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# User Assumptions

The screen printing unit consists of three lessons designed to teach High School Graphic Design students how to use the screen printing process to print a design on a T-shirt. The Graphic Design class is part of the Career Technical Education program at South El Monte High School. Most students have taken Intro to Industrial Technology which most freshman take and focuses on the different CTE sequences available at SEMHS. The screen printing lesson is part of the Intro to Graphic Design class which is a year round class consisting of two semesters. The lesson is part of a printing unit which takes place 2nd semester which means students have an understanding of graphic design principles and familiar with graphic design software such as Adobe Illustrator. The class meets A thru G requirements and is certified by University California under the Visual and Performing Arts (“F”) certification.

# Graphic Description

## Image 1: Positive Vs Negative Space

The Solution will work because the image shows the difference between positive and negative space which students need to understand to set-up the screen. I decided to use simple shapes in my design so I choose to use squares which facilitate comparisons. (pg 250) The image shows a comparison between positive and negative space. The positive spaces that you cut out of the stencil will allow the screen printing ink to pass through the screen to the paper. I also used a wood border around the outside to represent the wood frame used in the screen printing process. Since the black area represents the positive space which is cut out of the stencil I used all large caps and the negative space was represented in small caps. I used a Georgia font which is a square Serif typeface and is easy to read on a computer screen and widely used for educational materials. (pg 220)

## Image 2: Screen Printing Process (CARP)

The Solution will work because the image reviews the 6 basic steps to screen printing for the instructional unit. The image helps students understand the process of screen printing. While designing the image and following CARP principles I decided to only use three colors to give it good contrast, I used a dark background and lighter text to make the content pop. I used arrows to show the direction of the steps. The arrows and number boxes are aligned and the pictures are also aligned as the same size as the arrow heads. The text and arrows show repetition and proximity to the page. I also created the image like this because step 1 and 2 is lesson 1, step 3 and 4 is lesson plan #2, and step 5 and 6 is lesson plan #3. The flow of the arrows represents the lessons changing.

## Image 3: Screen Preparation: (Color, depth, space, & Selection Process)

The Solution will work because it focuses on the selection principle and the figure-ground concept.  I used white space to represent the T-shirt students will be designing and the image inside the white space is the content of the lesson and the process to prepare the screen.  This image uses the figure-ground concept which uses the white space of the t-shirt to show the process and the content of the image which is the figure and element of the message. The black space around the t-shirt represents the ground.  I used more white space and figure ground concepts when designing this image rather than color. The only color used was to represent the ink used in the screen printing process. This will help students understand the focus of the message.  I used color only to represent the ink used to create the t-shirts.

## Image 4: Screen exposure Image (Organization & Integration)

The Solution will work because the image shows how an image exposed to light will create a stencil image on the emulsified screen for printing use. I used horizontal alignment in my hierarchy by showing the emulsion screen with a black image and text first to which is the 1st step to creating a screen emulsion.  The next image shows the next step which is the light source which is used to burn the image to the screen.  After the image is burnt to the screen it leaves a stencil image on the screen which is see through which is represented with a white image and text and still follows the horizontal hierarchy.  All three images are chunked in the middle of the image with the light centered between the two frames to bring attention to the main objective of the content.  I used a Georgia font which is a square Serif typeface and is easy to read on a computer screen and widely used for educational materials. (pg 220)

## Image 5: Header for Color Separation Page

This image was created to introduce the color separation lesson and is used as an image header for the lessons webpage. This solution works because it shows examples of color separation and how students need to remove the color and leave just a black image to use for the emulsion process. The image uses a horizontal alignment and the figure ground concept using white space as the background with black font color to represent the color separation.

## Image 6: Header for Material Page

This image was created to introduce the materials lesson which is part of lesson plan 2 and is used as the image header at the top of the webpage. The solution works because it shows the different materials used by the student to create their screen printed t-shirt. This image also uses a horizontal alignment. I picked the orange frame and screens to match the overall color scheme of the site and used a white background to allow the materials to pop on the page and have good contrast.

## Image 7: Header for Screen Preparation Page

This image was created to introduce the screen preparation lesson and is used as the image header on the webpage. The image shows eight steps to preparing the screen to print. The steps uses a horizontal right alignment and are chunked together to bring focus on the steps. To keep most of the image headers consistent I used a white background on this page which also helps with the contrast and organization of the image.

## Image 8: Header for Printing Page

This image was created as the image header to introduce and show the hardware used to print student t-shirts. The image uses white space to stay consistent with the other webpages and to bring out the color and spacing of the objects. The images are organized horizontally with the largest image at the far end. This is the most important image because it provides labels to all the parts of the screen printing assembly.

# Design Process

The screen printing webpages were designed as a blended lesson to allow students to use the webpages to learn the screen printing process by watching tutorial videos, reading content, and reviewing graphic images. After completing each lesson students will try the concept in the technology lab by participating in a lab activity related to the lesson. The website was created using Weebly which is a web hosting service that allows drag and drop options while creating your site.

The site was created similar to a web quest which takes students through a series of lessons which build upon each other. The home page lists the objectives of the lesson and provides a tutorial video and graphic image of the screen printing process. Each webpage is dedicated to each content process and provides information, graphic image and video to better understand the concept. Also, a problem/solution page was added to help students understand some of the difficulties they may occur while working with screen printing materials. Students can use this page as a resource to help solve problems when they occur.