unresolved agonizing on ethics of craft production seeking mass market; sporadically functionalist, traditional materials and techniques; Philip Webb, Charles F. A. Voysey.
 - **Art Nouveau** Fluid lines predominantly; new interior schemes; conspicuous craftsmanship, luxury; application of a decorative motif; Louis Comfort Tiffany, René Lalique, Hector Guimard, Charles Rennie Mackintosh.
- Identification of required movement, practitioners and works, and descriptions of works, e.g.:
 - Shaker (officially the United Society of Believers in Christ’s Second Appearing). A Protestant celibate sect originating in Manchester in 1747 (or in London in 1706, according to Shaker oral tradition), relocating to N. America under the leadership of Ann Lee (“Mother Ann”) in 1774 where it expanded to a high of about 18 communities and 6,000 members between 1830 and 1850, but falling to only 8 members in 2000 – rule of celibacy meant there were no second-generation Shakers. Communal living and property, with the sexes segregated; the communities self-sufficient, hard working, orderly, believing in “plain and simple” living; building, making and other forms of work viewed as forms of worship, to be done to the very highest standards and without ostentation of any kind.
 - Shaker factory, New Lebanon, New York State. New Lebanon the only Shaker community to mass-produce chairs; tens of thousands sold, sales continuing until 1942.
 - Rocking chair. Light-weight three-slatted ladder-back rocking chair in turned and stained maple. Back posts gently tapered and topped by simple rounded finials; front posts, with gentle ogee taper between seat and arms, extended through arms and ending in flat pommels; double turned stretchers to front and sides, single stretcher to back; plain wooden rockers; simple woven seat.
 - Ladder-back chair, c. 1880. As above but without arms and rockers, and with ball-and-socket tilter buttons on back legs (tilter buttons a Shaker invention enabling feet to remain flat and firm to floor, minimising damage when chair is tilted backwards); this design awarded a medal at 1876 Philadelphia Centennial Exhibition for combining “strength, sprightliness and modest beauty”; both chair and tilter button granted patents.
 - or
 - Early industrial design.
 - Michael Thonet (b. Boppard, Germany, 1796; d. Vienna, Austria, 1871). With his sons Franz, Michael, August and Joseph, founded the furniture making firm of Gebrüder Thonet in Vienna, 1845.
 - Bentwood Chair No. 14, c. 1859. Light-weight mass-produced laminated wood chair; steam treatment also used to bend solid wood.

- Christopher Dresser (b. Glasgow, 1834; d. 1904). Lecturer in botany, writer and designer of wallpaper, textiles, ceramics, glass, furniture and metalware.
 - Model No. 2045 Crow’s Foot Claret Jug, 1878; designed for and manufactured by Hulkin & Heath; electro-plate and glass; amphora-shaped glass jug supported on three feet; angular handle connecting feet and lid assemblies.

or

- Arts and Crafts Movement.
 - Philip Webb (1831–1915). Architect, designer and founding member of Arts and Crafts Movement.
 - Morris Chair, 1866. Reclining upholstered armchair; arms backwardly extended and drilled with series of holes in which inserted pins/pegs set desired reclining angle.
 - Charles F. A. Voysey (1857–1941).
 - *Tempus Fugit* aluminium and copper clock, c1895. Quite plain, simple lines.

or

- Art Nouveau.
 - René Lalique (1860–1945).
 - *Oiseau de Feu* lamp, c. 1925. Softly cylindrical base of frosted fluted glass; extravagant “stopper” in form of two peacocks.

UNDERSTANDING

- Analysis/interpretation/significance/appraisal, e.g.:
 - Shaker.
 - Shaker factory, New Lebanon.
 - Chairs. Finely crafted, although also mass-produced; practical, elegant, unostentatious, durable; designed to be hung on lintel-high peg-boards when not in use, leaving floor space free for cleaning or other activities; product of a religious belief system but anticipates many of the functionalist design principles of Modernism.

or

- Early industrial design.
 - Gebrüder Thonet.
 - Bentwood Chair No. 14. Functional, reasonably comfortable and affordable; curved lines arguably anticipate Art Nouveau.

or

- Arts and Crafts Movement.
 - Webb.
 - Morris Chair. Essentially simple and practical design, although some fussiness of treatment in the turned rails and other decorative touches (strength also slightly compromised by the turnings).
 - Voysey.
 - *Tempus Fugit* clock. Architectonic forms reminiscent of Voysey’s Arts and Crafts architecture.

or

- Art Nouveau.
 - Lalique.
 - *Oiseau de Feu* lamp. Combination of curvilinear and rectilinear forms indicative of being on cusp between Art Nouveau and Art Deco.
- General, e.g.:
 - General craft–design relationship; conflict, often unresolved, between aesthetic, social and/or economic principles; tension between art and industry; catering for elite or mass markets.
- Any other valid content identified at the standardising meeting to be credited.

AS 2 Section 7 – Three-dimensional craft and design 1918–1945

122.207: Three-dimensional craft and design 1918–1945 saw a great variety of design approaches. Compare and contrast the approaches of two craft and/or design practitioners illustrating this diversity, establishing contexts and referring to appropriate works.

Indicative content

Answers should include the following:

KNOWLEDGE

- Immediate context
 - **Art Deco** Cubist, African, Egyptian, South American, Japanese influences; formal simplicity infused with glamour and opulence; Jean Dunand, Eileen Gray, Jacques-Émile Ruhlmann, Maurice Marinot, René Buthaud, Clarice Cliff, René Lalique.
- and/or
 - **Modernist** De Stijl: Neo-Plasticism; Theosophical, Cubist, machine influences; Bakelite developed 1907–09; Gerrit Rietveld. Bauhaus: formal experiment, functionalism; craft with a view to mass-production; Ludwig Mies van der Rohe, Marcel Breuer, Marianne Brandt, Wilhelm Wagenfeld. Independents: Le Corbusier, Alvar Aalto.
- and in summary
 - Art Deco or Modernist, as not already covered.
- Identification of required practitioners and works, and descriptions of works, e.g.:
 - Eileen Gray (b. Enniscorthy, Co. Wexford, Ireland, 1878; d. Paris, 1976). Irish-born, Paris-based, Art Deco designer. Employed Japanese cabinetmaker and lacquerwork expert Seizo Sugawara (or Sougawara) to teach her about lacquerwork.
 - *Pirogue [Canoe] sofa*, c. 1919–20. Wooden day-bed/sofa similar in basic form to a dugout canoe; raised tapering ends; 10 or so small feet; dark lacquered finish on outside and lacquered silver-leaf within; cushioned within.
 - Marcel Breuer (b. Pécs, Hungary, 1902; d. New York, 1981). Modernist architect and designer. Bauhaus student 1920–23. Head of Bauhaus carpentry/furniture workshop c. 1925–28. One of the first to use tubular steel for furniture, influenced in this by his purchase of a racing bicycle c. 1925 and/or awareness of Dutch designer Mart Stam's (1899–1986) tubular steel cantilevered chair prototype of 1926.
 - *Model No. B3, Wassily Chair*, c. 1925–27, for Standard-Möbel, Berlin (a manufacturing firm established by Breuer and the Hungarian architect Kalman Lengyel), and Thonet. Chrome-plated tubular steel armchair with stretched leather or canvas seat, back and arms. Chair frame appears almost a continuous length of tubular steel, for part of its length forming a “runner” either side. Named after Wassily Kandinsky (1866–1944), the abstract painter and Bauhaus master, who encouraged Breuer's experiments in new materials.

UNDERSTANDING

- Analysis/interpretation/significance/appraisal/comparison and contrast/discussion, e.g.:
 - Gray.
 - *Pirogue sofa*. Could be argued that Gray's day-bed/sofa is essentially French in concept, African in form, Japanese in technique, modernist in constraint of applied decoration, and ergonomic in its physical harmony with the recumbent human form.
 - Japanese and African artefacts particularly strong influences on European fine art late 19thC (Impressionism, Post-Impressionism, Symbolism) and early 20thC (Fauvism, Cubism, Expressionism...). Any such associations made to be credited.
 - Breuer.
 - *Model No. B3*. Chrome-plated tubular steel light, strong, adaptable, hygienic and reasonably workable and affordable. Minimal visual clutter and consistent with developments in Modernist architecture. Functional, modern, innovative, visually interesting/exciting; suitable for mass-production. Can also be criticised as coldly clinical and lacking in comfort.

- General craft–design relationship; conflict, often unresolved, between aesthetic, social and/or economical principles; tension between art and industry; catering for elite or mass markets.
- Any other valid content to be identified at the standardising meeting and credited.

AS 2 Section 8 – Textiles and fashion design 1850–1945

122.208: Textiles and fashion design 1850–1945 saw a great variety of design approaches. Discuss the approaches of three textiles and/or fashion designers illustrating this diversity, establishing contexts and referring to appropriate works.

Indicative content

Answers should include the following:

KNOWLEDGE

- Immediate context
 - **Arts and Crafts Movement** Favoured sources, plant, bird, animal and other organic forms; Gothic and Japanese influences: William Morris, Liberty.
 - and/or
 - **Bauhaus** Ethos of abstraction, formal experiment, functional design; craft with a view to mass-production; Adelgunde (Gunta) Stölzl, Anni Albers, Léna Meyer Bergner (Helene Bergner).
 - and/or
 - **Art Deco** Formal simplicity infused with glamour and opulence; Sonia Delaunay, Marion Dorn.
 - and/or
 - **Fashion** Earliest practical sewing machines invented 1840s–50s; economic, practical, gender, personal, lifestyle, social, cultural factors; emergence of haute couture; Charles Worth, Paul Poiret, Coco Chanel, Cristobal Balenciaga.
 - and in summary
 - Arts and Crafts Movement, Bauhaus, Art Deco and/or Fashion, as not already covered.
- Identification of required practitioners and works, and descriptions of works, e.g.:
 - William Morris (b. Walthamstow, Essex, 1834; d. Hammersmith, London, 1896). Craftsman, designer, poet, Socialist campaigner and leading member of the Arts and Crafts Movement. Principal influences, nature, medievalism, Pre-Raphaelitism and the writings of John Ruskin. No formal art or design training, apart from, in 1856, training briefly as an architect under George Edmund Street, whose senior assistant at the time was Philip Webb (1831–1915), subsequently a longstanding friend and colleague.
 - *Jasmine* wallpaper, 1872. One of over fifty wallpaper designs by Morris; a repeat pattern well disguised by the complex layering and intertwining of the plant forms.
 - Adelgunde (Gunta) Stölzl (b. Munich 1897, d. Küsnacht, Switzerland 1983). Textile artist and designer who studied and taught at the Bauhaus (its only female master) and who played a leading role in moving textiles design from craft-based pictorialism to abstraction-based art and industrial-production design. 1913–17, studied at the Kunstgewerbeschule (School of Applied Arts), Munich. 1917–18, served as a Red Cross nurse in WWI. 1919–23, studied at the Bauhaus. 1924, studied dyeing and textile production at a school in Krefeld and helped Johannes Itten establish the Ontos weaving workshops, in Herrliberg, near Zürich. 1925, returned to the Bauhaus as a member of the teaching staff and, in 1927, was appointed Junior Master in the weaving workshop. 1929, married Israeli architecture student Arie Sharon and thereby lost German citizenship. 1931, political pressure by the Nazis forced her resignation (the school itself closing 1932). Emigrated to Switzerland and, with her former students Gertrud Preiswerk and Heinrich Otto Hürlimann, established S-P-H Stoffe (S-P-H Fabrics), a textile studio and weaving workshop. 1933–37, business partnerships dissolved due to financial difficulties. 1937, established her own hand weaving studio, Handweberei Flora (Hand Weaving Studio Flora).
 - *Schlitzgobelin Red-Green Rug*, 1926–27; hand-loom tapestry in cotton, wool, silk and linen. Richly coloured and patterned; predominantly reds and greens, with grids and checkerboard patterns set against wave forms top and bottom.
 - Gabrielle ‘Coco’ Chanel (b. Saumur, France, 1883; d. Paris 1971). Fashion designer renowned for the comfort, practicality and simple elegance of her designs, and credited more than any other with freeing women from the constraining and generally ostentatious clothing of

the previous era. Precise details of her early life unclear but seems to have been raised in a convent orphanage at Aubazine, where she learned to sew. 1902–04, café-concert singer under name 'Coco'. 1910, with the financial backing of Arthur 'Boy' Capel, she began making and selling hats from her own shop in Paris. 1913, opened a boutique in Deauville and, in 1915, another in Biarritz, selling her own designs of hats, blouses and chemises – designed to be worn without corsets. 1916, began using jersey (a cheap material previously found mostly in underwear) for her garments; borrowing elements from menswear (sweaters, blazers, trousers...). By 1920s, she had established a couture house, textile factory and range of perfumes, including Chanel No. 5. 1939–53, her business closed on outbreak of WWII and, following an affair with a Nazi officer, she went into exile in Switzerland. 1954, business reopened.

- An example of her 'little black dress', c. 1927. Pleated wool jersey dress; finely tailored

UNDERSTANDING

- Analysis/interpretation/significance/appraisal, e.g.:
 - Morris.
 - *Jasmine*. Good example of Morris's mature style. Intimate knowledge of nature combined with informed and talented sense of pattern making. One of his less assertive designs. Typically, an evocation of the plant rather than a detailed rendering.
 - Stözl.
 - *Schlitzgobelin Red-Green Rug*. Example of her freely experimental hand-woven textile art. Tapestry a medium lending itself well to grids and abstract forms. Fully consistent with Bauhaus approach. Strong similarities with paintings of Bauhaus master Paul Klee. Richly complex and dynamic abstract patterns.
 - Chanel.
 - 'Little black dress'. Modest form, colour, materials and decorative treatment, finely and expensively crafted. Innovative use of black as a fashion colour. Simple clean lines and inconspicuous detailing often described as 'classically elegant'. 'Boyish' lines reflecting new independence and freedom of lifestyle for western women post-WWI, for which Chanel herself was a leading role model. Certain democratisation of style, connecting with servants' uniforms, and capable of being cheaply emulated.
- Any other valid content to be identified at the standardising meeting and credited.

AS 2 Section 9 – Graphic design 1850–1945

122.209: The pursuit of pleasure and the pursuit of victory were major motivations behind graphic design 1850–1945. Discuss, establishing contexts and referring to appropriate movements, designers and works.

Indicative content

Answers should include the following:

KNOWLEDGE

- Immediate context
 - **Post-Impressionism and Art Nouveau** Contemporary art influences; street as gallery; Jules Chéret, Henri de Toulouse-Lautrec, Alphonse Mucha, Aubrey Beardsley.
 and/or
 - **Wars and revolution** World Wars, 1914–18, 1939–45: James Montgomery Flagg, Alfred Leete, John Heartfield (Helmut Herzfeld), Jean Carlu, Abram Games. Russian Revolution, 1917: El Lissitzky, Alexander Rodchenko.
 and/or
 - **Modernism** Bauhaus: ethos of formal experiment, abstraction, functional design; László Moholy-Nagy, Herbert Bayer, Max Bill. Art Deco: formal simplicity infused with glamour and opulence; Edward McKnight Kauffer, Adolphe Mouron Cassandre. Independent: Jan Tschichold.
 and in summary
 - Post-Impressionism and Art Nouveau, Wars and revolution and/or Modernism, as not already covered.
- Identification of required practitioners and works, and descriptions of works, e.g.:
 - Aubrey Beardsley (1872–98). Short-lived but unique and influential English Art Nouveau illustrator specialising in black-and-white images with a very distinctive air of decadence and – in the view of many – perversion.
 - “The Climax”, illustration, first published 1893, to Oscar Wilde’s play *Salomé*, written in French and first published in English in 1894 (version incorporating text as illustrated in Alan and Isabella Livingston, *The Thames and Hudson Dictionary of Graphic Design and Designers*, 1998, ISBN 0-500-20259-1, p. 24). Black-and-white illustration of Salomé holding head of John the Baptist, top right, the reward she requested from King Herod for pleasing him with her dancing (based on Biblical story). Large black areas contrasting with large white areas and also with areas of fine detail. Predominantly organic, curvilinear forms; very shallow pictorial space. Globules of blood appear to drop from the severed head and an exotic flower grows out of the pooled blood. Just below left centre are the words “J’AI BAISÉ TA BOUCHE/IOKANAAN/J’AI BAISÉ TA BOUCHE” (translating from the French as “I have kissed your mouth/Iokanaan/I have kissed your mouth”).
 - El Lissitzky (b. near Smolensk, Russia, 1890; d. Moscow, 1941). Leading Suprematist graphic designer, painter, photographer, architect, teacher and theorist. Studied under Suprematist painter and designer Kazimir Malevich (1878–1935). 1921, appointed Russian cultural ambassador to Weimar Germany, strongly influencing De Stijl and Bauhaus graphic design.
 - *Beat the Whites with the Red Wedge*, 1920; poster. Historical context: following the Russian revolutions of February/March and October/November 1917, civil war 1918–20 between the (Communist) Bolsheviks (Reds) and (anti-Communist) anti-Bolsheviks (Whites). El Lissitzky’s poster an arrangement of upper-case Cyrillic type and various geometrical shapes in red, black and white, the most prominent being a large, sharply angled, red triangle pointing left-to-right and penetrating a white circular shape on the right.
 - Abram Games (b. Abraham Gamse, London, 1914; d. London 1996; name changed 1926). A leading English graphic and product designer renowned especially for his drawn and airbrushed WWII and Festival of Britain poster designs, also his Cona Coffee machine, 1959. Son of a Latvian artist-photographer and Russo-Polish seamstress. Largely self taught, having studied for two terms only at St Martin’s School of Art, London. 1932–36, worked as a “studio boy” for

- airbrushing technique (soldier's head is photograph-like).
- Tschichold.
 - *Die Hose*. An early example of Tschichold's Modernist typography; radically different from classical centred typography. Asymmetry and effective use of white space something shared with Japanese painting and graphic design. Purity of form, use of severe geometry, functionalism, rejection of the past and a declared dislike of "selfish individualism" all accord with principles widely held within Constructivism, de Stijl and Bauhaus. Use of photographic image emphasises openness to new technologies, as does the fact that it is a film poster; connects also with popular culture and mass entertainment.
- General.
 - Pleasure, e.g.:
 - aesthetic
 - popular culture/entertainment
 - sexual
 - Victory, e.g.:
 - military
 - 'battle of styles'
- Any other valid content to be identified at the standardising meeting and credited.

AS 2 Section 10 – Automotive design to 1945

122.210: Automotive design to 1945 saw very different design approaches. Compare and contrast the approaches of two designers/manufacturers illustrating this diversity, establishing contexts and referring to appropriate examples.

Indicative content

Answers should include the following:

KNOWLEDGE

- Immediate context:
 - **Family car** From batch- to mass-production; social, economic, environmental and other kinds of impact; Henry Ford/Ford, Henry Royce/Rolls-Royce, Citroën, Chrysler, Mercedes-Benz, Ferdinand Porsche (Senior), Battista Pininfarina
 - and/or
 - **Other Sports/racing cars:** Enzo Ferrari, William Lyons/Jaguar, Ettore Bugatti/Bugatti, Aston Martin; Various, Harry Ferguson, Raymond Loewy, Henry Dreyfuss.
 - and in summary
 - Family car or Other, as not already covered.
- Identification of required practitioners and works, and description of works, e.g.:
 - Henry Ford (b. Michigan, USA, 1863; d. Dearborn, Michigan, 1947). Engineer, designer, industrialist and pioneer of assembly-line mass production (standardised parts, division of labour, and assembly-line system carrying the product to the worker), greatly increasing output and savings on production costs. By 1896 he had designed and built his first car, the four-horsepower *Quadricycle*. Various family car and racing car prototypes followed, 1896–1903, relationships with financiers ending acrimoniously when he insisted on design development and they on immediate production. 1903, the Ford Motor Company incorporated, almost immediately profitable but also almost immediately engaged in legal challenge to a patent claiming rights on all petrol-powered cars, losing the case in 1909 but winning it on appeal in 1911. Also in dispute 1909–19 with his own shareholders who wanted to take profits out of the Company rather than reinvest them into design and production improvements. By 1919 all shares in the Company were held by Ford and other family members. By 1927, when production had been relocated to a huge new plant at River Rouge, Michigan, the Company was largely self-sufficient in production, assembly and transportation, and operating in 33 countries, but about to suffer serious market loss due both to the Great Depression and tardiness in matching what rival car manufacturers were by then able to offer.
 - *Model T*. Five-seat, front-mounted four-cylinder, two-speed family car. Designed 1908 by team including Childe Harold Wills, Joseph A. Galamb and Eugene Farkas. Assembly-line mass production from 1913. Almost 17 million manufactured in USA, Canada and Britain by 1927, about half of the global car production to that time. Design simple, practical and economical. Various body styles on a standard chassis. Various body colours offered initially but restricted to black from 1913 (Ford: “in any colour you choose, so long as it’s black”). Unit price of about \$850–950 in 1908 falling to about \$290 by 1927, despite initially paying workers well above going rate.
 - Charles Stewart Rolls (1877–1910) and Henry Royce (1863–1933), founders of Rolls-Royce Ltd, 1906. Rolls mostly providing the finance and business expertise and Royce the engineering and designing.
 - *40/50 hp* or *Silver Ghost*, 1907–25 (after introduction of the Phantom I in 1925, all 40/50 hps were officially renamed *Silver Ghosts* after a particular 1907 example – finished in aluminium paint and with silver-plated fittings – ordered by the company’s Commercial Managing Director, Claude Johnson); six-cylinder (7,036 cc, in 1909/10 increased to 7,428 cc; 48–80 bhp), three-speed (four-speed from 1913) car with various body styles (such as the Barker Tourer, Hooper Landaulet, London-Edinburgh type, and Barker enclosed cabriolet). Substantial chassis had rigid front and rear axles with leaf springs all round. Electric starting and lights introduced from 1919. Special lubrication and bearings

used in the engine, transmission and elsewhere to minimize noise and vibration, and to increase reliability. Extensive, arduous public trials undertaken to increase awareness of the new car and demonstrate its reliability, quietness and refinement.

UNDERSTANDING

- Analysis/interpretation/significance/appraisal/comparison and contrast, e.g.:
 - Ford.
 - *Model T*. More than any other, made the car “the ordinary man’s utility rather than... the rich man’s luxury”, with stated intention that the car be “so low in price that no man making a good salary will be unable to own one”. Own workers also viewed as customers. Major role in general social change from an agricultural to an industrial society, and pioneering international conglomerates. Extensive repercussions affecting everything from urban planning to world economics. Ford assembly-line production methods revolutionised modern manufacturing in general. The utilitarian nature of the *Model T*’s design also its eventual downfall – others unable to match its price but able to surpass it in customer appeal (features, engineering developments, exclusiveness, styling, colour choice, etc).
 - Rolls-Royce.
 - *40/50 hp* or *Silver Ghost*. Promoted as having been designed and constructed to the highest standards almost irrespective of costs. Unashamedly addressing an elite, luxury, exclusive market.
- Any other valid content to be identified at the standardising meeting and credited.