# A Graphic Design Problem

**SUPER FORCE CEREAL**

## Introduction

This activity package deals with the graphic design of a package for a new product. The purpose of a package for any product is to contain the product and provide a means of transporting and storing the contents until they are needed. However, packages are also used to attract attention, provide important information, and "sell" the product they contain.

Imagine walking down the aisle at a grocery store. What would cause you to consider buying a certain box of cereal? If you were nine years old, would you be more interested in the design on the box, the "free" toy inside, the cut-out mask on the back, or the cereal inside?

Graphic designers are people who use artistic skills, knowledge of design, and the concepts of *advertising* and promotion to create packages for products that will attract your attention.

## Job Description

In this project, you are going to be a graphic designer. In this activity you are going to use the design process to create a package for a new cereal called "Super Force". Your *target audience*, or customers, is made up of 9-12 year old children. The product can be described as "a crisp, satisfying blend of five wholesome grains bursting with raisins, almonds, and strawberries". Your job as the graphic designer is to design a cereal box to contain this new product that will attract the attention of your *target population*, and provide an interesting, attractive package for the product.

You will have to do some research and investigation into package design before you begin your actual design. To complete this assignment, you will need to know what requirements there are for cereal packages, what will "motivate" the customer to purchase your product, and how graphic designers do their jobs.

## Materials and Supplies

To complete this activity, you will need the following materials:

- several sample cereal boxes
- tag board, 18" x 24"
- drawing paper
- pencils
- ruler
- scissors
- colored pencils
- colored markers
- water colors
- tempera paints
- brushes
- spray fixative
- colored construction paper
- rubber cement
- X-acto knife
- watercolor paper

## The Design Process

1) Before you begin your actual design, you need to research the information that is contained on cereal boxes. Begin by selecting an empty cereal box and making a list of the items found on the box. These will be items such as:

- name of the cereal
- a description of the cereal itself.
- a Logo (or trademark) for the cereal company
- a Net Wt. listing
- a bar code
- a price block
- a list of ingredients and nutritional information

What other information is printed on the box you have selected?

2) Next, sketch a layout of the box showing the front, back, and side panels, and the top and bottom flaps. What information is placed on each of the parts of the box? Where is the *bar code* commonly placed? Where is the nutritional information found?

3) Now that you have some information about cereal packages, you are ready to begin the design process. First you should consider your audience. Who are you designing the box for? What do you think would attract the target audience? What kind of images, colors, shapes, and information would influence your audience to select your package? Graphic designers use this type of information, often supplied by *consumer* research firms, to make decisions about what they are going to use in their designs. Would your design be different if your audience was made up of adults?

4) Begin your design of the cereal box with *thumbnail sketches*. These are small sketches that allow you to put some ideas down on paper. Look at the sample "thumbnail"

sketches included in this package for an idea of what thumbnail sketches look like. You will notice that they do not contain a lot of details, but only a basic idea for the design.



*A thumbnail of a possible logo design*
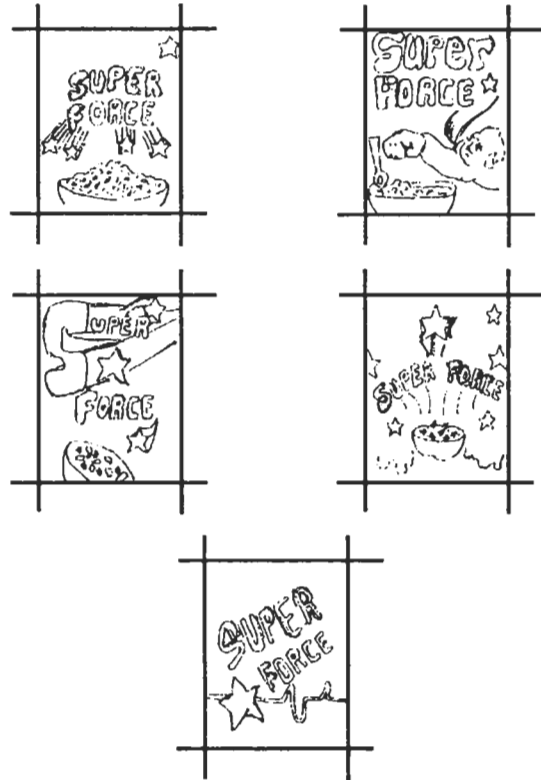


*Five thumbnails representing ideas for the front panel design*

5) After you have done several thumbnails, you should select the design you believe best suits the problem. You then create a *rough sketch*. This drawing is done "full size" so that you can determine the size and proportion of all the elements of your design. The design now starts to look more like a real cereal box!

6) Rough sketches are done for all six sides or eight panels of the box, showing the location of all the information on each panel. You must decide where to put the elements such as logo, weight statements, nutritional information, bar codes, and other necessary

**TEACHER GUIDE**
**A GRAPHIC DESIGN PROBLEM:** *SUPER FORCE* **CEREAL BOX**


**OBJECTIVES:** Upon completion of this assignment, students will be able to:

• Describe the design process, and give examples of thumbnail, rough, and comprehensive art.
• Prepare a design presentation for a given product, including a thumbnail, rough, and comprehensive.
• Describe the term "final art", and describe how final art differs from "presentation" art.
• Examine the design process, including the consumer research aspects related to graphic design.

**HELPFUL HINTS:**

1. Materials for this project are available in *DCPS Stores & Distribution Catalog.*

2. Teachers should collect several different "super heroes" comic books and coloring books that students can use for art on this project.

3. It is suggested that photocopies (reduced & enlarged) be made of a variety of "comic book" heroes. These can be traced or grid reduced/enlarged for artwork on this project.

4. As an extra credit assignment prior to giving this project, have students bring in sample empty cereal boxes and super heroes comic books.

5. Templates can be made ahead of time, by unfolding a "real" cereal box and tracing the outline on a sheet of heavy tag board. Make sure you draw on the fold lines and tabs so that students will copy these onto their box "blanks".

6. A variety of pressure sensitive or rub-on lettering might be made available for headlines, subheads, and display type for comprehensives.

7. "Greeking" can be produced on a computer or typesetting equipment by typing multiple rows of the following example:

    aewfaewfaewfaewfaefwaefwafefwsfafwfesfawfefwafafefwfs
    wfefwfaewfeawgfweafwewfafefwi ffefwfwafeafweaewfgwfaewf
    aefwfwowrwfeafeowfafefdefasfafi defsrfdfwarefewdarefwfafrq

8. A plastic spray fixative should be ⊔sed during the application of paint, marker, colored pencils, or other media on the comprehensive. This will keep the artwork from getting "smeared" or from "running".

9.  Inexpensive black India ink pens are available from a variety of suppliers. Called "Penstix", these are excellent for inking black detail lines, indicating elements such as lettering on the comprehensive.

10. If you have access to a plastic laminating machine, the finished "comps" can be laminated prior to cutting out and assembling into finished boxes.

11. The project can be presented as a "scenario", putting the student into the role of a graphic designer. The concept of competitive selection can also be used. Tell students that they will be competing for the "award" of the account from the manufacturer and that only one design will be selected as the winning design. Extra credit can be given to the designer whose design is selected. You can also bring in "experts" to act as judges during the presentation of the designs.

12. Do some research in advertising textbooks for materials on how products are "sold" using graphic design. Some great examples can also be found around the house. Check out the pantry!

**LANGUAGE ARTS APPLICATION**
**A GRAPHIC DESIGN PROBLEM: *SUPER FORCE* CEREAL BOX**

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Student Name

In all types of jobs, you will find that you need the ability to communicate your ideas effectively. Writing skills are necessary in all occupations. Here are a few examples of how writing skills are related to this activity.

Cereal boxes contain a great deal of written material describing the cereal, such as its nutritional information, ingredients, vitamins and minerals, recipes, and directions for use. This writing assignment can be used along with your design assignment to help you create your product's packaging.

1. Write a description of the ingredients in your *Super Force* cereal.

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2. Write a sentence that describes your *Super Force* cereal that could be used in a television commercial.

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3. Create a description of the nutritional information for a serving of your *Super Force* cereal. You may want to look at a sample of a real cereal box for ideas for format

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**LANGUAGE ARTS APPLICATION**
**A GRAPHIC DESIGN PROBLEM: *SUPER FORCE* CEREAL BOX (Cont'd.)**

4. Write the script for a radio commercial for your *Super Force* cereal. The "commercial" can be tape recorded and played back to the class as part of your product presentation.

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Student Name

In all types of jobs and occupations you will need the ability to apply mathematics effectively. Here are a few examples of how math skills are used in relation to this activity.

The packaging industry uses weights and measures to tell consumers the amount a package contains. Standard units of measures in the United States are the **pound** and **ounce** for weight and the **quart, pint,** and **gallon** for liquid measure.

In U.S. Measure, the standard for weight is one ounce, and sixteen ounces is equal to one pound.

The standard for liquid measure is the ounce; however, larger quantities are measured in pints, quarts, and gallons. Sixteen ounces equals one pint; two pints equal one quart; and four quarts equal one gallon.

The **metric system** of weights and measures uses a different standard. The metric standard for weight is the **gram** and for liquid measure the **liter.**

If you look at a cereal box, you will find that the manufacturer has placed the Net Weight on the cereal box. **Net weight** is the weight of the contents of the box; it does not include the weight of the box itself.

Most packages today have both the U.S. and the metric unit of measurement. A cereal box may show a Net. Wt. of 7.5 oz (212.6g). If you read the side panels for the nutritional information, you will find that this information is given in grams, based on a serving given in ounces.

Being able to make comparisons of weights and measures is a skill that each **consumer** should have. Since prices of products vary, along with the amount of the contents, you need to be able to **comparison shop**. For example, you should be able to tell if a one liter bottle at 50 cents is the same value as a pint bottle at 39 cents. Is a box of cereal that is 7.5 ounces at $1.09 a better value than a box of cereal that is 12 ounces and costs $2.39?

**PROBLEMS:** (Show your work.)

1.  A box of cereal that costs $2.39 contains 36 ounces. What is the cost per ounce? (Hint: Divide the cost of the box by the number of ounces to find out how much one ounce costs.)


    Answer: _____

2.  A second box of the same cereal contains 18 oz . The cost of the box is $1.39. What is the cost per ounce?


    Answer: _____

3.  Which box is the best buy?


    Answer: _____

4.  A liter of soft drink contains about the same amount as a U.S. quart. A quart
    contains 32 ounces. If a two liter bottle of soft drink costs $1.39, approximately how
    much is the drink per ounce?


    Answer: _____

5.  If a twelve ounce bottle of soft drink costs 75 cents, how much is it per ounce?


    Answer: _____

6.  Which drink size is the best buy - the two liter bottle or the 12 oz. bottle?


    Answer: _____

7.  A U.S. ounce contains about 30 grams. If one box of cereal contains 270 grams
    and another contains 10 ounces and they are both the same price, which one is the
    better value?


    Answer: _____

8.  A box of cereal weighs 22 oz. Approximately how many grams does the box of
    cereal contain?


    Answer: _____

9.  How many pint glasses could be filled from a gallon of punch?


    Answer: _____

10. How many 4 oz. servings are there in three lbs. of potatoes?


    Answer: _____

**QUIZ**
**A GRAPHIC DESIGN PROBLEM:** *SUPER FORCE* **CEREAL BOX**

_____
Student Name

**True or False:**

_____ 1. Graphic designers use research on consumers when creating designs for products.

_____ 2. A thumbnail sketch is a large drawing used to show the client how the finished product will look.

_____ 3. Lettering on a rough or comprehensive is often indicated with "greeking", which are rows of letters used to represent type.

_____ 4. The rough sketch is usually done full size.

_____ 5. A comprehensive is so well done that it can be used for final art to produce the actual package.

_____ 6. The normal progression in the design process is: thumbnails, rough sketches, comprehensives, and final art.

_____ 7. A "target population" is the group of consumers for which a product is designed or developed.

_____ 8. A logo is also known as a trademark.

_____ 9. It is acceptable to use pressure sensitive or rub-on type on a comprehensive.

_____ 10. A comprehensive is a full size, full color representation that is used to show the client what the final design will look like. It is not final art and cannot be used for reproduction purposes.
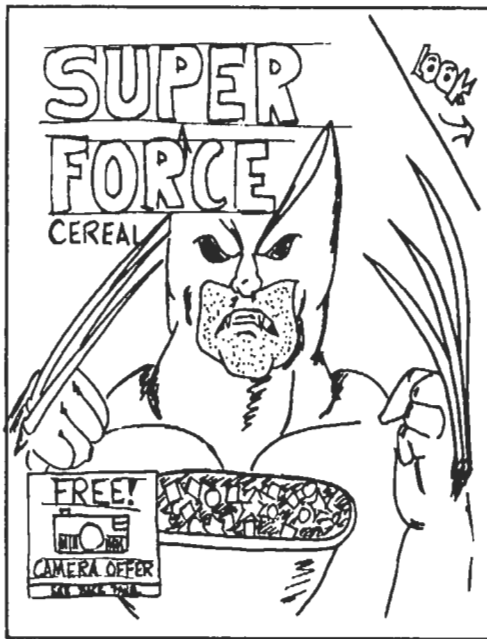
*A sample "rough" sketch. Note this sample is reduced, but normally rough sketches should be the actual size of the finished product.*

information. Lettering on a rough is often only indicated by **"greeking"** to resemble the type that will be used later in the final layout. Art work, drawings, and photographs are all indicated or drawn in on the rough. Large lettering like the name of the cereal, is usually hand lettered in at this stage of the design.

7)    After the rough sketch is completed, check your design to make sure you have not omitted any important information.

8)    The next step in the design process is to create a *comprehensive*. It is this art work that is presented to the client to give an accurate idea of what the final design will look like. Comprehensives are usually done in color, using materials like markers, paints, and pencils. Body type is usually indicated with greeking, but headlines and display type are either hand lettered or done on typesetting equipment. Often designers will use pre-printed **"rub-on"** lettering on the comprehensive to save time and the cost of typesetting.

9)    For your comprehensive, you will create a three-dimensional cereal box. This will re-

quire the development of a pattern layout. Begin by unfolding a real cereal box carefully and laying it flat. Use the "real box" to trace an outline on a sheet of tagboard; then cut out your pattern to create a template for your box.

10)    Complete the pattern for the box by indicating *fold lines*, flaps, and slits required to hold the completed box together.

11)    Next, place the pattern over a sheet of watercolor paper. Trace the outline of the pattern, and then draw in the fold lines and tabs. Make sure you note in pencil outside the layout, which panel is the front, back, left side, right side, top, and bottom flaps. Notice how the top and bottom flaps tuck together to form the top and bottom of the box, and in which direction the copy faces on each panel.

12)    Begin the layout of your comprehensive using **very light** pencil layouts of your panels. Begin with the front panel. You should lay out the entire box before applying any color or ink to the sheet.

13)    Lettering that is larger than 1/2" should
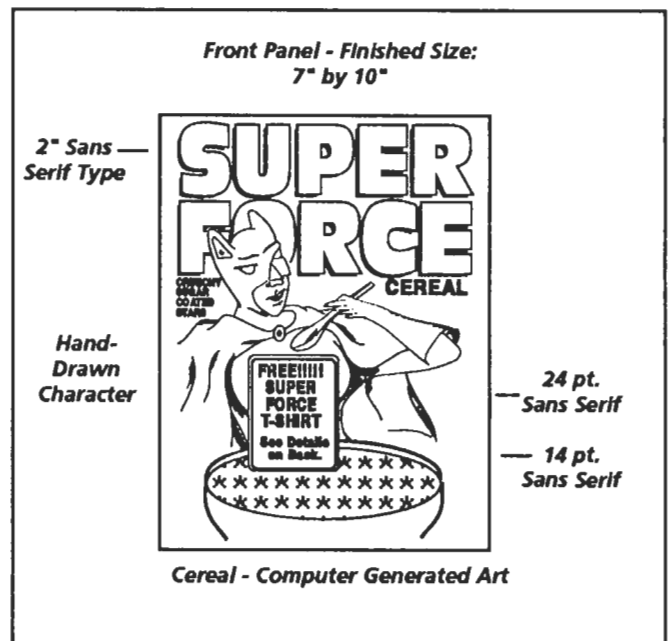


*A comprehensive gives the customer a good idea of the appearance of the product and pins down needed production information.*

be lettered in block style as close to the actual lettering style as possible. You can trace lettering or use stencils or type done on typesetting equipment. Lettering that is less than 1/2" high can be indicated with greeking.

14) After the design is laid out in pencil, begin applying the background color first. Lighter colors usually work best for background colors. If you are going to use watercolor for the background, try a *wash*, which is a light coat of thinned out watercolor. A spray fixative after each application will keep the colors from being smeared by additional work on the design.

15) Additional colors may be added after the background color is dry. Use markers, colored pencils, tempera paints, or acrylic paints to add color to your art work. "Fix" each application to protect your work.

16) The black details and lettering are done last. Use a black India ink pen for good dense black. Be careful not to ink on a wet drawing, however, as the ink will run!

17) Now add rub-on lettering to your comprehensive if you are using it.

18) Protect your work with a final coat of a spray fixative. The finished comprehensive is now ready to be presented to the client for approval. If changes are needed, the designer works on changes in this medium first. Later, art work, *color separations*, typesetting and photography will be done to create the *"final art"* used in the production of the actual printed boxes.

## Safety

When using materials such as fixative, read the label before use.

Be careful with X-Acto knives. Use a cutting surface, and do not cut on a drawing board or desk. Cut away from hands and fingers.

## Ecology

Read the labels on all art supplies and materials, especially spray cans. Be sure to use materials that are not harmful to humans or the environment. Some materials need to be used in a well vented area or a spray booth. Avoid using lacquer materials in a closed environment like a classroom. When washing brushes and pens, check to make sure the materials can be safely disposed of in an ordinary sink, or if they should be handled in another manner. Recycle used paper and paper scraps when possible.

## Vocabulary

thumbnail
rough
comprehensive
target population
advertising
consumer
final art
"greeking"

rub-on or
  "press type"
color separations
typesetting
medium
"wash"
bar code
fold lines

## On Your Own

1) Visit a grocery store "cereal aisle" and look at how graphic designers have created cereal boxes aimed at various audiences. Write down the names of those cereals you think are aimed at; young children, teenagers, health conscious people, adults, active people.

2) Bring in empty cereal boxes to use in a display of packaging along with your comprehensive.