

GRAPHIC DESIGN and the INDUSTRIAL REVOLUTION

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Chapter 9 Study Questions

1. Name the era created first by the invention of the steam engine, and representative of capitalist and humanistic ideals, mass production, and merchandising.

- A. Art Nouveau
- B. 20th Century Design
- C. Arts and Crafts
- D. Industrial Revolution

2. Robert Thorne designed the first _____ in 1803. The contrast between the thick and thin strokes in this extremely bold roman type is much greater than in modern typefaces such as Didot or Bodoni.

- A. sans-serif type
- B. wood type
- C. fat-face type
- D. slab-serif type

3. From 1815-1840, Vincent Figgins designed a range of antique slab-serif types called _____, which were perhaps inspired by the era's fascination with all aspects of ancient Egyptian culture.

- A. sans-serifs
- B. wood type
- C. fat-faces
- D. Egyptians

4. _____ debuted in an 1816 specimen book created by William Caslon IV. It closely resembled an Egyptian face with the serifs removed.

- A. Sans-serif type
- B. Wood type
- C. Fat-face type
- D. Slab-serif type

5. As display types got bigger, printers found the larger metal types expensive, brittle and heavy. An American invention, router-carved _____ enabled mass production of large display faces at an economical cost.

- A. sans-serif type
- B. wood type
- C. fat-face type
- D. slab-serif type

6. The first _____ was invented in 1814, causing the speed of printing to skyrocket to 400 sheets per hour, compared to only 250 sheets per hour by handpress.

- A. light-sensitive camera obscura
- B. cast-iron letterpress
- C. steam-powered cylinder press
- D. mechanical composing machine

7. By the mid 19th century, presses could print 25,000 copies per hour —yet every letter of every word had to be set painstakingly by hand. In 1886, the _____ revolutionized typesetting, and publishing surged.

- A. Linotype
- B. photography
- C. computer
- D. typewriter

8. Based on the simple chemical principle that oil and water do not mix, an image is drawn on a flat stone surface with oil-based crayon, pen, or pencil. Water is spread over the stone to moisten all areas except the oil-based image. An oil-based ink is then rolled over the stone and a printing press is then used to transfer the inked image onto paper. The name literally means “stone printing”.

- A. photoengraving
- B. block printing
- C. typography
- D. lithography

9. By 1837, _____ was developed with a process where near-photographic images were drawn in crayon on separate lithographic stones to print individual colors in perfect registration.

- A. chromolithography
- B. block printing
- C. typography
- D. lithography

10. From 1860-1900, chromolithography gave designers freedom to invent any letterform, along with an unlimited palette of vibrant colors —unavailable with letterpress printing. Fancy labels and packages, and complex poster montages for traveling shows and theatrical performances became hallmarks of _____ graphics.

- A. Medieval
- B. Victorian era
- C. Renaissance
- D. 20th Century

11. Joseph Niépce was a printer searching for a new way to make printing plates other than by drawing on stones. In 1822, he invented _____ by exposing sunlight to engrave images onto light-sensitive metal plates.

- A. photoengraving
- B. block printing
- C. typography
- D. lithography

12. Joseph Niépce created the first _____ from nature in 1826 by exposing a chemically coated, light-sensitive plate inside a camera obscura pointed to a view from outside his window.

- A. pantograph
- B. lithograph
- C. engraving
- D. photograph

13. American political cartoonist Thomas Nast began his career as an illustrator and joined *Harper's Weekly* to produce battlefield sketches during the Civil War. He introduced symbolic images of _____.

- A. the Democratic donkey
- B. the Republican elephant
- C. Uncle Sam & Santa Claus
- D. all of a, b, & c

14. Mathew Brady photographed the bloodiest battles of the Civil War, which had a profound impact upon the public's romantic ideas about war. Photography gradually replaced illustration as the dominant medium for:

- A. ...experiments with images of fantasy and fiction
- B. ...symbolizing Victorian virtues such as patriotism
- C. ...creating political satire and propaganda
- D. ...reporting factual information and documenting history

15. Eadweard Muybridge was a photographer who lived in San Francisco. He helped settle a \$25,000 bet in 1877 by documenting a trotting horse with photos proving that the horse lifted all four feet off the ground simultaneously. The development of _____ was a logical extension of Muybridge's innovation.

- A. photography
- B. cartography
- C. mechanical engineering
- D. motion picture photography

16. By the 1880s, the first photographs and color illustrations were printed in newspapers and magazines. Images exposed to light through _____ produced minute dot patterns of continuous tones that could be etched onto metal plates for printing.

- A. cheesecloth
- B. pixels
- C. halftone screens
- D. criblé

17. Thanks to the photomechanical halftone process, the period from the 1890s until the 1940s became the _____. Children's books, magazines, and advertising were dominated by illustrations.

- A. age of antiquity
- B. golden age of American illustration
- C. end of the illustration era
- D. golden age of French typography

18. Victorian typography had a passion for elaborately ornate typefaces and trademarks. Which one of the following best describes this style of graphic design?

- A. Shadows and outlines were added to letters.
- B. Ornamental complexity.
- C. Fanciful distortions to an extreme degree.
- D. All of a, b, & c.