

GUIDED NOTES ANSWER GUIDE

PRINT TECHNOLOGY PART I: HISTORY AND TYPES

Directions: Complete these notes as you watch the MyCareerTech "Print Technology Part I: History and Types" video.

Introduction

1. Printing is the process for <u>reproducing</u> text and images, typically done with ink on paper using a printing press, but also includes <u>design</u>, finish, and the binding of the product.

History of Printing

- 2. Prior to the invention of the printing press, and before the use of an image carrier like printing plates, writings and drawings were done by hand.
- 3. A <u>scriptorium</u> is a special room within monasteries that were dedicated to the hand printing process.
- 4. In a scriptorium, the scribe would carefully reproduce the text from another book, then an illuminator would add designs to the pages, leading to the finished product.
- 5. <u>True</u> / False: Clay, wax, and parchment were all used as an attempt to transcribe manuscripts and books.
- 6. <u>Woodblock</u> printing was the process of hand carving out entire pages on blocks of wood, which were then inked so they could be copied.
- 7. The printing press, invented by Johannes Gutenberg, used movable metal type pieces that would press into ink, and then onto paper, which transferred the text or design.
- 8. Offset lithography is a printing technique in which the inked image on a printing plate is printed on a rubber cylinder and then transferred.
- 9. The Offset Printing Press, invented in England in 1875 by Robert Barclay, used a metal cylinder wrapped in <u>cardboard</u> that printed the image directly on a metal plate.
- 10. Chromolithography is a two-color lithography process that relied on multiple stones for prints.
- 11. In 1906, the Eagle Printing Ink Company introduced the four-color wet ink process, based around the CMYK color set.
- 12. <u>True</u> / False: Offset printing is still used today to mass produce newspapers, magazines, books, and other high quality printed materials.
- 13. <u>Digital</u> presses use advanced inkjet or laser jet technology to transfer ink to paper, producing prints from a digital image for smaller quality and cost-effective print runs.

Printmaking Processes

- 14. Relief printing is the process of printing from a <u>raised</u> surface where the non-image areas have been cut away, like wood blocking, woodcutting, and wood engraving.
- 15. <u>Intaglio</u> printing is the opposite of relief printing, consisting of ink filled recesses that produce an image where they are present instead of absent.

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- 16. Lithography, or planography, is the method of printing from a <u>limestone</u> or metal plate by using a method based on the chemical composition of oil and its ability to reject water.
- 17. <u>Serigraphy</u>, also known as silk screening, is a stencil-based printing process in which ink is forced through a fine screen onto the paper beneath.

Conclusion

18. <u>True</u> / False: According to the U.S. Bureau of Labor Statistics, 174,000 people are currently employed to set up and operate digital, letterpress, lithographic, flexographic, gravure, short-run offset printing presses, and other printing machines.

Reflection

- 19. How has the history of printing, from manual transcription to the invention of the printing press and modern digital presses, influenced the way information is reproduced and distributed?

 Student Free Response
- 20. What aspects of print technology are most intriguing to you, and how could you explore them further?

Student Free Response