

Advanced High School Architecture Knowledge Assessment

Architecture · Answer Key · 10 Questions

1. Which architectural movement, prominently featuring the use of steel frames, large glass expanses, and open floor plans, sought to integrate structure and aesthetic, exemplified by buildings like the Villa Savoye by Le Corbusier?

- A) Art Nouveau
- B) Bauhaus

C) International Style

- D) Brutalism

2. The concept of 'Deconstructivism' in architecture, which emerged in the late 20th century, is characterised by a deliberate rejection of harmony, continuity, and symmetry, often employing fragmentation and manipulation of surface. A seminal exhibition that popularised this style was held at which institution?

- A) The Metropolitan Museum of Art, New York
- B) The Tate Modern, London

C) The Museum of Modern Art (MoMA), New York

- D) The Centre Pompidou, Paris

3. In classical Greek architecture, the optical illusion of columns appearing to bend inwards at the top and bulge slightly in the middle was counteracted by a subtle entasis. What is this deliberate, convex curve applied to the shaft of a column called?

- A) Anathyrosis
- B) Crenellation
- C) Metope

D) Entasis

4. The development of reinforced concrete in the late 19th and early 20th centuries significantly influenced architectural design, allowing for greater spans and more fluid forms. Which architect is widely credited with pioneering the use of this material in innovative ways, notably in his textile block houses?

- A) Antoni Gaudí

B) Frank Lloyd Wright

- C) Walter Gropius
- D) Mies van der Rohe

5. Gothic cathedrals are renowned for their soaring heights and intricate stonework, made possible by the development of the pointed arch and the flying buttress. The structural innovation that allowed for large, thin walls and the incorporation of extensive stained glass windows in these structures was the system of:

- A) Barrel vaulting
- B) Rib vaults and buttressing**
- C) Drip courses
- D) Corbelling

6. The term 'vernacular architecture' refers to building styles that are indigenous to a particular region, utilising local materials and traditional construction methods. Which of the following is NOT a characteristic typically associated with vernacular architecture?

- A) Adaptation to local climate and topography
- B) Emphasis on readily available local materials
- C) Use of complex, imported building technologies**
- D) Reflects local cultural practices and needs

7. The Chicago School of architecture, emerging in the late 19th century, is credited with early development of skyscrapers and pioneered the use of steel-frame construction. Key to their design was the emphasis on:

- A) Ornate ornamentation and historical revival styles
- B) Large, open interior spaces and functional facades**
- C) Curving organic forms and natural materials
- D) Exposed structural elements and raw concrete

8. Postmodern architecture, which reacted against the perceived austerity of Modernism, often incorporates elements of historical styles and playful, ironic references. Which iconic building, designed by Philip Johnson, is a prominent example of Postmodernism, featuring a prominent 'Chippendale' style broken pediment?

- A) Guggenheim Museum Bilbao
- B) AT&T Building (now Sony Building), New York**
- C) Walt Disney Concert Hall
- D) Seagram Building

9. The structural principle that allows arches to distribute weight outwards and downwards to supporting piers or abutments, enabling the construction of large openings and domes, is known as:

- A) Cantilevering
- B) Trussing
- C) Thrust**
- D) Tensile strength

10. The Bauhaus school, founded in Germany in 1919, profoundly influenced modern design and architecture by advocating for the union of art, craft, and technology. A central tenet of the Bauhaus approach to design was:

- A) Emphasis on individual artistic expression and historical precedent
- B) The pursuit of beauty through ornamentation and asymmetry
- C) 'Form follows function' and mass production potential**
- D) A return to traditional craftsmanship and artisanal techniques