Art Fundamentals Workbook

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My mother, brilliant in matters concerning science and math, stares at her art textbook. With a pencil sticking out of her mouth and a half-empty triple-caffeinated mocha beside her, she asks me for help.

I ask her what’s the matter.

She doesn’t get it, she says, motioning to a piece of artwork.

“Oh, well, look how the artist plays with line and color here, and the negative space is cleverly manipulated here …” I begin.

“No, no, I get all that,” says my logical mommy. “I just don’t … get it.”

I’m at a loss for words. “Well, see, this is a personal piece and—”

“Yeah, I know”—and here she details the life of the artist in question.

“I don’t understand then, Ma. You’ve studied the techniques employed in this artwork. You know the background and circumstances of this person’s life. So … is there something else you need to know?”

“Well, I mean, Jessica, I just don’t get it. Like, I don’t get it.” Saying this, she waits for me to impart the magical, mystical knowledge that would somehow reveal another dimension of art that apparently only certain artistically gifted individuals could comprehend.

But here’s the problem: there is no such magical, mystical knowledge.

There’s no esoteric knowledge being passed around the art community and kept hidden from the masses. In my experience, the only things needed by an individual to fully appreciate art are a basic understanding of key artistic principles, and a willingness to react to art and to understand how and why it evokes emotions within us. It’s my hope that this workbook and other Academic Decathlon resources will assist you in your progress with the former; only a conscious decision on your part can precipitate the latter.

I understand that art may not be every decathlete’s favorite subject. I know there are those who would rather cram for biology or brush up on some calculus than study color theory and Christo’s escapades with shrink wrap. But try to approach art with an open mind, in the same way you would a more “pleasant” subject.

For those of you who, like my mother, are more inclined to think of the world more objectively, art fundamentals will be your friend. Here, there is little holistic analysis (that part of art can be found more abundantly in the resource material). With art fundamentals, you can look at artwork, piece by piece, and work your way up the totem pole of understanding. As a scientist would begin the construction of a space shuttle by tinkering with the smallest of screws and O-
rings, with art fundamentals you begin your appreciation of a particular piece by looking at its base components.

This workbook is broken down into three parts. The first section concerns the elements of art—the basic building blocks on which all art is based. You would do well to familiarize these concepts by burning them into your brain. The next portion of this workbook examines the principles of art—ways that artists arrange their art in order to stimulate interest and to organize the artwork in a significant manner. Not all art follows these principles, especially in more modern art. This year’s art theme, however, will have you considering these formal properties in all the selected artworks. The last section addresses two- and three-dimensional art processes covered in this year’s outline. Some of these techniques, such as drawing and painting, should be familiar to most decathletes, but there may be new and previously unexplored artistic methods and media introduced to my gentle audience.

Please do not feel restricted to studying the official USAD material and DemiDec resources as you explore the world of art. A former decathlete friend of mine did very well in the Astronomy Super Quiz after reading Isaac Asimov paperbacks1. If you explore non-traditional study materials, you might find the material less dry, more palatable, and easier to retain.2 Also, watch historical movies and documentaries. If you absorb information like a sponge from whatever source works best for you, your neck muscles will bulge from numerous art medals at competition.

With whatever you do, and however you study, here’s to many successful “gettings” of this year’s art curriculum.

Best wishes and warm regards for the upcoming year,

Jessica Sacs

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1 Asimov was one of my favorite authors when I was small. His science fiction was fine, and I read it with bated breath; however, I truly devoured his essays and books on science and history. They’re probably why I became a Science, Technology and Society major at Stanford. I remember a morning in April when my mom shared with me that he had passed away. At that instant, no doubt, many of the world’s libraries were able to scale back expansion plans. – Dan

p.s. The first documented use of the phrase “bated breath,” by the way, was in Shakespeare’s The Merchant of Venice. Nowadays, a lot of people misspell it as “baited breath”—a mistake that sends shivers down my spine, though they aren’t as bad as the convulsions that wrack my body (not rack it) each time I hear someone say, “I could care less,” when they mean they couldn’t care less.

p.p.s. When I speak Spanish, which was my first language, I can hear my own egregious “Gringo” accent. It’s almost paralyzing at times; I think I hear Spanish like a native, but speak it like a foreigner. Similarly, even in writing the above paragraph, I noticed myself making a mistake—using “they” as the pronoun for someone. Technically, I should have said “he or she,” or maybe “s/he.” But I like the way that words sound inside a person’s head, and I’m not sure what s/he sounds like.

p.p.p.s. I think this may be my longest footnote ever.

2 Yet another plug for The Agony and the Ecstasy by Irving Stone. Read it. Also, Sister Wendy videos are fantastic if you can find them. — Laura Reddick
TUTORIAL: LINE

Before an artist begins painting masterpieces, he or she must understand (or at least learn to use) the most basic of the basics. It doesn’t get much more basic than the concept of line.

A **line** is defined as the route of a single point moving through space. That point could be the bristles of a Japanese calligraphy brush or the end of a cat’s tail dipped in fingerpaint, and if you were to drag any of these objects around, you’d be dragging that point around too, making a line³.

Different materials make different sorts of strokes, and the way an artist manipulates lines and media contributes to the emotion or mood of the piece. A cheap ballpoint pen will make a thin, graceful line in the hands of a middle-school girl practicing her autograph in little swirls, reflecting the peaceful, contemplative mood of study hall. The line created by the cat’s tail will make thick, bold, accidental lines, reflecting its angry protest at being manhandled. Lines come in all sorts of shapes, sizes, and media, and manipulating these elements will change the effect of the lines.

Horizontal and vertical lines, according to the USAD, create serene and static emotions—like an elderly relative who is peaceful and non-threatening (won’t ever toss you in the pool, for example) but a little boring. Curves and jagged lines, however, lend an air of activity and movement to a piece; this can be a soothing activity, like petting a cat or twirling in a ballerina’s pirouette, or it can be a harsh, striking motion, like violence, anger, or pulling hair out of your head after a week of DemiCramming. Line thickness also can be manipulated to alter mood or emotion, but the effect often depends on circumstance.

There are some lines that are not actual lines. An **implied line** is a series of non-line objects that are arranged in a way that looks like a line. A footprint by itself is not a line, but a trail of footprints behind a beachcomber is a line. A random flurry of dots might not appear to be a

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³ Jessica is not endorsing dragging a cat with an inked-up tail around the floor. Or, at least, DemiDec isn’t. – Dan
coherent line, but children know that at the end of the numbered connect-the-dots they’ll find the outline of a scary dinosaur.

Another kind of implied line is the edge of objects. The edge of a door, a piece of paper, or the meeting of two walls all can make lines. Lines need not be literal. Although lines are most prominent in drawings and lithographs (more on these later), the fact is that lines are inescapable. Artists use lines all the time, whether or not it’s intentional. Two- or three-dimensional, abstract or realistic, lines are everywhere—like taxes and scary cats.

IDENTIFICATION

Diff’rent strokes for diff’rent people. For each scenario, choose whether horizontal (and/or vertical) lines or curvy (and/or jagged) lines would be used to convey the emotions expressed in the story. Circle “H” for straight horizontal or vertical, or “C” for curvy/jagged.

H    C Example: I want to express my extreme hatred for overpriced foreign CDs in a non-objective drawing with lots of tension and anger and fury and emotion.

H    C My cousin wants to paint a relaxing picture for Great-Grandmother Janine’s room to remind her of the scenic, seashell-scattered ocean.

H    C Your assignment in senior-level art class is to draw a sleeping figure. You choose your brother, emphasizing the stillness and peacefulness of his sleep.

H    C Degas wants to express the motion and grace of the soothing dance of the pint-sized beginning ballet students, just now learning to twirl around in tutus.

H    C There’s nothing like your favorite cold beverage at the local coffee/Internet café to calm you down and soothe your nerves, making you feel relaxed and calm. You draw a quick doodle of it on your napkin in awed appreciation.

H    C The Matrix is secretly Clive Barker’s favorite movie, and he can’t stop drawing action-packed scenes from the film on his foggy bathroom mirror after showers.

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4 I was never too scared of dinosaurs, maybe because I viewed it as unlikely that I would get eaten by one. I was, however, very afraid of model sharks. I placed one on my nightstand when I was about seven, and didn’t dare remove it for two years for fear that it would come back and bite me while I slept. Finally, a friend who learned of my affliction helped me relocate it to a kitchen cabinet, where I rediscovered it as a teenager—and chuckled at my own silliness, even as my spine tingled. – Dan

5 U2, anyone? That’s right. Irish, multi-decade pop-rock bands rule. – Jess
**DRAWING**

*Be vewy, vewy quiet.* Remember the nihilistic rabbit from the resource? Well, here he is. He has some beady little eyes and a nose, but the rest of his body is hidden. Write down in the space below why you can’t see the rabbit, and then draw in what you think he looks like.

I can’t see the rabbit because ________________.

Shape and form cannot exist without ________________.

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I once asked my parents to buy me a rabbit. I was about 8, and quite spoiled, so my parents trundled us off to the pet store. We played with all the rabbits, had a long conversation, and brought home a puppy. Like several of the rabbits, she was white. – Dan
CONNECT THE DOTS

Making the connection. Perhaps because I have some sadistic need to insult your intelligence again, we’re going to play Connect the Dots. Begin at the starting point, and once you have traced the outline of a diminutive alpaca, you will see that the drawing miraculously has transmogrified from one type to another. Write the term for both the first and the second type of drawing in the spaces to the side. Then, don’t be afraid to give him a cool ’do. You know you want to...

First it was ____________

Now it is ______________

IDENTIFICATION

Help them get in touch with their emotions. Identify the following lines using the following descriptive terms: emotional restraint/controlled calm; tranquility, ease, peace; tension fear, chaos; strength/boldness; movement, action, excitement.
TUTORIAL: SHAPE AND FORM

We can use our lines to create shapes and forms. Shape consists of a two-dimensional object (a circle, a square, anything you can draw with a cat’s tail7), whereas form is the three-dimensional equivalent of shape—a sculpture, a schoolhouse, the cat. In other words, shape is defined as an object with height and width, while a form consists of height, width, and depth. Shape occupies area, whereas form occupies volume.

Now, anyone who’s ever slept through geometry class knows that there are many objects that have clearly defined areas or volumes. You know, or could look up, the equation for the area or volume of a circle, a sphere, a cube, or a pyramid. Standardized exams will respect you for knowing these facts, but the problem is, few things in life are as geometric as these objects. What if you needed to know the volume of your cat or your Edward Scissorhands action doll? Would your math textbook have formulas to solve these problems? These non-geometric shapes and forms are known as freeform or organic, because they are objects that naturally occur in the living world (hence, organic).8

Sometimes we want a shape to reflect its corresponding form—to make a two-dimensional object seem 3-D. In this case, we have an arsenal of illusionary techniques available; for example, we could use perspective, foreshortening, or shading to make a picture of a kitty a little more realistic. These topics will be covered later, but for now just understand that they exist and that shape can mimic form.

IDENTIFICATION

Separating the men from the boys. Decide whether the objects in the object bank are shapes or forms, and sort accordingly. Each object corresponds with only one category.

<table>
<thead>
<tr>
<th>OBJECT BANK</th>
<th>SHAPE</th>
<th>FORM</th>
</tr>
</thead>
<tbody>
<tr>
<td>My cat, Nikki</td>
<td></td>
<td>My kitty, Nikki</td>
</tr>
<tr>
<td>computer icons</td>
<td></td>
<td></td>
</tr>
<tr>
<td>circles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>squeegees</td>
<td></td>
<td></td>
</tr>
<tr>
<td>pyramids</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gackt⁹ as a sketch</td>
<td></td>
<td></td>
</tr>
<tr>
<td>squares</td>
<td></td>
<td></td>
</tr>
<tr>
<td>pentagrams</td>
<td></td>
<td></td>
</tr>
<tr>
<td>rotten tomatoes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>triangles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>dodecahedrons</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gackt in concert</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7 I wonder why Jessica is so interested in cat’s tails. – Dan
8 Well, if you’re drawing something, then I suppose that it’s merely a representation of something out of reality. And I don’t think that the Scissorhands doll would occur naturally—McFarlane has to manufacture it. But you get the idea…. - Jessica
9 A music artist. He’s one of my favorites, in fact. Leave his name alone, okay? – Jessica
DRAWING

In all shapes and sizes. In the boxes below, illustrate the two types of shape: geometric and organic. You can make a geometric cat if you like.

TUTORIAL: SPACE

So, you have these lines and these shapes or forms, but what are you going to do with them? Haphazardly throw them against a canvas, hoping that the resulting image will make some sort of sense? If a scrambled, messy, modern-art piece is not what you’re after, you’re going to have to think about where to put the various objects in your painting. You’re going to have to consider the elements of space, or the organization of your artwork.

The various objects, shapes, or forms in your piece make up the positive space. A prominent object is called a figure. The area around a figure or figures is known as the negative space, or ground. A really simplified definition of positive and negative space describes the positive space—the figure—as what the artist is focusing on (the main focus of the piece—the person in a portrait, a group of people in a historical scene) and the negative space as the background (the part of the picture that isn’t as relevant or important).

Don’t think for one moment, though, that just because an audience is supposed to zero in on the figure that the artist is just going to forget the negative space—oh, no, no! What separates a good piece from a great piece is the attention the artist pays to negative space. Behind the sitter in Ginevra de’ Benci, for example, is a delicate background. Pull out your art reproductions booklet and examine the minute details that da Vinci expends on the trees, the river, the mountains in the far distance. Look how he carefully arranges the environment so you can see the winding river behind the subject’s shoulder, but the placement of the river doesn’t seem fake or posed; instead, it adds a sense of movement.10 He didn’t just slap Ginevra on a plain black background and call it a day. He spent a good amount of time on the background. He spent nearly as much time, perhaps, as much time, on the ground as on the figure herself. If you look at any of this year’s artworks, you’ll find a good amount of detail on the negative space. These artists aren’t famous years later for being cheap on their masterpieces and neglecting their grounds.

Painters are not the only artists to take positive and negative space into consideration: Sculptors, architects, and other three-dimensional artists need to keep these in mind as well. The negative space of a 3-D object can be the space surrounding it or spaces or holes in the

10 See how your eye naturally trails off to the right? It makes your eye wander around the page, instead of staying glued to one static, stationary object. That’s movement. It’s a good thing. A lack of movement is boring, which is a bad thing.
object. In relief sculpture\textsuperscript{11}, the figure either can project very far from its surface, in which case it is in \textbf{high relief}, or it can project only slightly, in which case it in what is referred to as \textbf{bas} (or \textbf{low}) \textit{relief}. An example of high relief might be a saint who’s quite nearly detached from a church relief, almost as though he’s stepping out of the wall.Bas relief might be the little Abe Lincoln on a penny.\textsuperscript{12}

How an artist manipulates positive and negative space can have a big impact on your reaction to an artwork. Closed spaces with lots of positive space will create a serene, stable feeling, whereas lots of open air and negative space will create a light and airy picture. If you’re in a coffin, you could hardly be more closed in, and I’m sure you’d be snug as a bug. On the other hand, if you were in a big, open field, you’d perhaps feel glad being in the warm air with fields of flowers surrounding you.\textsuperscript{13}

\section*{CRITICAL THINKING}

\textbf{Return of the Space Balls.} Write down what concept concerning space is illustrated here, and then label at least two figure/ground reversals.

\begin{center}
\includegraphics[width=0.4\textwidth]{space_balls.png}
\end{center}

\textsuperscript{11} Relief sculpture: When a sculpture protrudes out of another surface—when you carve something out of a wall, say. It’s the opposite of freestanding sculpture, which stands on its own and, if anything, is only connected to some sort of base. – Jessica

\textsuperscript{12} Last year at State there actually was a question about what kind of sculpture a one-cent coin is: bas relief or high relief. Well, that’s one question I know I got right. And I never thought of a penny as sculpture or art before. - Jessica

\textsuperscript{13} How much positive or negative space is good for an artwork is also a matter of opinion. An art teacher of mine liked to say that if a picture’s not good enough, you’re not close enough. But he was also an obsessed David Bowie fan, so… - Jessica
CRITICAL THINKING

More basic shapes, because they’re easy to draw. In spite of existing within the same plane (i.e., this piece of paper), these three boxes appear to be arranged to show different points in space. How does the primitive modern computer artist do this? Fill in your response to the left.

MATCHING

I definition I. Match the letter of the word on the left with its definition on the right.

a. Positive space (figure) 1. ____ Strong outward projection in a relief sculpture
b. Negative space (ground) 2. ____ The space that the prominent objects occupy
c. Bas relief 3. ____ Slight outward projection in a relief sculpture
d. High relief 4. ____ The space surrounding objects, shapes, and forms

TUTORIAL: COLOR

When a team of decathletes first examines a painting, its collective head spins with minute details. But if a child were to look at the same piece, the only thing that might be of any interest would be the colors involved. But what’s wrong with such a simplistic view of art? Color is a powerful tool of emotion by itself, and if manipulated carefully, it can be the most prominent, powerful element in a piece.

We begin an examination of color by starting at the bottom rung of the totem pole: the complementary colors. The primary colors consist of yellow, red, and blue, and the entire color system is based off them. When you combine equal doses of two of these primary colors together, you get an entirely new color. This new color would be one of the secondary colors—

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14 We dubbed the most awesome decathlete on my team (besides myself, of course) “Swifty Swift Totem Pole of Justice” because he was just that awesome. – Jessica
15 If you add all three primary colors (or two complementary colors) you will get some yucky variation of brown. A good brown color would have (more or less) one part blue, one part red, and two parts yellow. – Jessica
red and blue, for example, make violet. Blue and yellow make green. Yellow and red make orange. If you were to take a secondary color and add more of one of its component primary colors, you’d get yet another color. This new set of colors is referred to as the **tertiary colors**. If you were to take your violet and add more blue, you’d get blue-violet. More red in a violet would make red-violet. This naming scheme is consistent—tertiary greens are yellow-green and blue-green, and tertiary oranges are yellow-orange and red-orange. The over-achieving Sir Isaac Newton developed this system of color nomenclature, which he arranged into a circle, in the 1800s. It allows artists to visually predict the results of a combination of colors.

So, mixing colors will get you new colors. But up until now, we have been dealing with pure, undiluted colors—the natural **hues**. **Intensity** measures the brightness of a color. Pure, unadulterated colors are the brightest; primary colors, then, have the highest levels of intensity. But we can change the **value**—the lightness or darkness—of a color by adding black, white, or gray to the hue. If we wanted to make a color lighter, we would add white to that color to create a **tint**; conversely, by adding black to make a color darker we create a **shade**. For the record, black and white are not included in the color wheel because they’re not considered colors; rather, they are **neutrals**, as is gray, being some mixture of black and white.

Neutrals aren’t the only hues to get special names, though; every color can be divided into either **warm** (red, orange, yellow) or **cool** (blue, green, purple) colors. Furthermore, we can classify colors by their relationship to others.

**Complementary colors** are a set of colors opposite each other on the color wheel. Blue and orange are complementary colors, as are red and green, as are purple and yellow. Complementary colors will combine to form brown. **Analogous colors** are the colors next to each other on the color wheel. For example, yellow and yellow-green are analogous, because they’re butted right up against each other. A set of **triadic colors** could be made up of the three primary colors used together, the three secondary colors, or a threesome of any of the tertiary colors. Finally, a **monochromatic** color scheme would be one that is based around a single hue—a portrait painted exclusively in varying shades of blue, for example, would be monochromatic.16

Artists use these color systems—complementary, analogous, triadic, and monochromatic—to suit their needs. Different schemes not only create different emotional effects, but they also can alter the way an audience views the colors. Some of the color that we see is arbitrary: When certain colors are placed together, our brains may interpret them to have a stronger or weaker intensity, when in fact nothing has changed about the colors. It’s all about our perception. The new colors that we think we see are called **optical colors**. The actual colors of an artwork, without the effects of surrounding colors or special lighting, are called **local colors**.

Complementary colors make each other seem brighter and more intense, and these colors draw the attention of a viewer into a painting. Analogous colors are in harmony with each other, and their optical color isn’t drastically different from their local color. Triadic colors look chipper and energetic together. The effect of monochromatic color schemes depends on the color used. Since yellows are energetic, an artwork based in this color will take on that lively feeling too. Blue schemes are calming, but they carry a melancholic overtone. And so forth.

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16 Actually, if you took human skin colors from all over the world and arranged them into a value scale, there would be only slight variation in hue. —Laura
Color is one of those great things that makes life worth living. Because color questions appear so frequently on exams, you need to "get" this. Use colored pencils or markers to fill in the spaces with appropriate colors, and label the blanks that have not already been filled.

17 Georgia O'Keefe said this first.
IDENTIFICATION

Cats can be artists, too. For each of the following scenarios, list the color scheme that describes the situation given. Using the color chart from the last exercise might make this exercise easier, while covering up the chart can add an element of challenge.

1. Moorgyn wants to paint a calming forest scene. To reflect the soothing effect that this quiet forest scene invokes in her, she colors the trees, the burbling brook, and the cool grass in subtly different shades and tints of blue. This painting would be an example of ____________________.

2. Nikki decides to paint an energetic and chipper painting to represent the crazy but beautiful times we’ve had together. She uses yellow, yellow-green, and green to express the giddy, gleeful relationship that we have as pet and pet owner. This vigorous, active color scheme is referred to as ________________.

3. Scottie wants to express the futility and nihilism of this dark, dark world. She chooses not to use prismatic colors but rather ________________ colors, which consist only of black, white, or some gray in between the two.

4. Willie wants to show his fellow decathletes his dream of the Willie’s World theme park, and he wants his conceptual art to really stand out. His art director suggests that he use blue and orange as the main color combination, so that the two colors will make each other seem brighter. The color scheme that Willie’s art director is suggesting is called ____________________.

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18 “Nyaa! Nyaa!” is what my little cat would say if she were a Japanese kitty painting a picture. Moorgyn, the late, great Rottweiler family pet, would have said, “Wan! Wan!” if she had been inclined to speak in foreign onomatopoeia.
MATCHING

This exercise is like those edible candy bubbles, except less fun and not as edible. Match the following terms with their definitions. Each bubble will correspond with only one other bubble.19

19 I know it’s weird that I took up a whole page for definitions, but I think an art workbook needed some more, well, art. Plus, bubbles are super-cool. Just…not the edible ones so much. – Laura
TUTORIAL: TEXTURE

Imagine the familiar feeling of warm, scratchy grass beneath your knees; the cool, soft feel of a silken dress\textsuperscript{20}, or the bumpy, metallic hardness of a rusty automobile hood. The way these objects—or any objects—feel beneath your skin is referred to as texture. We don’t have to actually be kneeling on the park lawn or holding a prom dress to know what these surfaces are like, because these tactile experiences are ingrained in our memories.\textsuperscript{21} Artists take advantage of our prior knowledge and incorporate texture into their artwork. This texture can be actual or implied. Three-dimensional artists are the usual culprits of actual texture—ceramists can add tactile details to pottery or masks, sculptors can carve realistic hair or replicate rough hands on a sculpture, and collagists and muralists can stick shells, beads, twine, chewed gum, or other materials onto their artwork.

Sometimes a painter can incorporate actual, physical texture into his or her artwork. It’s called impasto, and painters achieve it by lumping large amounts of oil paint onto their painting surface. But for the most part, two-dimensional artists deal with implied texture, otherwise called visual texture. Artists employ lines, color, shading, and other artistic devices to mimic real texture, to create the illusion that the 2-D objects presented have the look and feel of their 3-D counterparts. Shiny objects dramatically reflect light, and thus a painter would incorporate stark shading and extreme areas of light and darkness to mimic this. Rough textures might have prickly brushstrokes. Smooth textures might be devoid of much variation.

COMPARISON

I hope you’re reading the footnotes. Decide whether the following art pieces would employ physical (“P”) or visual (“V”) texture.

Example: ___P___ the smooth surface of a life-size replica of a Gundam mecha

1. ___ P ___ an African ceremonial mask celebrating bad acne
2. ___ P ___ a da Vinci painting with grassy landscaping
3. ___ P ___ a Van Gogh painting of a starry night
4. ___ P ___ a collage of a beachcombing excursion, replete with souvenirs
5. ___ P ___ a portrait of a debutante in very expensive silks and furs
6. ___ P ___ Whistler’s *Mother* made out of stacks of foreign coins
7. ___ P ___ a photorealistic picture of Spock’s earlobe and slick, combed hair
8. ___ P ___ Michelangelo’s sculpture of *David*

\textsuperscript{20} Evidence that this was likely written by a Jessica, not a James.

\textsuperscript{21} It’s worth mentioning, while I’m throwing the word “tactile” around, that many people (myself included) are tactile/kinesthetic learners (as opposed to visual or audio learners). This means that these people learn best while doing something else, like eating, walking, or bouncing their legs. I also find my fact retention is stimulated by touching something with a lot of texture while I’m reading—a prickly stress ball, rough carpet, but especially my feet (yuck, right?). Sometime when you’re DemiDecking, you should try doing some kind of physical activity or experimenting with texture. It might help. – Jessica
ANALOGIES

All together now. Complete this list of analogies from the elements of art.

1) implied line: overlapping of two separate shapes :: actual line: __________

2) shape: circle :: form: __________

3) fading colors: atmospheric perspective :: orthogonals: __________

4) red, yellow, blue: __________ :: red, orange-red, orange: analogous

5) black: shade :: white: __________

6) colorless scheme: __________ :: opposite colors: complementary

7) trompe l’oeil rendering: visual texture :: sandpaper: __________

8) ground: negative space :: __________: positive space

9) geometric: mathematical :: freeform: __________

10) modulated: contour :: high: __________

11) Louis Daguerre: daguerreotype :: Filippo Brunelleschi: __________

12) impasto: texture :: relief: __________

13) orange: warm :: __________: cool

14) blue: orange :: yellow: __________
### MATCHING

**Elements recap.** I know how you all love learning new art vocabulary terms. So to make sure you remember the terms for the art elements and hold them dear to your heart, write the letter of the matching word with its definition. (Not all answers are used.)

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<table>
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<tbody>
<tr>
<td>1</td>
<td>the most basic element of art</td>
<td>a) neutrals</td>
</tr>
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<td>2</td>
<td>colors adjacent to one another on the color wheel</td>
<td>b) linear perspective</td>
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<tr>
<td>3</td>
<td>variations of a hue using gray values</td>
<td>c) isometric perspective</td>
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<td>4</td>
<td>the way an object appears under normal lighting</td>
<td>d) draftsmanship</td>
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<td>5</td>
<td>the visible boundaries of a picture</td>
<td>e) figure</td>
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<td>6</td>
<td>distinguishable objects</td>
<td>f) modeling</td>
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<tr>
<td>7</td>
<td>the use of shading to create convincing areas of light and dark</td>
<td>g) geometric</td>
</tr>
<tr>
<td>8</td>
<td>shapes associated with emotion and freedom</td>
<td>h) organic</td>
</tr>
<tr>
<td>9</td>
<td>black and white</td>
<td>i) shape</td>
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<tr>
<td>10</td>
<td>a thick coat of paint used to create texture</td>
<td>j) line</td>
</tr>
<tr>
<td>11</td>
<td>a type of sculpture that projects from a surface</td>
<td>k) local color</td>
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<tr>
<td>12</td>
<td>perspective which does not take into account the effect of lines receding toward a vanishing point</td>
<td>l) arbitrary color</td>
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<tr>
<td>13</td>
<td>red, blue, and yellow</td>
<td>m) impasto</td>
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<tr>
<td>14</td>
<td>perspective which shows the effects of atmosphere</td>
<td>n) relief</td>
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<tr>
<td>15</td>
<td>properly planning and sketching the dimensions of a work</td>
<td>o) tones</td>
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<tr>
<td></td>
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<td>p) tints</td>
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<td></td>
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<td>q) analogous</td>
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<td></td>
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<td>r) aerial perspective</td>
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<tr>
<td></td>
<td></td>
<td>s) primary triad</td>
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<td></td>
<td></td>
<td>t) picture plane</td>
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PRINCIPLES OF COMPOSITION

The principles of composition, otherwise known as the formal properties, are used to organize artwork and the elements within it in a meaningful, effective way. The USAD lists rhythm, movement, pattern, balance, contrast, emphasis, variety, proportion, and unity as the basic principles, but be aware that other art academics will add or subtract from this list.

TUTORIAL: RHYTHM (MOVEMENT AND PATTERN)

Rhythm could be translated as movement or pattern. When an artist repeats some element of art—shape, color, or line, for example—movement is created. This pulls the viewer’s eyes across the page in a rhythmic pattern, which is pleasing to the eye and creates interest. By using rhythm, an artist can direct our attention to the places where he or she wants us to focus, as well as adding a sense of movement and even, perhaps, tension or excitement to the work.

There are different kinds of rhythm. A random pattern in an artwork can be created by placing shapes, colors, or lines haphazardly, without organization. This is somewhat akin to if you were to drop a bag of Bottlecap candies onto a table. The candies would be the same shape and size, but they wouldn’t be arranged in any particular order; the colors would be different, and there would be different-spaced gaps between them. If, however, instead of scattering the candies everywhere, you were to take those Bottlecaps and sort them into a pattern that switched its colors in a regular pattern (purple-red-orange-brown-purple-red-orange-brown…), then you would have created an alternating pattern—a pattern in which two or more motifs are switched, which tends to be visually appealing.

A motif is a single aspect in a pattern that is repeated. If you were to gaze upon your grandmother’s aging bathroom wallpaper, you’d see a motif or two repeated over and over again.

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22 Just like there are different kinds of zombie movies. Examine George Romero’s masterpieces next to something like Shaun of the Dead. Just not the same. – Jessica

23 All this talk of randomness makes me think of chaos theory, which makes me think of Jurassic Park. I bet Ian Malcolm would rather drop a bag of Peanut Butter M&M’s on the table any day. There were a lot of factual errors in the book, I should mention, which made me really sad and/or furious. A Jeep could totally outspeed a tyrannosaurus… - Jessica
Again. A **pattern** is the repetition of one or more motifs or elements. We can look back at the organized Bottlecap example and appreciate the repetition of the delicious colored sugar concoctions: Each color is organized into a pattern, and the pattern is repeated.

**IDENTIFICATION**

Determine whether the following scenarios are representative of motif (a single element or elements) or pattern (an organized construct of motifs). Circle “M” for motif or “P” for pattern.

| M | P | Example: The wildflowers and seashells on my grandpappy’s kitchen wallpaper. |
| M | P | Example: The series of wildflowers and seashells on my grandpappy’s wallpaper. |
| M | P | 1. The buttons arranged on a keyboard (ignoring the letters and symbols) |
| M | P | 2. A computer keyboard (ignoring even more letters and symbols) |
| M | P | 3. One of several Corinthian columns supporting an ancient temple |
| M | P | 4. A stack of CDs |
| M | P | 5. A lineup of septuplet siblings |
| M | P | 6. A box of crayons |
| M | P | 7. One volume of an encyclopedia |
| M | P | 8. A row of adorable newborn alpacas |

**IDENTIFICATION**

**Rhythm of life.** Identify which descriptions based on actual paintings would most likely show rhythm, and mark them with an “R.”

Example:

A series of lines of similar height and width arranged at different angles (R)

Three flat panels of gray values

| 1. | Repetition of shapes and colors |
| 2. | Rows and rows of Campbell’s soup cans |
| 3. | A row of men working in a field, all wearing white hats |
| 4. | A man working in a shop, using similar colors and angles |
| 5. | A serene painting of the sea, using an analogous color palette |
| 6. | A trompe l’oeil rendering of a still life |
TUTORIAL: BALANCE

Balance is the distribution of visual weight that you place in your artwork—it’s much like rhythm in that you worry about organization in your piece, but it’s different in that balance concerns itself more with the distribution of objects. The simplest form of balance is symmetrical balance. Symmetrical balance can be achieved in an artwork by placing identical halves of a picture on both sides of a central axis. Outstretched angel wings are symmetrically balanced, as is the body of a normal human being facing the front. So are French double-doors. So is the Pantheon. Any object or artwork that has equally situated objects on either side of a (perhaps invisible) line would be considered symmetrical. This style of artwork was revered by the classics, as it lends a dignified, formal feeling to the piece. It also makes an artwork look more stable.

Symmetrical balance in an artwork, however, usually looks forced and stiff. In more recent times, approximate symmetry has become more popular, even among more academic or formal circles. Approximate symmetry is a more casual form of symmetry—objects are about equal on either side, but no one pulled out a tape measure to make things completely even. An angel might have one wing droopy or perhaps pulled taut against the back, as if turning, versus the equally outstretched wings of a symmetrical angel. An artist might position a sitter in a portrait so that one side is favored, while another is slightly hidden, but the figure is arranged so that the two halves still fill each side of the artwork about equally.

Now, if you wanted to impress your hip, modern friends at the café, you’d probably want to whip out the last form of balance, asymmetrical balance—balance without symmetry. The angel has only one wing. The human is turned to one side, positioned on one side of the artwork. It’s just not symmetrical. Just because you’re positioning things in a non-symmetrical balance, however, doesn’t mean you can just slack off. Asymmetrical artwork is more complicated than the other two forms if you still want to maintain balance in your artwork. You could keep balance in your asymmetrical artwork through:

- **Modifying position**: Position larger objects, or objects with more visual weight (bright, intense color, for example) near the center, while positioning smaller objects, or objects with less visual weight (dull, boring color, for example) near the edge.

- **Varying visual weight**: A small but detailed object will balance quite nicely with a large, boring object. Likewise, a small but textured object will balance out a large, smooth object. Small objects with more color, more value, or more of any form of visual weight will balance out a large object with less visual interest.

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24 Well, actually, you can have more than one central axis. One central axis would be like folding a paper, hot-dog style. You could add more axes by also folding the paper sandwich-style, and so forth. You just would have to remember to keep everything symmetric. Remember those crazy paper fortune-tellers you made as a kid? They’re excellent examples of well-done multiple axes. The sides are even, even though the paper has been folded numerous times. – Jessica

25 Or perhaps mangled by George Romero’s zombies… - Jessica

26 I was supposed to have some of my artwork displayed at this one café downtown, but the silly lady never called me back. I never even got to show her my hip, modern asymmetrical artwork! – Jessica
FILL IN THE BLANKS

I hope you’re reading the footnotes, part two: The Rejection Letter. The mean lady at the café has not returned my phone calls, and I know I got the number right this time. Therefore, I’m writing her a letter telling her that it is she, not I, who is being rejected. Fill in the blanks of my letter with the appropriate words.

Dear Waitress at Hip Downtown Café:

I feel sad and depressed and angry that you have decided to snub me, so I think this relationship is coming to a dead end. Before we part ways, though, I think you should realize the beautiful things you could have experienced.

For instance, you never got to see my painting of the grand Victorian mansion my grandparents bought. It had three bay windows on the right side, and to make it symmetrical I added 1 ______________ to the left. But I know your kind doesn’t like symmetry, so I painted a series of beautiful asymmetrical paintings. In my first one, I had a small, brightly colored goldfish on one side, so I added a 2 ______________ goldfish to make it even. Then I had a picture of two kids on a seesaw. One was enormously fat, so I put him in the 3 ______________, and since the other was horrifically skinny, I put her on the 4 ______________. Then I had that photo of some different balls. I put the 5 ______________, heavily textured hairball my cat coughed next to the 6 ______________, smooth contact-juggling ball. It was pure genius!

This is just a glimpse at the pure creative giant that you could have buddy-buddied with. But instead, you threw it all away. I hope you’re happy! Because I’m certainly better without you!

No regrets at all! I don’t even miss you!

~ Jessica Sacs
LABELING

Balance basics. For each subject matter listed, indicate which type of balance most likely would be used. Choose from symmetry, asymmetry, and approximate symmetry.

1.) a stable, unchanging religious theme
2.) a large, wealthy family’s portrait
3.) a landscape
4.) a dynamic photograph of a thunderstorm
5.) a logo for a cutting-edge design company

TUTORIAL: CONTRAST, EMPHASIS, AND VARIETY

Contrast, emphasis, and variety all are principles of composition that pertain to the amount of interest generated in a piece. **Contrast** refers to the variation of line, color, shapes, and other elements of art in a work. An object that stands out more than other surrounding objects, due to the amount of contrast that the artist has lavished upon that one object, is called a **focal point.** The viewer’s attention will be mainly concentrated on this object. Without a focal point, the artwork will look uniform and bland, terrible and monstrously boring.  

**Emphasis** is the dominance or importance that an artist places on some part of the artwork. Understandably, when an artist chooses to emphasize an object, that object often becomes the focal point of the composition. Without contrast and emphasis, an artist’s creation would be more wallpaper than art, suitable for bathrooms but not for stimulation of one’s inner creative genius. By making sure that the artwork isn’t just some boring, repetitive, monotonous piece, an artist creates **variety.** Contrast, emphasis, and the variety they produce serve to generate interest in the artwork, which is, one assumes, what an artist hopes to instill in his or her audience.

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27 Much like that accursed Saw film. What a waste of a plot. >:S
SENTENCE COMPLETION

Circular arguments. For each sentence below, decide which word or words would best complete the thought. Circle the correct answer.

Example: This workbook’s author’s favorite composer of all time is (DANNY ELFMAN, JOHN WILLIAMS), who also used to play rhythm guitar.28

1. Contrast and (EMPHASIS, VARIETY) combine to make (EMPHASIS, VARIETY).
2. (CONTRAST, EMPHASIS) is the variation of one or more elements of art in an artwork.
3. (FOCAL POINT, EMPHATIC POINT) is the area or element of a composition that an artist has made to stand out or contrast with the rest of the piece.
4. (CONTRAST, EMPHASIS) is the dominance or importance that an artist has placed on some part of the artwork.

TUTORIAL: PROPORTION

If you really want to impress someone, you give him something really big, right? Burger chains are forever trying to make their McBizzaWow sizes even larger28 and more McBizzaWow-ish to attract more fry-hungry customers. Churches always tried to make their buildings more elaborate and expansive in an attempt to capture the awe and imagination of their congregations. When we talk about proportion, we’re talking about the size of one thing compared to other things—the relationship of sizes of objects in some group. Scale, crucial to proportion, is the comparative relationship of some object in an artwork to the entirety of the artwork; the one piece compared to the whole picture.

An artist must consider proportion when he or she sets down to work. Should such-and-such object loom over everything else in the artwork, dominating the piece with its humongousness? Some people, many of whom cannot get a big enough McBizzaWow, think that more is better. These people are impressed by looming architecture, big portraits, and other obvious power plays, and artists appeal to this love of largeness by making their art, or the figures within it, momentous and powerful. Think of the big Medici palaces and the art within them. On the other hand, though, should a figure intrigue people with its smallness? Imagine the faces of the onlookers in Fra Angelico’s Adoration of the Magi. Certainly, the main figures are interesting, but our attention is quickly diverted to the small features of the worshippers. How interesting! How intriguing! And the appeal of these people is amplified by the fact that we have to squint to see them clearly; they’re not all “in our face,” demanding our attention. We come to them. And so is the appeal of small objects in comparison to their larger counterparts.

The ancient Greeks determined the realistic ratios of the human body about 2500 years ago. They determined, for example, that the body is about seven and a half head-lengths high, and

28 And you thought he only wrote movie scores! From 1979 to 1995, Elfman was frontman, vocalist, rhythm guitarist, and writer of the music and lyrics for Oingo Boingo, the greatest band in the whole world, ever! Viva la Weird Science!
– Jessica
29 How hard could it be, though? They just have to use bigger patties. And more patties. – Dan
that the bottom of the nose rests halfway between the chin and the corners of the eyes. These Greek standards of perfect body ratio have been altered through the millennia to match society’s views on beauty. But on top of body and face ratios, the Greeks also came up with the golden mean (or golden section)—a very pleasing ratio of approximately three to five (3:5), which artists use to organize their compositions. It was lost for a while, but the plucky artists of the Renaissance found it again. The golden mean continues to this day to be a standard in formal composition.

**SENTENCE COMPLETION**

More fun with circles. As before, circle the word to make the sentence complete.

1. (PROPORTION, SCALE) concerns itself with one object compared to the artwork as a whole.
2. (PROPORTION, SCALE) concerns itself with one object compared to other objects.
3. The golden mean is also known as the golden (SCALE, SECTION).
4. The golden mean was (DISCOVERED, REDISCOVERED) during the Renaissance.

**INDENTIFICATION**

Art meets math. Fill in the respective numbers for each specification.

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<tr>
<td>1)</td>
<td>Number of heads high the average person is</td>
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<tr>
<td>2)</td>
<td>When the Greeks began using the Polykleitan canon of proportion</td>
</tr>
<tr>
<td>3)</td>
<td>How many eyes wide a person’s face is</td>
</tr>
<tr>
<td>4)</td>
<td>How many hands wide a person’s face is</td>
</tr>
<tr>
<td>5)</td>
<td>The golden mean</td>
</tr>
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</table>
TUTORIAL: UNITY

Imagine being scared silly by a really scary old woman who is walking down the street. This woman doesn’t scare you so much because she is a really scary old woman but rather because of her atrocious fashion, which of course offends the sensitive art sensibilities that you have thus far acquired from this workbook. This particular woman is wearing, much to the chagrin of your honed decathlete skills, a yellow shirt with polka dots, and a purple-and-green striped bottom. Her outfit kinda clashes, because the colors and the lines and shapes in her clothes are mismatched and misplaced. This example demonstrates the importance of unity—the harmony or “all-togetherness” of the different elements of an artwork. You can achieve a state of blissful unity in your artwork by:

- applying the principle of similarity, or placing similar elements together. When similar objects aren’t all placed together, similarity drags the attention of the viewer from one similar element to another: from red to another red, from fuzzy texture to another fuzzy texture, so on and so forth.
- applying the principle of proximity, or the placement of individual objects near one another or in little bunches. Like similarity, this draws the eye from one group of objects to the next.
- applying the principle of plain ol’ commonsense, or using your knowledge of formal properties, your artistic sensibilities, and your pretty little eyeball to manipulate the elements and composition to look pleasing and interesting.

Notice how proximity and similarity both involve the movement of the eye from one object or element to the next? This movement of the audience’s attention is called continuity. It also can be achieved by either implied or actual lines.

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30 Remember those fuzzy posters from your childhood? I still have my furry Celtic design hanging on my wall—well, okay, the back of my closet. Speaking of which, does anyone remember Lisa Frank? Her designs lately are disappointing. I should mention that the Lisa Frank company is based in Tucson, Arizona. Go Tucsonans! Go me!
IDENTIFICATION

I bet you can’t tell what my favorite type of exercise is. Determine whether the following instances of unity are representative of proximity “P” or similarity “S.”

P  S  **Example:** Throwing all my multi-colored goldfish to one side of their tank

P  S  1. A painting of my goldfish, in which the goldfish are all the same golden color

P  S  2. Many maids-in-waiting huddled together in the lower righthand side of a historically accurate artwork

P  S  3. A picture of scattered haystacks strewn across a rustic landscape

P  S  4. A dirty clothes hamper in a corner of your closet, garments strewn around the bin

P  S  5. A painting with shifty-eyed monkeys hidden throughout the jungle landscape

P  S  6. A photo with dozens of multi-racial hands coming up from the bottom of the picture

---

31 This was a photograph displayed at a Tucson high school photo competition. Sadly, it wasn’t mine. - Jessica
TUTORIAL: DRAWING

Primitive French cave dwellings. Small children’s doodles. Leonardo da Vinci’s sketchbook. The Perry Bible Fellowship and Dinosaur Comics. These very awesome pieces of artwork all employ the technique of drawing. Drawing is the most basic of artistic applications, and predictably, the most basic of techniques uses the most basic of artistic elements—line.

Drawing involves making marks on a 2-D plane with some sort of medium. The drawing media usually used today include pens, pencils, markers, pastels, charcoal, pen and ink, and crayons. But you could use any tool that leaves a visible trace—a chunk of sulfur rock, say, or the top of a greasy-haired kid’s head. The type of medium used will determine the kind of lines made, whether the lines are thin and dark, like scribbles made with a pen, or thick with paper showing through, like strokes made with charcoal. Nowadays, we usually use paper as a drawing surface.

Drawing is a two-dimensional practice, but we can make our drawings mimic three-dimensional objects with shading techniques. Shading creates an illusion of volume by simulating the effects of light on an object. Shading can be achieved in a variety of ways.

For pens, pencils, and charcoals:

- varying the pressure of the medium on the paper
- hatching—drawing lines close together to indicate increasingly dark areas
- cross-hatching—drawing criss-crossing (or cross-hatching) lines to indicate increasingly dark areas
- stippling—using dots to create shading (dense clusters of dots indicate darker areas, while spread-out groups of dots indicate lighter areas). This method always reminds me of stubble.

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32 Two very awesome Web comics. Dinosaur Comics can be found at www.qwantz.com and the Perry Bible Fellowship can be found at www.thepbf.com. Go on—check them out! I’m all over very awesome Web comics. You should be too!

33 Awesome Web comic designers eventually end up modifying their drawings on a computer, though, or so I’m told. Also, if drawing on walls was good enough for our Neanderthal ancestors, it should be good enough for decathletes.
For pen and ink:

- Besides using any of the above techniques, we can create a wash by diluting opaque ink into something a little more translucent by adding water to the ink. Creating areas of lighter ink adds to other shading effects.

Any shading techniques that can be done with black-and-white media (i.e., the four media I’ve mentioned thus far) also can be performed with colored media. Colored pastels, which became popular in the 1700s, are easy to blend (and thus, they are easy to shade with), but the pastels themselves are easy to break. Also, artworks created with pastels need to have some sort of fixative sprayed on them or else the pastels will smudge and smear. Colored pencils have all the advantages of pastels, but they don’t break or smudge as easily.

IDENTIFICATION

The following pencil image scenes were completed by computer stunt doubles. For each pencil-shaded square below, determine what kind of shading technique was used. Each technique will only be used once.

1. ________  2. ________  3. ________  4. ________

DEFINITION

Drawn to you. Define each of the following drawing terms:

1) Crosshatching______________________________
2) Binder______________________________
3) Pen and ink______________________________
4) Stippling______________________________
5) Conte______________________________
6) Pastel______________________________
7) Gesture______________________________

34 You can buy an expensive fixative at any art store, but an old artists’ trick is to smother art media you don’t want to smear, such as pastels and charcoal, with aerosol hair spray. It doesn’t work quite as well, but it’s cheap, and hair spray is easy to obtain. – Jessica
DEFINITION

Drawing Scenario number one. Fill in the blanks with appropriate terms.

You’re making a drawing, and this time you’ve decided to use graphite pencil. You begin by sketching with a very light ____ pencil because you might have to erase. Afterwards, you shade with a darker ___ pencil to add more __________. You shade a cylinder using the technique of __________ with slight changes in the thickness of each line, without forgetting to use ____________ to show the curve at the base of the cylinder. You shade a sphere using the technique of __________ because dots are perfect for the particular aesthetic you desire. You also add a self-portrait in the middle of your drawing using the shading technique called _____________, which makes use of criss-crossed lines.

ANALOGIES

It’s pretty self-explanatory. Fill in the following blanks with vocabulary terms:

A.) cartoon:__________ :: sketch:oil painting

B.) opaque:translucent :: ________:12H

C.) pencil:charcoal :: pen and ink:_______

D.)_______:trompe l’oeil :: stippling:chiaroscuro

E.) tenebrism:chiaroscuro :: photorealism:_____

F.) light:modeling :: ________:texture

G.) organizational line:gesture :: hatching:______
TUTORIAL: PAINTING

A painting is a piece of art, usually two-dimensional, created with paint. And what is paint, you may ask? **Paint** is a medium composed of pigments, binders, and (perhaps) solvents. **Pigments**, natural or synthetic ground materials, are what make paint colorful, while the **binder** is what holds the pigments together and allows the paint to stick to a surface. Additionally, a **solvent** can be added to change the paint in some way—to thicken it, to thin it out, to speed up or slow down its drying time, or to make the paint do your AP calculus homework. Of course, the reaction between your paint and your solvent depends on what kind of solvent you’re using. Some of the first paintings were executed by the process of **fresco**. **Buon fresco**, or “true” fresco, is a process in which water and pigments are painted onto the wet plaster of walls or ceilings. The paint dries along with the plaster, so it’s permanently fixed into the wall—the fresco, then, will last as long as the plaster does. The only catch is that you have to apply only as much plaster as you can finish painting before the plaster dries, and you don’t have the luxury of making mistakes. But another kind of fresco, **fresco secco**, is less strict about all that—the paint is applied after the plaster’s already dried and done for. The paint doesn’t adhere to the plaster as well as in buon fresco, but at least you don’t have to be so rushed and precise about your artwork.

Maybe you know that there are more kinds of paint than your childhood fingerpaint. In fact, there’s more paint than you could shake a paint brush at! Check out some of the AcaDec varieties:

- **Oil**: When you think old, stuffy, formal paintings, you’re probably thinking of oil paint. Or at least you should be. But the funny thing is, oil didn’t become popular until the 1400s. Oil is great, partly because it allows artists to achieve realistic tones and colors. Also, you can create **glazes** (thin, semi-transparent layers of color painted on top of existing layers) to subtly change colors. In addition, you can create visual texture, or **impasto**, by chucking great big lumps of paint onto the surface of your art. Another reason that makes oil paint so lovely is that it takes a while for oil to dry, which is great for leaving your artwork for a while and then coming back and picking up exactly where you left off. All in all, oil was a great replacement for its earlier predecessor…

- **Tempera**: The paint you played with in elementary school. Tempera’s been around for ages and ages, and in the good ol’ days it was bound with egg yolk—yum. It’s now bound with water (thus making it a water-based paint). Tempera was a big hit in Egypt, Rome, and other places, and to this day, modern art audiences could, given the right access, see ancient tempera paintings that still contain their bright, vivid colors. However popular it was among the ancients, though, few people use tempera now, for several quality reasons:

35 So, while you should be thinking “old and stuffy,” you shouldn’t be thinking too old and stuffy. – Jessica
36 From personal experience, however, oil’s slow drying time is a pain in the bum when it comes to fixing mistakes. – Jessica
37 I’m no Emeril, so correct me if I’m wrong, but don’t you add water to scrambled eggs to make them fluffier? Is tempera not making you hungry just thinking about it? And am I the only one who has made the tempera = tempura connection? – Jessica
38 Except first-graders, apparently. Shouldn’t we be encouraging artistic tendencies in children by giving them better quality art supplies? For a better American education: Vote Jessica Sacs for President, 2008! - Jessica
Tempera is a fast-drying paint (as opposed to oil, which has a slow, slow drying rate), so artists have to paint quickly and with thin layers.

Tempera colors don’t mix, so you have to place colors beside each other instead of blending the colors together.

Tempera colors have a narrow tonal range, meaning there isn’t as wide a variety of colors as there are in other paints. You’re stuck with a certain set of colors (because, once again, you can’t mix colors to make new ones).

- **Encaustic**: A wax-based paint, applied onto the painting surface with a hot iron. The ancient Egyptians painted grave markers with encaustic. Some modern artists are picking up encaustic again, sans the emphasis on death ceremonies.

- **Gouache**: Another water-based paint. It’s like school-quality tempera, the USAD assures us, but better. It’s brighter and doesn’t dry very fast. It’s used a lot in contemporary fine arts.

- **Watercolor**: This may come as a surprise, but watercolor is the third and last water-based paint in the guide. Watercolors are transparent, unlike the opaque gouache, and are very unforgiving about mistakes. Because watercolor paint sets generally lack a white, watercolor tints are instead made by adding water to a color, dampening its intensity.

- **Acrylic**: The newest of the paints, it’s a polymer (i.e., plastic) paint. It’s great for people with allergies to oil paint or the accompanying paraphernalia (like turpentine), and you don’t have to (1) lay down some paint, (2) wait for it to dry, (3) add more layers, (4) wait some more, (5) repeat process repeatedly, as you do with oil. It’s also cheaper and needs fewer accessories than oil—you have to buy a lot of things besides the paint itself to paint in oil (e.g. turpentine)—but some of the subtle color play that makes oil so life-like is, sadly, lost. Personally, though, I feel acrylic is often the best choice for today’s artists, and I’m not just saying that because Acrylic is my nickname.

Paint tubes were a big contribution to the art community when they were invented in the late 19th century. Instead of being chained to a studio, artists could take their pre-mixed paints and go outdoors. This change of scenery influenced the work that painters were producing; the rise of Impressionism coincided with the invention of the paint tubes. Now, however, there’s a movement to go back to the old ways of mixing your own pigments. When you create your own colors in this fashion, you can produce a wider spectrum of colors than is available to buy commercially.

---

39 I’d like to point out that the USAD mentioned school in all three of the water-based paints. Merely a coincidence? – Jessica
40 To each her own. I’m a huge fan of oils, so nyah! — Laura
41 I’ve been doing this the last two days with a toothpaste tube. – Dan
IDENTIFICATION

…and Betty, when you call me, you can call me Ack. From the word bank provided, describe each of the following paints. Words can be used more than once. Use only the information provided by the USAD and this workbook for this exercise, meaning that if it wasn’t mentioned, don’t worry about it—fear not about being tested on encaustic tonal range, for example.

<table>
<thead>
<tr>
<th>OBJECT BANK</th>
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<tbody>
<tr>
<td>water-based</td>
</tr>
<tr>
<td>wax-based</td>
</tr>
<tr>
<td>polymer-based</td>
</tr>
<tr>
<td>was egg-bound in past</td>
</tr>
</tbody>
</table>

1. Tempera:
   a. ___________________
   b. ___________________
   c. ___________________
   d. ___________________

2. Acrylic:
   a. ___________________
   b. ___________________
   c. Jessica’s favorite paint

3. Watercolors:
   a. ___________________
   b. ___________________
   c. ___________________

4. Oil:
   a. ___________________
   b. ___________________
   c. ___________________

5. Encaustic:
   a. ___________________
   b. ___________________
   c. ___________________

6. Gouache:
   a. ___________________
   b. ___________________
   c. ___________________
IDENTIFICATION

Repeat, please. This exercise is similar to the one above, only reversed. Label each type of paint or material beside each description.

A.) __________: substance applied to oil paintings after they have dried for at least six months

B.) __________: water-based paint that is often used concurrently with watercolor

C.) __________: synthetic paint with a plastic binder

D.) __________: type of paint made with gum Arabic, glycerine, and raw pigment

E.) __________: paint that uses linseed oil as a binder and turpentine as a thinner

F.) __________: paint that uses a milk protein binder

G.) __________: most permanent form of paint

H.) __________: liquid mixture that is used to prime surfaces for painting

I.) __________: water-based paint traditionally made using egg as a binder

IDENTIFICATION

Just the facts, ma’am. Fill in the blanks.

1.) __________ is created through thick application of paint, often with a paint knife.

2.) Name one difference and one similarity between watercolor and gouache.

________________________________________________

3.) Casein is ________________________________.

4.) __________ is the traditional Egyptian method of painting that uses hot irons.

5.) ____________ is a type of paint that uses plastic as a binder.

6.) Who is Eugene Chevreul?
TUTORIAL: PRINTMAKING

With all of the above processes, the art you create is a one of a kind. After you draw a drawing or paint a painting or sculpt a sculpture, that’s it. You can take a picture or make a copy, but those things are merely replicas. Now, however, you’re going to be an introduced to an art process that can make multiple original artworks as many times as you please—printmaking! The USAD lists several printmaking methods, all of which involve creating an image on a plate (which ends up as the “latent image”) and printing that image. The four main categories of printmaking are:

- **Relief printmaking:** A process in which you carve out an image from a plate made of linoleum, wood or synthetic materials. The parts that you leave behind are the parts that get printed; in other words, you carve away the negative space and leave behind the figure. After you’re through carving, you ink the plate with a **brayer.** Brayers look like smaller versions of the rollers you paint your walls with. When your image is inked up, you lay a piece of paper on the plate and press the two together with another roller called a **burnisher.** Lastly, you peel the paper off the plate and hang up your artwork on your mum’s refrigerator.

- **Intaglio printmaking:** The opposite of relief printmaking, you carve into the plate with the intention that the lines that you cut out will become the positive space. When you’re done with the carving, you ink the cut-out lines and these become the printed figure. Basic intaglio printmaking is called **engraving.** A more advanced version of intaglio is **etching,** in which you carve lines into a coating of wax or varnish covering a piece of copper. Then the plate is chucked into acid, which eats away at the copper you exposed when you carved into the coating. Leaving the plate in acid for only a little while will cause the plate to print light lines, while a long exposure time will make it print darker lines.

- **Lithography:** A process in which you draw an image straight onto the plate with a waxy pencil or crayon. The image is left to harden, and then the plate is drenched with water and covered with ink. Since water and oil aren’t friends, the oily ink will cling to the greasy image only. Finally, the plate and a piece of paper are smashed together with a press. To be good at lithography, you only have to know how to draw, so considering the finesse and keen sense of line that you have to possess to be proficient at relief and intaglio printmaking, lithography’s a cop-out.

- **Screen printing:** The printmaking that you wear! Most commonly used in the production of T-shirt images, screen printing involves transferring a photograph or other picture onto a piece of screen, which is silk or synthetic fiber stretched across a frame. Then ink is transferred through the frame and onto paper (or a T-shirt!) with a squeegee.

---

42 Linoleum gets hard over time. My freshman art teacher gave my class some really stiff stuff, and we were carving with sharp tools. Therefore, some people cut themselves very badly trying to carve into the plates, including one person who wouldn’t stop bleeding and had to be rushed away to the nurse’s office. Printmaking isn’t really considered dangerous, but there are certain precautions you have to take, like carving away from your hands and body. Just a friendly public service announcement for the decathlete who wants to try her hand at printmaking.

43 There was a chart for this in our printmaking lab—each value had a certain exposure time assigned to it. My professor also posted a series of gentle reminders like, “Hey, boneheads, turn off the hot plates!” —Laura
FILL IN THE BLANKS

But I’m not responsible enough yet to be a teacher. My old high school art teacher has gotten sick, and for some reason I’m the only person left in Tucson with any inkling for art. The generous person that I am, I offer to cover for her. But whoa, I don’t remember anything about printmaking, and what’s more, I’ve spilled coffee all over her lecture notes! Fill in the following blanks with the appropriate answers. The number (2) after a space indicates a two-word answer; all other answers are one word.

<table>
<thead>
<tr>
<th>OBJECT BANK</th>
</tr>
</thead>
<tbody>
<tr>
<td>burnisher</td>
</tr>
<tr>
<td>etching</td>
</tr>
<tr>
<td>positive space</td>
</tr>
<tr>
<td>Jessica</td>
</tr>
</tbody>
</table>

Hello, my name is Jessica. Printmaking is the process of creating original artworks. Relief printmaking involves carving away the (2) while leaving the (2) as is. Ink is applied to the carved plate with a while the paper is pressed onto the plate with a . Intaglio is different from relief printmaking because what you carve becomes your (2) instead of your ground, as it is in relief printmaking. When you carve out lines and then force ink into them, it is called . The process of carving into a wax or layer on a plate is known as . Writing on a plate with a wax crayon or pencil is the process of . This is a kooky printmaking method that works because of the principle that repel each other, and so the greasy ink only applies itself to one of them, the part of the image that doesn’t have any on it. Lithography’s really a cop-out compared to other forms of printmaking, according to what someone told me once in a Panda Express washroom. Images are imprinted onto T-shirt fabric through the process of (2). After printing an image onto a silk or synthetic screen, ink is pressed through the frame with a .
CRITICAL THINKING

(No cheating, but this is discussed in the fundamentals guide). In the space provided, please give a brief explanation of why individual artworks created with printmaking processes are generally worth less monetarily than other forms of artwork. Also, give an example of how this value reduction has been beneficial to certain people in the past.

_____________________________________________________________________________________
_____________________________________________________________________________________
_____________________________________________________________________________________
_____________________________________________________________________________________
_____________________________________________________________________________________
_____________________________________________________________________________________
_____________________________________________________________________________________

CRITICAL THINKING

Separation anxiety. Assign the following printmaking elements to their respective categories:

burnisher, frottage transfer, brayer, burr, crible, mezzotint, aquatint, etching, soft ground, jigsaw method, limestone block, metal, wood, linocut, collagraph, register, waxy crayon

<table>
<thead>
<tr>
<th>Relief</th>
<th>Intaglio</th>
<th>Lithography</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>
TUTORIAL: SCULPTURE

When you think of sculpture, what is the first thing that comes to mind? Something that’s three-dimensional, right? When I think of the word “sculpture,” I usually get a mental image of Michelangelo chiseling away in some drafty, dust-coated room with pieces of rock flying, but…well, that’s not the only way it’s done. Michelangelo’s method of carving away stuff is called subtractive sculpture, but you also can make sculptures using an additive method.44

When someone makes an additive sculpture, he or she is probably adding (self-explanatory, right?) clay or some other malleable substance to an armature, or frame. Modeling is one way of making an additive sculpture, which is why modeling clay is called, well, modeling clay.45 If you were to make a really big, clay homage to Gumby for your front lawn, you would need a massive armature to support the weight of all the clay you would add to the surface. But then, who has time for all that? Therefore, most really huge additive sculptures are made from longer-lasting materials using rigid metal fabrication techniques, like soldering and welding.

Another traditional way to make a sculpture is by casting a form in bronze or another type of metal. Lost-wax casting is a method characterized by creating a wax form, covering the wax in some type of metal, and then melting the wax from within to reveal a hollow cast shape.

CRITICAL THINKING

Make like Michelangelo (alliteratively speaking). Answer the following questions about sculpture.

1) What are the two main techniques used to create sculpture?
   ___________________________  ___________________________

2) What is the most common subtractive method?
   ___________________________

3) Name two additive techniques.
   ___________________________  ___________________________

4) Name four traditional materials used in sculpture.
   ____________  ______________  ____________  ____________

5) What is an armature?
   ___________________________

6) What are the two main types of sculpture?
   ___________________________  ___________________________

44 For instance, the floor of my apartment. – Dan
45 Modeling creates three-dimensional form, so the term “modeling” is used to describe the way that artists create the illusion of 3-D form on a 2-D piece of paper. — Laura
TUTORIAL: PHOTOGRAPHY

Before photography was invented, art was less of an expression of inner meaning and emotion than a means of capturing events and occasions. That all changed in the 19th century with the advent of photography.46 At first, artists tried to match photography in realism, perhaps in an attempt to validate painters’ existences. But eventually, artists decided that because photography allowed for a way to completely and accurately capture reality, art could just be about art. Painting became generally less realistic and in time, photography was accepted as a legitimate form of art. Now, certain films and video media may be considered fine art.

SENTENCE COMPLETION

Running around in circles. For each sentence below, decide which word or words would best complete the thought. Circle the correct answer.

Example: Jessica’s favorite book trilogy of all time is

(HIS DARK MATERIALS, THE LORD OF THE RINGS).47

1. Fine art initially became more (REALISTIC, ABSTRACT) with the advent of photography.
2. After time passed, however, paintings and such became more (REALISTIC, ABSTRACT) because of the influence of photography.
3. Speaking of photography in general, people were initially

(ENTHUSIASTIC ABOUT ITS POTENTIAL, SKEPTICAL ABOUT ITS VALIDITY AS ART).

46 Advent of photography...advent...Final Fantasy VII: Advent Children. Oh, man, is it ever going to be awesome! Maybe even more awesome than those two awesome Web comics! Okay, I’ll just crawl back into my hole now. - Jessica

47 There’s supposed to be a movie coming out about The Golden Compass, The Subtle Knife, and The Amber Spyglass, but I haven’t heard a word about it in years. Calling rumor control central! The Abhorsen series is also very awesome, and it’s ironic, in a good way, that Philip Pullman likes Garth Nix’s work. – Jessica
DEFINITION

These have funny names. Briefly describe each of the following advancements in technology.

<table>
<thead>
<tr>
<th>先进技术</th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>wet collodion process</td>
<td></td>
<td></td>
</tr>
<tr>
<td>waxed paper negative process</td>
<td></td>
<td></td>
</tr>
<tr>
<td>dry gelatin plates</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calotype</td>
<td></td>
<td></td>
</tr>
<tr>
<td>camera obscura</td>
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</tbody>
</table>

TUTORIAL: TEXTILES

We wear textiles. We sleep and lay our heads on textiles. We even make voodoo puppets with textiles. Textiles, which can fall under either folk art or fine arts, are defined as art (or non-art!) composed of fiber. According to www.wikipedia.com, fibers are “a class of materials that are in discrete elongated pieces, similar to pieces of thread.” Fiber can be non-woven or it can be woven, either with a loom, or through braiding, knitting, or crocheting. Looming can be done by hand or by a factory machine. Quilting is another way of creating textiles; it is, I hear, big on the streets with the rappers and scenesters. Other examples of textiles are felt-craft and soft sculpture (sculpture formed by the sewing and subsequent stuffing of fibers). Neither felt-craft nor soft sculpture are popular among America’s youth; sadly, they’ve been relegated to nerd status.

48 In Craig’s attic, where I’m currently sleeping while visiting Cambridge, I found a small stash of textiles with which to outfit my bed. – Dan

49 I know, I know — sympathetic magic dolls are more European and Dutch colonial magic than voodoo. – Jessica
SENTENCE COMPLETION

Running around in circles makes you dizzy, so stop. Fill in the blanks in the sentences with the appropriate words or phrases.

Example: Obviously, the best flavor of ice cream in the world is chocolate chip cookie dough.

1. Textiles are composed of ________________.
2. Fibers can be either ________________ or ________________.
3. Fibers can be woven in a variety of manners. These include ________________, ________________, ________________, and ________________.
4. Three examples of textile art are ________________, ________________, and ________________.

TUTORIAL: ENVIRONMENTAL ART

Having emerged in the 1960s, environmental art is one of the newest forms of art (another notable new art form would be computer-generated media). Environmental art, like many things from the 1960s, is complex, a little awkward, and better described with a list than a definition.

Environmental art usually is:
- big, big, big—we’re talking Central Park big (and I mean this literally)
- constructed on-site (meaning the artists drag themselves out to the woods or the beach instead of working in a cushy studio)
- constructed in natural settings (this is related to on-site construction)
- ethereal (not permanent)

Occasionally, environmental art:
- incorporates human participation
- requires governmental or environmental approval to proceed

Environmental art has produced some pretty original—and some pretty wacky—art and artists. For example, a man named Christo wrapped 11 islands in Biscayne Bay, Florida, in pink plastic tarps. He also wrapped all of the trees in Central Park in plastic, as well as famous architecture in Germany and in Paris’s Pont Neuf. Robert Smithson made a huge spiral of rock and red algae in the Great Lakes. Andy Goldsworthy, probably the second most famous environmental artist (after Christo), made sculptures out of icicles, twigs, leaves, branches—many different kinds of natural materials.

50 I hate, hate, hate this guy. He’s always under fire by environmental agencies, and there’s good reason why. I mean, there’s art, and there’s making a point, and then there’s wrapping islands in plastic. What a jerk! I went to one of his exhibits, where many people tried to dissuade me from my violent opposition. I feel all the more strongly having gone.
Since most environmental art is temporary—built to last for only a very short amount of time—the best way most people have of discovering this art is through photographs. Sadly, however, there is something lost in translation. Environmental art, from all accounts, is best viewed up close and personal, while it still exists.

IDENTIFICATION

Extra credit for drawing a squiggle over Christo’s work. For each image below, write the name of the environmental artist responsible for the work.

![Image 1](image1.png)
![Image 2](image2.png)
![Image 3](image3.png)

DEFINITION

New Kids on the Block. Though environmental art has existed about as long as all other art forms, it’s perhaps the most recent to have received its own distinction as a fine art. Define these particular terms as they apply to environmental art, but remember that, as with all art, environmental artists usually think outside of the proverbial box.

<table>
<thead>
<tr>
<th>Earthworks</th>
<th>Site-specific</th>
<th>Installation</th>
<th>Conceptualism</th>
</tr>
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51 Even though I get a little sick thinking about Christo, I highly suggest checking out Andy Goldsworthy’s work, even outside of Academic Decathlon. Just Google some of his images. I’m sure you’ll find his work stimulating or, at the very least, original.
INDENTIFICATION

People, people, people... The great thing about environmental art is that it tends to vary greatly, according to the individual artists. Write down the person associated with each famous work of art described below. Choose from Robert Smithson, Christo, Andy Goldsworthy, Maya Lin, Richard Serra, James Turrell, Mel Chin, and Nam Jun Paik. (Not all choices are used.)

1) algae spiral in the Great Salt Lake

2) Vietnam Memorial

3) works that use natural debris (ice, twigs, etc.)

4) wrapping of Pont Neuf

5) colossal steel sculpture in a site-specific location

TUTORIAL: ARCHITECTURE

When you’re making buildings, you’re making architecture. At first, people were making buildings—if you can call them that—with sticks, ice, mud, animal skin, and whatever else they could find and heap together. Later, an architectural form called the post-and-lintel structure was created. In this structure, one long beam is laid horizontally across two or more upright vertical beams (Stonehenge and the Pantheon come to mind). This form is still used as the basis of modern architecture (but without the monolithic blocks of stone). Other early contributions to architecture included the Roman inventions of the arch, vault and dome (similar structures that make a building more open and airy) and concrete. The Romans, in fact, were great architects—the Colosseum was a momentous structure of its time, and many of Rome’s aqueducts, roads, bridges, baths, and other buildings still stand and are fully functional to this day. Hail, Caesar!52

Not quite as awesome as the Romans (but no less influential), the people of the medieval age alternated strong, thick, unadorned buttresses with thin walls made weak by the inclusion of stained-glass windows. The purpose of the buttresses was to support the walls containing stained-glass windows. This technique allowed for large, awe-inspiring architecture with ornamented windows, all without sacrificing structural integrity in the process. Flying buttresses, also developed in this time period, allowed for even more height and windows in medieval structures. A flying buttress is an arch-like structure that supports a wall from the outside.

More notable architectural advances arrived with the Industrial Revolution, including:

52 My dad spent some time in Italy, wandering around, looking at the old Roman buildings. You can’t use any of their baths, unfortunately, even though they’re still filled with warm, inviting water, because the Romans lined them with lead. But I’ve always fantasized about sneaking into one of them, regardless. What’s a little lead poisoning, anyway?
• The advent of skyscrapers.

• Measures developed to combat overcrowding and the economic, social, health, and moral problems associated with it. Overcrowding became a big problem during this period.

• The construction of many awesome and famous buildings. You probably have heard of the Eiffel Tower, but what about the Crystal Palace?\textsuperscript{53} Taking only 17 weeks to complete, the “palace” was so named because it was made out of glass and wrought iron.

• The rise of steel and concrete as key players in the world of architecture.

• Organic, or freeform, architecture (versus geometric—think back to form).

ORDERING

\textbf{Chronological ordering is fun, fun, fun.} Order the following architectural advances from earliest to latest. The Paleolithic age corresponds with the number 1, Rome with 2, medieval Europe with 3, and the Industrial Revolution with 4. Some time periods will be used more than once.

1. ____ The arch, the vault, and the dome are developed.
2. ____ Overcrowding and its associated problems are dealt with on a governmental level.
3. ____ Organic architecture is pioneered by Antonio Gaudí.
4. ____ Cathedrals’ skeletons have alternating strong and weak walls.
5. ____ Concrete is first used.
6. ____ Local, minimally processed materials are used to build structures.
7. ____ Flying buttresses are first employed in architecture.
8. ____ The post-and-lintel architectural technique is developed.

\textsuperscript{53} Inside of it, rich patrons once ate inside what we now know is a dreadfully inaccurate statue of an \textit{Iguanodon}, but give them credit. In 1851 paleontologists were using only scattered bones to speculate on the nature and physiology of dinosaurs; they did the best they could with what they had.
DEFINITIONS

Building Basics. Most architecture is based on forms that have existed for thousands of years. Define each of the following basics:

A) post and lintel

B) arch

C) vault

D) colonnade

E) cella

F) column

G) nave
ABOUT THE AUTHOR

Jessica Sacs was nine years old when she was accepted into a public Texas university. There, she studied geology with the intent of becoming a paleontologist and playing with hard, dead things for the rest of her life. Was she missing anything? Was she not happy and well-adjusted? Sadly, just short a semester or two from graduating with her bachelor’s, Jessica threw the hissy fit of her life and wiggled and conned her way into attending high school when she was 14. Subsequently, she spent a numb, uneventful four years at Flowing Wells High School in Tucson, Arizona. Quite by accident, she enrolled in Flowing Well’s Academic Decathlon program as a senior. AcaDec quickly began to consume her spare time and college-ruled writing notebooks (but medals more than make up for that, hopefully). She decided to continue her beloved extra-curricular activity by joining the infamous ranks of the DemiDec elite after she graduated.

High school was not for naught, however. Jessica picked up interests in journalism and Japanese language, and her lifelong love of creative writing and art has been further nurtured by an outstanding gaggle of supportive, encouraging teachers. She enjoys Japanese and Russian music, bland and mostly tasteless food, video games involving dancing and sweating, and being a vegetarian. Having eschewed television a couple of years ago, Jessica now spends most of her time reading or pondering her next creative project. Right now she’s working on her long-running novel, which also is being developed as a graphic novel involving overly pretty people who are, she hopes, not too overly pretty. Jessica has a serious Internet addiction and usually can be found lurking on LiveJournal (as “dream_somehow”) or GaiaOnline (as “gahitsu”). She also enjoys camera phones and considers candid photographic shots as art for art’s sake.

Jessica has had correspondence with the infamous paleontologists Robert Bakker and David Norman and has seen authors Dan Savage and Garth Nix give lectures at her local library. She’s also quite proud of having seen L’Arc en Ciel live and having touched the pant leg of Little Jimmie Urine. Not content with such paltry celebrity encounters, however, Jessica has made it a personal goal to meet her lifelong idol, Danny Elfman, and to see Gackt and Sueno Hair in concert.

Decathletes interested in giving Jessica feedback about her first submission to DemiDec, as well as discussing home-style popcorn and the evils of Jurassic Park, can contact her at gahitsu@gmail.com.
ABOUT THE LEAD CONTRIBUTOR

Laura Reddick joined DemiDec in 2002 after studying with the Katy High School academic decathlon team for two years. She graduates this fall from the University of North Texas with a degree in English composition and a minor in drawing from the School of Visual Arts. To echo DemiDec veteran Jessica Raasch, Laura decided not to become a starving artist when she enters the workforce proper and instead plans to use her creativity and her patience toward teaching high school English. On Saturdays, however, she is a painter.

ABOUT THE GUADALAJARA RETREAT

In September, four DemiDec team members—Daniel Berdichevsky, Michael Huang, Marena Lin and Randy Xu—ventured to Guadalajara, Mexico, where they holed up in a hotel in with wireless Internet access. Here Michael and Marena are shown during one of their rare outings, looking for a laundromat.
ELEMENTS OF ART

DIFF’RENT STROKES FOR DIFF’RENT PEOPLE: COMPARISON

BE VEWY, VEWY QUIET: DRAWING
There is no contrast between the rabbit and the white page. Shape and form cannot exist without contrast.

MAKING THE CONNECTION: CONNECT-THE-DOTS
shape form isometric

HELP THEM GET IN TOUCH WITH THEIR EMOTIONS: IDENTIFICATION

SEPARATING THE MEN FROM THE BOYS: IDENTIFICATION

<table>
<thead>
<tr>
<th>SHAPE</th>
<th>FORM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer icons</td>
<td>My kitty, Nikki</td>
</tr>
<tr>
<td>Gackt as a sketch</td>
<td>Squgeegees</td>
</tr>
<tr>
<td>Triangles</td>
<td>Pyramids</td>
</tr>
<tr>
<td></td>
<td>Dodecahedrons</td>
</tr>
<tr>
<td></td>
<td>Rotten tomatoes</td>
</tr>
<tr>
<td></td>
<td>Gackt in concert</td>
</tr>
</tbody>
</table>

IN ALL SHAPES AND SIZES: DRAWING
The first image should be made of geometric shapes and lines; the second shape should be random.

RETURN OF THE SPACE BALLS: CRITICAL THINKING
Figure versus ground is being discussed; figure/ground reversals occur where there are white circles over
black circles

**MORE BASIC SHAPES, BECAUSE THEY'RE EASY TO DRAW: CRITICAL THINKING**
The artist shows that three different boxes occur in different points in space by (1) making the “closest” shape the darkest, (2) making the “closest” shape the largest, and (3) placing the “closest” shape at the bottom of the picture plane.

**COLOR IS ONE OF THOSE GREAT THINGS THAT MAKES LIFE WORTH LIVING: COLOR EXERCISES**
clockwise from “blue”: blue-violet, violet, red-violet, red, red-orange, orange, yellow-orange, yellow, yellow-green, green, blue-green
orange’s complement is blue
tertiary colors are blue-violet, red-violet, red-orange, yellow-orange, yellow-green, and blue-green
primary triad is red, blue, yellow
secondary triad is orange, green, violet
red’s analogous colors can be either red-orange or red-violet
achromatic schemes may have a gray value, but no color; monochromatic schemes may only have one color

**CATS CAN BE ARTISTS, TOO: IDENTIFICATION**
1. a monochromatic color scheme
2. an analogous color scheme
3. neutral
4. complementary

**THIS EXERCISE IS LIKE THOSE CANDY BUBBLES: IDENTIFICATION**

- **Hues:** natural, undiluted (“pure”) colors
- **Intensity:** brightness of a color
- **Tint:** a color plus white
- **Shade:** a color plus black
- **Value:** the brightness or darkness of a color
- **Local color:** a color without effects of other colors or special lighting
- **Optical color:** a color affected by lighting or the influence of other colors

**I HOPE YOU’RE READING THE FOOTNOTES: COMPARISON**
1. P
2. V
3. P
4. P
5. V
6. P
7. V
8. P

**ALL TOGETHER NOW: ANALOGIES**
1. a line drawn between two shapes
2. cube
3. linear perspective
4. primary
5. tint
6. achromatic
7. actual texture
8. figure
9. organic
10. relief
11. linear perspective
12. form
13. any cool color—blue is best
14. violet

**ELEMENTS RECAP: MATCHING**
1. J
2. Q
3. O
4. K
5. T
6. E
7. F
8. H
9. A
10. M
11. N
12. C
13. S
14. R
15. D
PRINCIPLES OF COMPOSITION

I NEVER THOUGHT ABOUT WALLPAPER LIKE THIS BEFORE: IDENTIFICATION

1. M - the buttons themselves, not as a collective set, are merely buttons/motifs
2. P - the buttons as they are arranged by Sony or Toshiba make a pattern
3. M - again, like 1., we are looking at part of a whole
4. P - the motif of a CD is repeated and thus makes a pattern
5. P - the motif of a child is repeated to make a pattern (the lineup of kids)
6. M - again, like 1., we are looking at part of a whole
7. M - the single volume is a motif that could be repeated to make a pattern
8. P - similar to 5., in which we have a repeated motif (an alpaca)

RHYTHM OF LIFE: IDENTIFICATION

1. R
2. blank
3. R
4. R
5. blank
6. blank

I HOPE YOU’RE READING THE FOOTNOTES, PART TWO: FILL IN THE BLANKS

1. three bay windows
2. large, dull
3. middle
4. edge
5. small
6. large

BALANCE BASICS: LABELING

1. symmetry
2. approximate symmetry
3. asymmetry
4. asymmetry
5. asymmetry

CIRCULAR ARGUMENTS: SENTENCE COMPLETION

1. emphasis, variety
2. contrast
3. focal point
4. emphasis
5. (“emphatic point” doesn’t exist)

MORE FUN WITH CIRCLES: SENTENCE COMPLETION

1. scale
2. proportion
3. section
4. rediscovered

ART MEETS MATH: IDENTIFICATION

1. 7.5
2. circa 500 B.C.
3. 5
4. 1
5. 3:5

I ET YOU CAN’T TELL WHAT MY FAVORITE EXERCISE IS: IDENTIFICATION

1. S
2. P
3. S
4. P - I hope your clothes are all a little different
5. S
6. P - You could argue that the hands are similar (and thus fall under similarity), but they belong to people of different races, so they are not all the same color.
PROCESSES AND TECHNIQUES

THE FOLLOWING PENCIL IMAGE SCENES: IDENTIFICATION
5. varying pressure; may also be a wash
6. cross-hatching
7. stippling
8. hatching

DRAWN TO YOU: DEFINITION
1. using crisscrossed lines to create value
2. the substance that holds the drawing material together
3. liquid drawing medium
4. shading using dots
5. drawing material similar to charcoal with a waxier binder
6. chalk or oil drawing medium that usually comes in a range of colors
7. quick sketch

DRAWING SCENARIO NUMBER ONE: DEFINITION
1. 4B
2. HB
3. hatching
4. foreshortening
5. stippling
6. crosshatching

IT’S PRETTY SELF-EXPLANATORY: ANALOGIES
A. fresco
B. 12B
C. pastel
D. frottage
E. realism
F. impasto
G. crosshatching or stippling

AND BETTY WHEN YOU CALL ME YOU CAN CALL ME ACK: IDENTIFICATION
1. Tempera: water-based, was egg-bound in past, narrow tonal range, bright
2. Acrylic: newest form of paint, polymer base
3. Watercolors: water-based, transparent, tints created with water
4. Oil: natural-looking, used to make impasto, slow-drying, can be used to make glazes
5. Encaustic: wax-based, used in Egyptian death markers, applied with a hot iron
6. Gouache: water-based, opaque, bright. (Slow-drying is a possible answer.)

REPEAT, PLEASE: IDENTIFICATION
A. varnish
B. gouache
C. acrylic
D. watercolor
E. oil
F. casein
G. fresco
H. gesso
I. tempera

JUST THE FACTS, MA’AM: IDENTIFICATION
1. impasto
2. both are water-based, but one is opaque and the other is translucent
3. a milk-based paint
4. encaustic
5. acrylic
6. a person who wrote a very influential book on color theory

BUT I’M NOT RESPONSIBLE ENOUGH YET TO BE A TEACHER: FILL IN THE BLANKS
1. multiple
2. negative space
3. positive space
4. brayer
5. burnisher
6. positive space
7. engraving
8. varnish
9. copper
10. etching
11. lithography
12. oil/water
13. water/oil
14. water
15. screen printing
16. squeegee
NO CHEATING: CRITICAL THINKING
Prints are generally worth less than an artwork not made by printmaking simply because printmaking makes multiple copies of an original work. There’s more than one original in the world, so each one just isn’t that special. This might make collectors of Humberto Calzada sad, but throughout the ages, printmaking has helped many people get their message across. During the Mexican Revolution, activists spread their ideology through distributing prints connected to their cause. Martin Luther and the Protestant Revolution also got a big boost from distributing cheaply made prints.

SEPARATION ANXIETY: IDENTIFICATION
Relief
Intaglio
Lithography
brayer, jigsaw method, wood, linocut, register
burnisher, burr, crible, mezzotint, aquatint, etching, soft ground, metal, collagraph
frottage transfer, limestone block, waxy crayon

MAKE LIKE MICHELANGELO: IDENTIFICATION
1. additive and reductive 2. carving
3. modeling and casting 4. bronze, clay, wood, marble
5. the supporting understructure of an additive sculpture 6. relief and free-standing

RUNNING AROUND IN CIRCLES: SENTENCE COMPLETION
1. realistic 2. abstract 3. skeptical of its validity as art

THESE HAVE FUNNY NAMES: IDENTIFICATION
1. process which allowed for faster exposure but involved messy chemicals
2. process which was cheaper and commonly used in the early days of photography
3. technology which allowed photographers more freedom of mobility
4. John Talbot’s invention, developed around the same time as the daguerreotype
5. the first photographic process, invented by Louis Daguerre

RUNNING AROUND IN CIRCLES MAKES YOU DIZZY, SO STOP: SENTENCE COMPLETION
1. fiber 2. woven, non-woven 3. loom, braiding, knitting, crocheting 4. quilting, felt craft, soft sculpture

EXTRA CREDIT FOR DRAWING A SQUIGGLE OVER CHRISTO’S WORK: IDENTIFICATION
1. Andy Goldsworthy 2. Christo 3. Robert Smithson 4. Extra credit: 1,000,000 brownie points

NEW KIDS ON THE BLOCK: DEFINITION
Earthworks Installations Conceptualism Site-specific
Works of art created from natural landforms Multi-media art that occupies a particular space and usually requires audience participation Focus on the process over the actual creation Art that is intended for a particular location

PEOPLE, PEOPLE, PEOPLE: IDENTIFICATION
1. Robert Smithson 2. Maya Lin
3. Andy Goldsworthy 4. Christo
5. Richard Serra
### CHRONOLOGICAL ORDERING IS FUN, FUN, FUN: ORDERING

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### BUILDING BASICS: IDENTIFICATION

1. basis of architecture consisting of two vertical pieces topped by a horizontal bar
2. a semicircular structure held up by two vertical posts
3. a hallway based on arches that resembles a stretched-out half-cylinder
4. a series of columns
5. a central area
6. a cylindrical vertical component used as either a support or as decoration
7. the central aisle of a building