

1. Dot gain is the increase of halftone dot sizes as ink absorbs into the paper in the offset printing process due to type of ink, type of paper and even temperature and humidity.
2. Creep is when the inner pages of a signature move away from the spine or stitch and must be trimmed in the binding process.
3. Setting up creep happens in prepress at the printshop and should never be asked of the designer.
4. It is possible to screen print cmyk, but printers prefer to use PMS colors.
5. Subtractive color mixing means that one begins with white and ends with black; as one adds color, the result gets darker and tends towards black. Additive color mixing is where you start with black and add equal amounts of RGB to create white.
6. A moiré pattern, also known as interference, is a pattern that shows up in the digital file after scanning in traditionally offset material.
7. A Portable Document Format, PDF, is one of the most common multi-platform file types used in the world today. They are becoming increasingly editable and solved most font conflicts.
8. Asymmetry is the absence of symmetry, lack of equality or equivalence between parts or aspects of something.
9. Pantone is a color matching system that uses formulation to control color accuracy globally.
10. Pantone color matching system has a larger gamut of color than can be reproduced by cmyk.
11. 300 dots per inch, in print, create a continuous tone whereas 72 dpi creates continuous tone digitally.
12. Ppi stands for pixels per inch, dpi stands for dots per inch, lpi stands for lines per inch.
13. Raster, or bitmap, uses pixels and is not scalable; vector uses algorithms and is scalable.
14. When a document has color, imagery or type that goes to the edge, the bleed allows a safe trim area for when the press sheet is folded and cut.
15. The print shop in accordance with their output device, determines the bleed. The designer should not set up a bleed randomly.
16. Margin, sometimes called a safety margin, exists to keep the elements of a composition in a safe printable area. Anything outside the safety margin should be pulled to the bleed.
17. When a composition crosses over to an adjacent page, a gutter is used to keep important information from getting lost.
18. Picas are the default unit of measurement in Adobe's InDesign, the primary page layout software used today. Most of the terminology used in design software come from a traditional practice, for example, picas traditionally was used to measure a line of type on the letterpress.
19. Even though most logos end up having a pantone color assigned to them, the first variation shown to a client should be in black and white. This rule is to protect the logo's importance on a black and white printer, fax machine or a copier, all of which are still in common usage.

20. Hierarchy is an arrangement or classification of things according to relative importance or inclusiveness. Hierarchy's origin comes from family structure.
21. Lorem ipsum is text generated to be a placeholder in layout software.
22. The initial idea evolves into a solid concept. This concept is the foundation on which the design process is built upon.
23. Even though the Chinese are known to have created movable type around 1040 AD, Johannes Gutenberg is known for inventing a metal movable type printing system in Europe.
24. Packaging an InDesign or Illustrator file not only gathers all linked files and typefaces, but it is a key communication component between the designer and the printer or developer.
25. Typography is the art of working with type.
26. Cyan, magenta, yellow & black, (cmyk) are used for print through a subtractive process. Red, green & blue, (rgb) are used for digital output through an additive process.
27. A loupe is a device to which graphic designers can look at print quality, look closer at letter combinations, look for proper registration and look at halftone patterns, called rosettes.
28. In the Adobe Creative Suite, Photoshop is designed to manipulate photos, Illustrator is designed to work with vector elements and InDesign is for use with multi-page documents.
29. Every typeface has a unique x height, which is literally the measurement in points of the height of lowercase x.
30. The rule of thirds is a grid, divided into thirds, that creates a balanced composition and is present in all forms of graphic design.
31. The grid gives structure to a composition that in turn allows the designer to properly organize the elements in a proper hierarchy.
32. Gestalt is the psychology of how we see and by understanding its principals, a graphic designer can communicate more clearly.
33. Ligatures are designed to replace problematic character combinations within a typeface. The most common ligatures are fi fl ffi ffl.
34. A monochromatic color scheme is one color or hue and the tints, shades and tones.
35. Offset printing is a process where ink is applied in the order of cmyk through halftone screens.
36. Leading originally is a letterpress term where strips of lead are place in between lines of movable type to improve readability. Its contemporary understanding is the same principal, done digitally within design software.
37. There are many color relationships on the color wheel such as: primary, secondary, tertiary, complementary, analogous tetrad, triad etc.
38. The purpose of a thumbnail sketch is to communicate initial ideas and concept development.
39. Rich black is 100% pure black ink with a percentage of each of the other three, cmy, not to exceed 200% total density. Process black is 100% black with 0% cmy.

40. Opaque is when no light transfers, translucent is when some light transfers and transparent is when all light transfers.
41. The most common paper sizes used in the U.S. are U.S. letter (8½" x 11"), US Legal (8½" x 14"), Tabloid (11" x 17") and Tabloid Extra (12" x 18").
42. Trapping is setting adjacent colors to overprint by a small margin. This process helps with misregistration.
43. There are 12 points in a pica and 6 picas in an inch.
44. Vertical is the same as "portrait" and horizontal is the same as "landscape" in reference to page orientation.
45. Negative space, also called white space, is used to create and reinforce hierarchy of the design (not to be confused with empty space).
46. The proper measurement system to use when working with type, past and present, is points.
47. Range kerning is adjusting from a single word to an entire text block the percentage of space between characters whereas kerning is adjusting the space between individual characters, +-10% range for readability.
48. The traditional definition of a font comes from when type was in type cabinets. In one drawer would be a font that would consist of a single typeface, its style and size (e.g. Baskerville, Italic, 10pt.). Today, because of the computer, many people refer to a typeface a font.
49. For maximum readability in a 12/14 printed line of serif type there should be a range of mid-40 to mid-50 characters, that includes spaces and punctuation, (e.g. a 48 character line of type). Some sources suggest a range as open as 30 to 70 characters. When type is set in a digital space, the type needs to be set at 14-18pts to counter the high screen resolutions on today's digital devices. The line length target for body copy for digital is the same as print.
50. When setting up file for screen printing, it is always a good idea to outline your type whereas when setting a file up for offset printing or the web it is preferred to not outline the type.
51. The gamut is the color range of any given device (e.g. a scanner, a printer, a monitor). There are 3.2 million identified colors and 32 thousand of them can be reproduced through offset printing.
52. The print shop sets up the imposition in their prepress department to maximize the press sheet by arranging pages in the most efficient way. It preps the sheet for when it gets folded and cut, and so that the pages are in the right order.
53. A frame or border is a design element that communicates that content is either outside or inside. When used properly, it reinforces the hierarchy.
54. A plain text file is a text file stripped of all formatting of the original copy, with the extension of .txt. It is a smart choice for a designer to place unformatted text into their design files in order to fully design the copy. Text edit is the most commonly used program to complete the task.
55. An image file should always be set up to perform well on the output device that it is intended. (print or digital)
56. Only three countries in the world use the Standard system of measurement, United States, Liberia and Myanmar.

57. A type family is the entire styles of any given typeface; a typeface is the design of the alphabet, numerals and all special characters. A typeface can have many styles which is when the original typeface is modified to create an italic or bold etc.
58. The two most important items to remember when scanning is always starting off with the highest quality image possible and know your intended output device.
59. An icon is a fixed ratio image that serves a certain function whereas a logo represents an idea and is scalable. A symbol doesn't have to represent itself i.e. a campfire on a map may only represent camping.
60. The glyph palette's purpose is to handle the large number of special characters that come with an opentype typeface (otf). The glyphs palette is where the ligatures of the typeface are sorted.
61. Even though opentype has become the primary font type preloaded on computers, true type and postscript 3 are still being used. The biggest advantage of opentype is the amount of extra characters in the glyphs palette.
62. Flexography is the most common and practical way to print on items like plastic bags for food packaging or cardboard boxes.
63. When working with hyphenation, a designer's goal should be 0, but when they must be used, no more than 2 per paragraph, as long as the paragraph has 5 lines or more.
64. An em space is equal to the type size so a 12pt type has an em space of 12pts whereas an en space is half of the em space, so an en space for a 12pt type is 6pt.
65. Gain in screen printing is the expansion rate of the ink as the material absorbs it. Gain is affected by many factors like type of material being printed on, temperature, humidity and type of ink.
66. Readability is the ability to read the content; words whereas legibility is the ability identify individual characters of a typeface.
67. By design, serif typefaces are easier to read because of the serif. They allow the eye to bounce along the top half of the letterforms.
68. Dimensional hierarchy is primarily used for the packaging industry.
69. Body copy or body text is the main text part of design collateral that provides the 'meat' of the communication. It is distinct from the logo, headline, subheadings, and graphics. Usually a professional copywriter writes the body copy.
70. A shell is an offset printed piece that is then ran through an Indigo printer, where each impression has the option of changing the data. Variable data printing is becoming more valuable within marketing strategies.
71. Stochastic printing is currently replacing traditional offset halftone plates. The random dot patterns that it produces verses the rosettes from the traditional offset plate, gets rid of 98% of moiré patterns. Another benefit to the random dot patterns is that they have a larger gamut.
72. Hue, saturation and brightness are the three characteristics designers use to describe color. Hue and color are used interchangeably but by definition, hue is the place of the color within the spectrum.

73. Layers are simultaneous overlapping components of an image of sequence.
74. A module is a fixed element used within a larger fixture of structure.
75. Oversampling is scanning in at an unnecessarily high dpi. It increases the file size but there is not much difference in the quality no matter the output device.
76. Overprint is when a base color is overprinted by another color.
77. Designers should not rely on the software that comes with a scanner to do any of the work that should be professionally done in Photoshop.
78. Embossing is a raised image in a material from striking from the back with the die. Debossing is the opposite process, striking from the front, creating a negative impression.
79. The preferred file type in screen printing is vector.
80. Optical interplay is when the figure ground creates an image that works back and fourth. Figure ground is also known as negative/positive.
81. Postmodernism, which emerged in the 1960's, it is futile to look of inherent meaning of an image or object because people will bring their own culture biases and personal experiences to the process of interpretation.
82. Formstorming is an act of visual thinking—a tool for designers to unlock and deepen solutions to basic design responses.
83. Point, line and plane are the building blocks of design. From theses elements, designers create images, icons, textures, patterns, diagrams, animations and typographic systems.
84. Point marks a position in space. Line is an infinite series of points. Plane is a flat surface extending in height and width.
85. A graphic object that encloses three-dimensional space has volume. It has height, width and depth.
86. Symmetry is the quality of being made up of exactly similar parts facing each other or around an axis. Symmetry is used to achieve visual balance. Asymmetry is lack of equality or equivalence between parts or aspects of something; lack of symmetry. Asymmetry is used to create focus within a dynamic composition.
87. Scale can be considered both objectively and subjectively. Objectively, scale refers to the literal dimensions of a physical object or to the literal correlation between a representation and the real thing it depicts. Subjectively, scale refers to one's impression of an objects size.
88. Visual perception is shaped by figure/ground relationships. Figure/ground, also known as positive and negative space. Negative space is synonymous with white space.
89. Three types of figure/ground: Stable, Reversible and Ambiguous. Stable figure/ground relationship exists when a form or figure stands clearly apart from it's background. Reversible figure/ground occurs when positive and negative elements attract our attention equally and alternately. Images and compositions featuring ambiguous figure/ground challenge the viewer to find a stable focal point.
90. Whether emphasized or erased, frames affect how we perceive information.

91. By cropping a photograph or illustration, the designer redraws its borders and alters its shape, changing the scale of its elements in relation to the overall picture.
92. Visual hierarchy controls the delivery and impact of a message.
93. Cascading Style Sheets (CSS) articulate the structure of a document separately from its presentation so that information can be automatically reconfigured for different output devices, from desktop computer screens to mobile phones, PDAs, kiosks and more.
94. Dimensional hierarchy, messages applied to three-dimensional form have the added challenge of legibility across and around planes. Dimensional hierarchy is key to successful packaging.
95. Layers are simultaneous, overlapping components of an image or sequence. The concept of layers comes from the physical world, and it has a long history in the traditions of mapping and musical notation. layers allow the designer to treat the image as a collection of assets, a database of possibilities.
96. The cut-and-paste function used in nearly every software application today refers to the physical process of collage.
97. A module is a fixed element used within a larger system or structure. A nine-by-nine grid of pixels can yield an infinite number of different typefaces.
98. A grid is a network of lines. The lines in a grid typically run horizontally and vertically in evenly spaced increments, but grids can be angled, irregular, or even circular as well.
99. Dots, stripes and grids provide the architecture behind an infinite range of designs. By understanding how to produce patterns, designers learn how to weave complexity out of elementary structures, participating in the world's most ancient and prevalent artistic practice.
100. Nearly any pattern arises from three basic forms: isolated elements, linear elements and the criss-crossing or interaction of the two.
101. A diagram is a graphic representation of a structure, situation or process. A network, also called graph, is a set of connections among nodes or points.
102. Data visualization is the interpretation of statistical data into a visual format in order to easily communicate complex information.
103. When animating type, the designer must pay attention to legibility and reading order.
104. Identity design is the creation of a visual system that makes a product, service or organization easily identifiable.
105. The overall goal of branding is to form an overall perception of any product, service or organization in the consumers mind through a variety of means.
106. The key for interactive design is total consideration for the end user.
107. UX stands for user experience.
108. There are two kinds of offset presses; sheetfed and web. Web presses are fed paper by huge rolls whereas sheetfed uses standardized parent sheets.
109. Principles of Design: Balance, Emphasis,

Movement, Pattern, Repetition, Proportion, Rhythm, Variety and Unity.

110. Balance is the distribution of the visual weight of objects, colors, texture, and space. If the design was a scale, these elements should be balanced to make a design feel stable. In symmetrical balance, the elements used on one side of the design are similar to those on the other side; in asymmetrical balance, the sides are different but still look balanced. In radial balance, the elements are arranged around a central point and may be similar.
111. Emphasis is the part of the design that catches the viewer's attention. Usually the artist will make one area stand out by contrasting it with other areas. The area could be different in size, color, texture, shape, etc.
112. Movement is the path the viewer's eye takes through the work of art, often to focal areas. Such movement can be directed along lines, edges, shape, and color within the work of art.
113. Pattern is the repeating of an object or symbol all over the work of art.
114. Repetition works with pattern to make the work of art seem active. The repetition of elements of design creates unity within the work of art.
115. Proportion is the feeling of unity created when all parts (sizes, amounts, or number) relate well with each other. When drawing the human figure, proportion can refer to the size of the head compared to the rest of the body.
116. Rhythm is created when one or more elements of design are used repeatedly to create a feeling of organized movement. Rhythm creates a mood like music or dancing. To keep rhythm exciting and active, variety is essential.
117. Variety is the use of several elements of design to hold the viewer's attention and to guide the viewer's eye through and around the work of art.
118. Unity is the feeling of harmony between all parts of the work of art, which creates a sense of completeness.
119. Design Elements: Line, Shape, Forms, Space, Color and Texture
120. Line is a mark with greater length than width. Lines can be horizontal, vertical, or diagonal; straight or curved; thick or thin.
121. Shape is a closed line. Shapes can be geometric, like squares and circles; or organic, like free-form or natural shapes. Shapes are flat and can express length and width.
122. Forms are three-dimensional shapes expressing length, width, and depth. Balls, cylinders, boxes, and pyramids are forms.
123. Space is the area between and around objects. The space around objects is often called negative space; negative space has shape. Space can also refer to the feeling of depth. Real space is three-dimensional; in visual design, when we create the feeling or illusion of depth, we call it space.
124. Color is light reflected off of objects. Color has three main characteristics: hue (the name of the color, such as red, green, blue, etc.), value (how light or dark it is), and intensity (how bright or dull it is). White is pure light; black is the absence of light. Primary colors are the only true colors (red, blue, and yellow). All other colors are mixes of primary colors. Secondary colors are two primary colors mixed together (green, orange, violet). Intermediate colors, sometimes called tertiary colors, are made by mixing a primary and secondary color together. Some examples of

intermediate colors are yellow green, blue green, and blue violet. Complementary colors are located directly across from each other on the color wheel (an arrangement of colors along a circular diagram to show how they are related to one another). Complementary pairs contrast because they share no common colors. For example, red and green are complements, because green is made of blue and yellow. When complementary colors are mixed together, they neutralize each other to make brown.

125. Texture is the surface quality that can be seen and felt. Textures can be rough or smooth, soft or hard. Textures do not always feel the way they look; for example, a drawing of a porcupine may look prickly, but if you touch the drawing, the paper is still smooth.