

Advanced Higher Graphic Communication

Class 4: Mass and Size

Lesson 1 - Defining Mass

As stated in the introduction, mass equals size. Each piece you create has a physical mass. The physical mass or size is the actual dimensions of the piece — height, width, thickness/weight (of paper), and depth (3D objects).

Additionally, each element within the design (graphics, photos, lines, text blocks) have their own mass relative to the whole piece. For example, a photo that is physically 3 inches by 5 inches can appear smaller or larger depending on the physical size of the paper it is printed on and the size and proximity (closeness) of other items on the page.

Some ways to use mass within your designs:

- **to accommodate information, content**
Example: To present all the desired or needed information comfortably a designer may create a bi-fold rather than the usual single business card
- **to accommodate normal size restraints or expectations**
Example: The postal service has limitations on the height and width of different types of envelopes. If a designer ignores those requirements it could incur additional mailing costs for the client.
- **to convey a mood or provide emphasis**
Example: A place that is physically large (such as an amusement park) or a business that offers a huge assortment of products may use brochures or other marketing pieces that are larger (physical dimensions) or heavier (weight) than normal to carry out the 'bigger' or 'more' theme.
- **to create contrast**
Example: A designer might design a full-page magazine ad using a single small image in the middle of the page with lots of white space. The contrast between the size of the page and the size of the content (image) draws attention to the image and can create a specific mood (depending on other elements) such as conservative, elegant, lonely, or open.

Exercise

Look for four types of material in your Class Samples:

- physically large pieces (larger than 'letter size')
- physically small pieces (business cards, small space ads, tags)
- physically large pieces that incorporate small or visually small elements and lots of white space
- physically average or small pieces that incorporate large or visually large elements (such as a single dominate photo or huge headlines compared to other items on the page)

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Lesson 2 - Measuring the Size of Your Design

What is large? What is small? In graphic design and desktop publishing there are many ways to specify size. This part of the class on mass focuses on the mechanics of size and common measurement systems used in desktop publishing. Expect to spend a great deal of time on this portion of the course. What you learn here is critical to DTP.

To keep from getting lost, bookmark this page now. The information for this lesson is found in a whole series of previous features on this site. You can come back to this page if you get 'lost' in the many pages and supplemental materials covering size and measurements.

Auxillary Materials: [Size Matters](#)

This multiple page complex covers the following topics: Type Sizes (1 page), Using Picas in Page Layout (1 page), Paper Sizes (1 page), Image Sizes (5 pages), Conversion Tools (1 page). In addition to the main coverage of each topic you'll find that many pages have a Glossary section with related terms, or How-to pages related to that topic. These pages are not included in the 'page count' for those topics but are important supplemental information. Review them. There are also offsite links to information elsewhere on the Web that will give you more in-depth information on some topics.

It may take several days or even longer to absorb all this information. Remember, you can complete all courses at your own pace. If you get lost, come back to this page or the [Size Matters](#) page.

After you've studied the auxillary materials, do the following exercises. Take your time. These exercises are important to your future in graphic design and desktop publishing.

Exercises

- Using pieces from your Class Samples, assemble a wide variety of the various ISO Standard, Metricated Traditional, or Nonmetric Traditional (North American) size items as you can - including envelopes and postcards. Arrange them in order by size.

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Graded Assignment

1. Mass includes the physical dimensions of _____, _____, _____, and, _____.
2. A standard letter size A4 piece of paper is _____ by _____ **millimetres**.
3. The same picture displayed on a low resolution monitor looks _____ than it does on a higher resolution monitor.
4. Type is typically measured in _____.
5. Of SPI, PPI, DPI, and LPI, the measure of resolution that properly refers to **display resolution** and the size at which an image displays on-screen is _____.
6. In addition to inches, millimetres, picas, and pixels, two measurement systems found in many desktop publishing programs are _____ and _____. (Do the 4th exercise listed in Lesson 2 to find some of these methods of measuring size. If the programs you have do not have at least two more measurement systems then answer this question by telling me the name of the program and listing all the measurement methods it does have.)
7. The use of _____ and _____, two Principles of Design, are ways of using or altering the visual or perceived mass of a piece. (Not explicitly spelled out, these answers can be found in or inferred from material in Lesson 1.)
8. Basic or basis size is used to determine the _____ _____ for a ream of paper. (Remember the Glossary entries from the Paper Sizes material? That's where you'll find this information.)