# SHADOW CASTING

Do you ever watch your shadow as you are walking, riding a bike or riding in a car on a sunny day? It is fascinating how the shadow of an object may have a shape very different from the object from which it originates. Though shadows are found all around us every sunny day, most of the time shadows come and go without our taking notice of them. And yet, once one begins to stop and really look at shadows, I think you will agree with me that they can be unusually beautiful "objects" in their own rite.

It can be fun to create shadow designs by lining up and arranging objects and/or people in an interesting order and allowing natural or artificial light to cast a combined shadow which can be recorded in black and white (or any other color) on paper. If the day is sunny, unrestricted sunlight naturally makes excellent shadows. If you can not use the sun as a light source, a bright lamp may be used instead.

The object of this project is to find a collection of objects which can be placed so as to make an aesthetically pleasing shadow on a sheet of paper placed where the shadow is cast. If you use sunlight, the size of the shadows are unchangeable at any given point in time during the day, so smaller objects will cast smaller shadows and larger objects will cast larger shadows. Using artificial light does allow you to vary the size of the shadows depending on how close to the light source the object is placed. Regardless of the light source, the shadow may be changed by turning the objects in different positions.

Experiment with different objects and different positions until you see a shadow design that you especially like. Then carefully draw the outlines of the shadows on the paper.
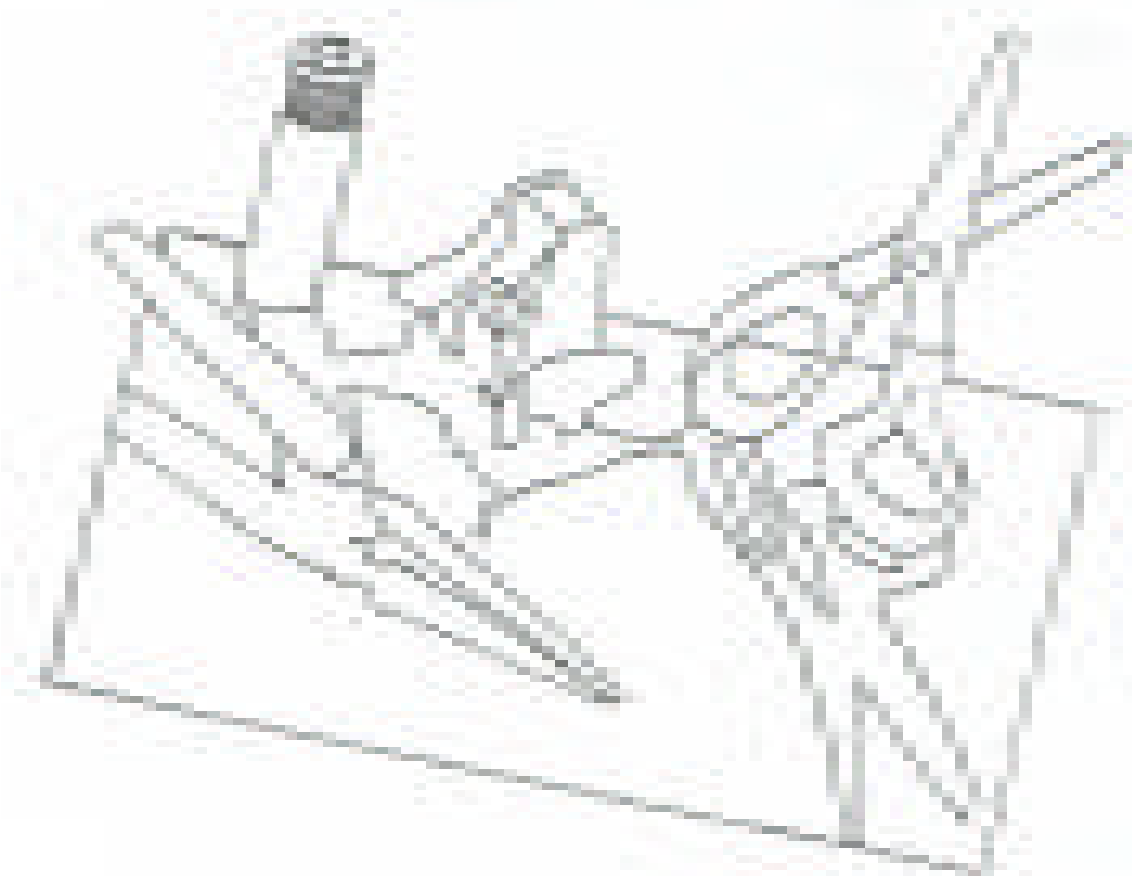
After the shadow designs have been outlined, use black paint and/or black ink to fill in the areas which were shaded. Some shaded areas may be only as wide as a line drawn by a marker; other areas may be large. You may wish to try using different colors of paper for different effects. Also papers may be rotated to alter the design before drawing the shadow outline. When the paint dries, you may mount the designs on other sheets of colored paper before hanging.

After you have experimented with this kind of art, I am sure you will come up with some very aesthetically pleasing results which can be displayed with pride!

Shadow Casting II

This art project is a delightful extension of the shadow casting project presented in last month's *Teacher Bulletin.*

Again we will start by arranging objects (any objects will do - small or large, stationary or movable, living or nonliving) in relation to the sun or other light source so as to create an interesting shadow design.

Using white paper of any size, place your paper where the whole or part of the shadow falls on it and trace the outline with a pencil.

Next, go over the pencil lines with black marker, and tape the paper on a window. Tape another paper over it and trace the same design a second time in pencil and marker, or just in marker.

Then turn these two papers over so that the drawn lines are facing outward, and tape them in place again on the window.
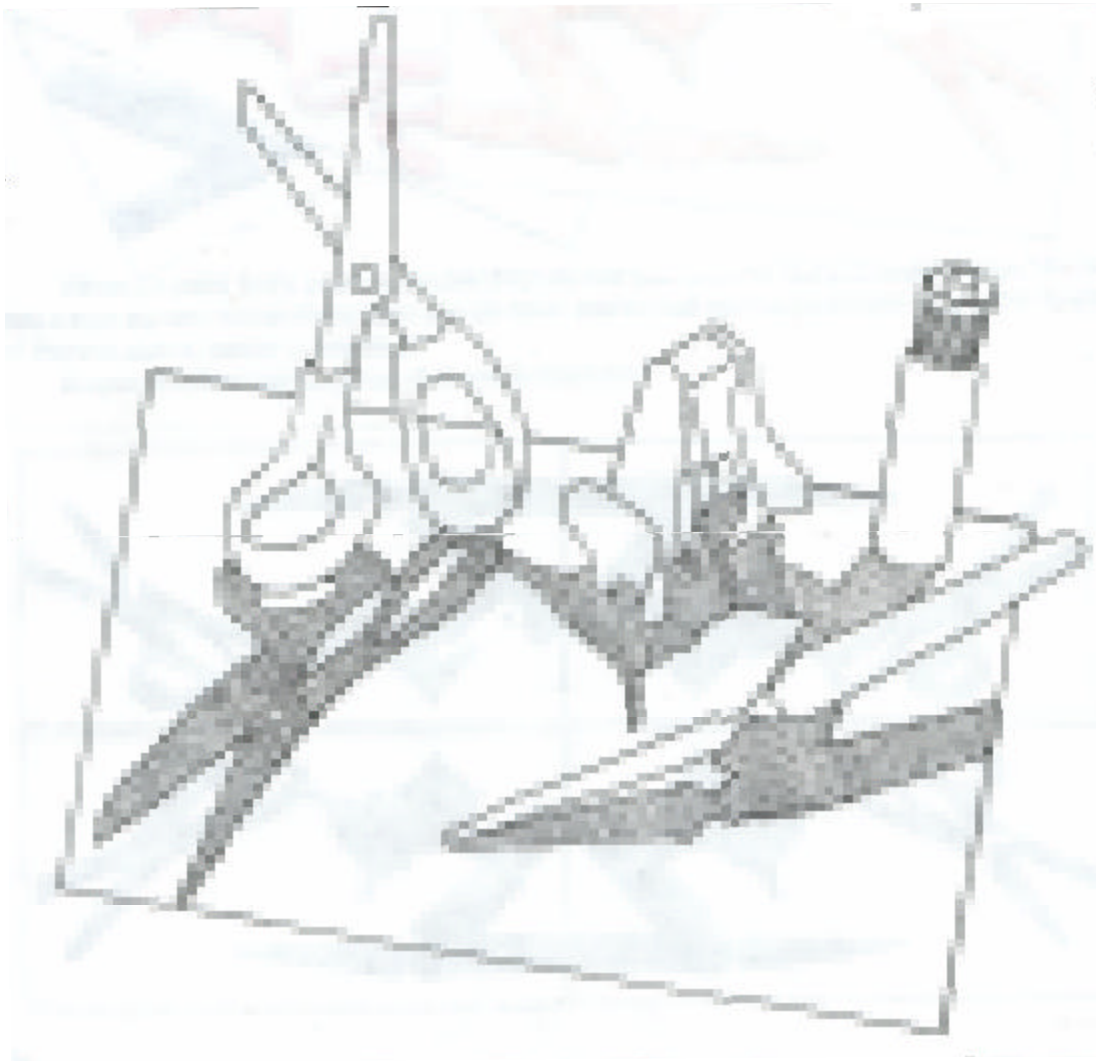
Now tape two other papers over the two on the window and redraw the designs so that these last two papers will show the design in the reverse.

After you have four shadw designs drawn in marker, the papers may be moved to a suitable location to add paint, only this time, instead of using black paint as suggested previously, use a different bright color for each design.
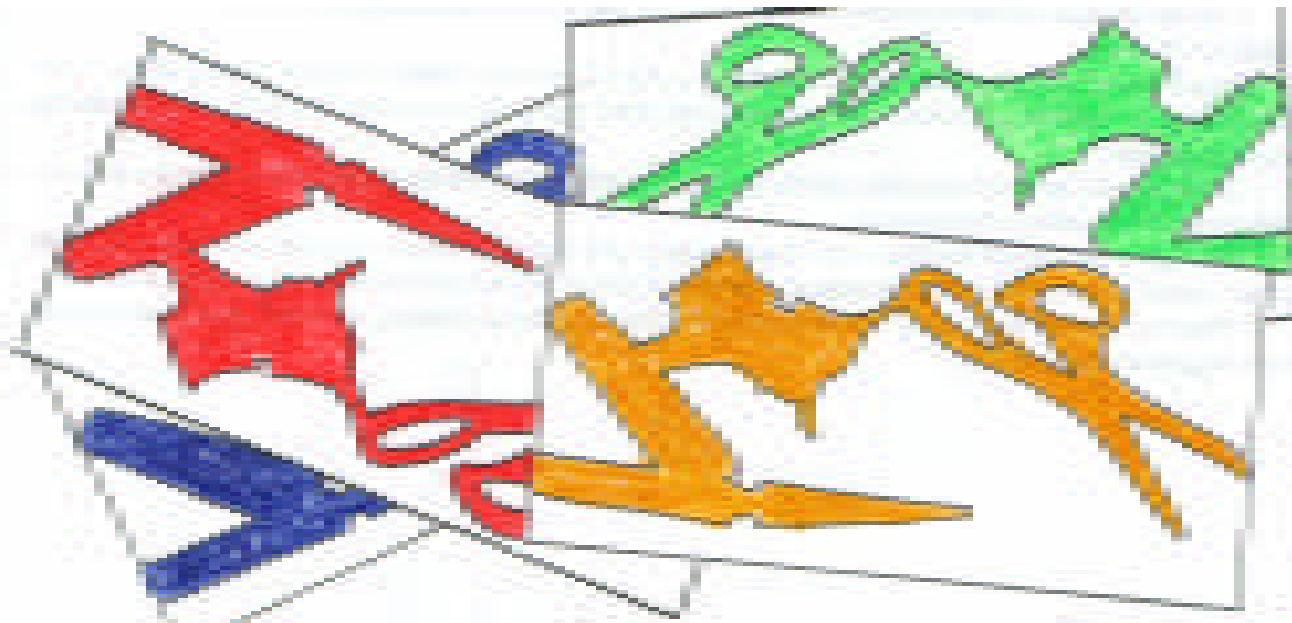
When the paint is dry, position the paintings so that you have four paintings arranged so that two are on top and two are on the bottom upside down and so that each adjacent painting is the reverse of the one above, below or beside it.

Display the final paintings for all to see and admire!
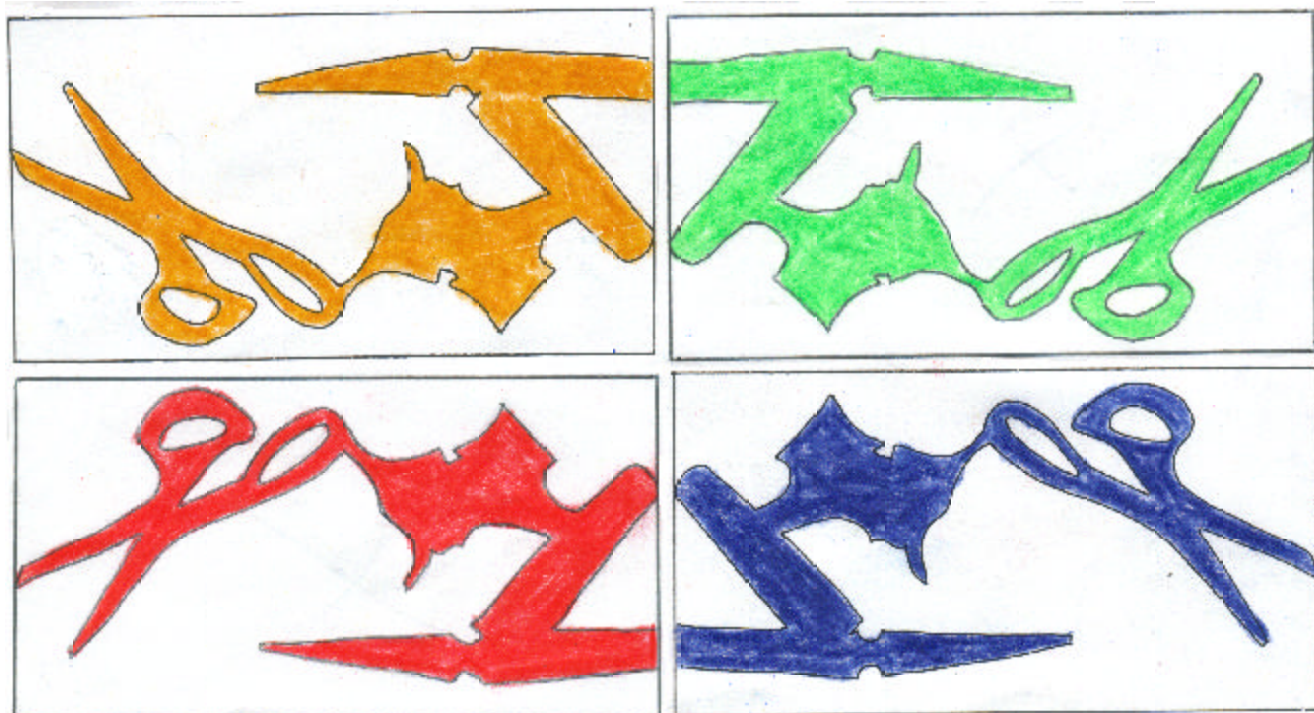
Shadow Casting III

Though one could come up with even more variations on this particular theme, this is the final suggestion that shall be made here based on the original basic shadow casting project outlined in the January issue of the *Teacher Bulletin.*

Materials needed:
- objects for shadow making
- a light source
- colored paper (9x12 or 12x18 inches)
- pencils
- scissors (and possibly exacto knife)
- glue
- paper clips
- cardboard
- masking tape

Here are the five steps you will need to follow:

1. Find and/or put objects together whose combined shadow make an aesthetically pleasing design when it is cast on a sheet of paper.

2. Place a sheet of colored paper where, with a pencil, you can trace the shadow outline on the paper.
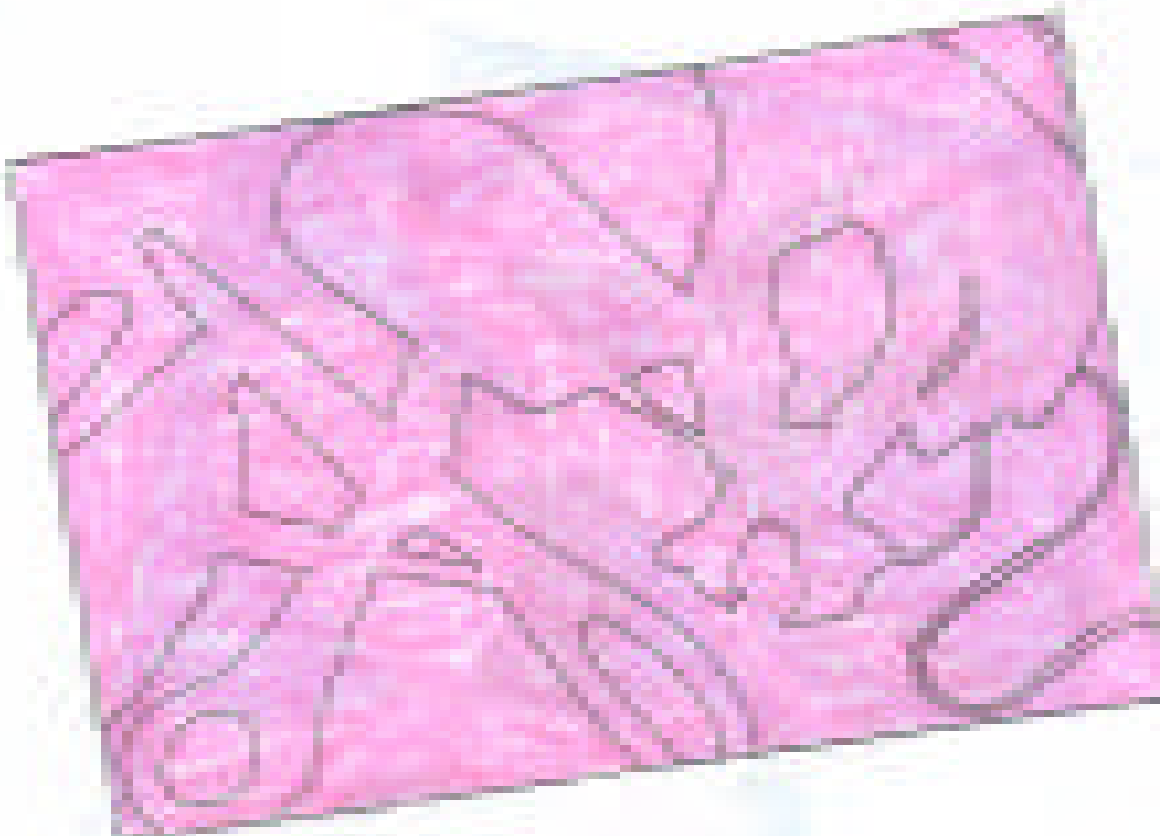
3. After tracing the design on the paper, carefully cut out the design using scissors, and where necessary for hard to get internal lines and spaces, an exacto knife.

4. Once the design is cut out, you may need to reenforce it by glueing on strips of cardboard or other paper to the back so that the design achieves a uniform stiffness.

5. Then, using pieces of stiff cardboard attached to the back side, or paper clips unbent, or some other means, mount the design onto a white or other light colored paper so that it stands out a few centimeters from the background. This will allow the cut-out shadow design , when placed where a bright light can strike it, to cast a shadow of it's own, creating a whole new effect!

If this project is done with careful thought and planning, a wonderful artwork will be the result of your labor!

It Shall Blossom Abundantly...

ISAIAH 35:2

Have you ever been out walking in the springtime and suddenly you've come to an orchard of apple, peach, apricot, cherry, pear, or citrus trees or maybe even just a single tree which is in full bloom? Have you breathed in the luxurious scent of the blossoms and been almost forced to stand back aghast in view of the exquisite beauty of the living things before you? Such an experience can actually be overwhelming if you take time to let your senses be totally open to what nature can do at this time of the year. Photographs and perfumes provide only a slight indication of the real thing - a glorious tree simply bursting with color and fragrance beyond imagination.

I can recall with great fondness when I lived on a school campus which sat in the middle of groves of orange, grapefruit, and lemon trees. I imagine heaven to be somwhat like those trees in full bloom, it was so extraordinary. I recall another spring when I happened upon a lone cherry tree in a courtyard of an old abbey when out walking one day. The sight of that tree was so overpowering that I was compelled to hurry home as quickly as possible, get out some paints and attempt to recreate the wonder of what I had seen.

No doubt many artists have had similar experiences. Two French impressionist painters, Claude Monet and Camille Pissarro, whose paintings *Apple Trees in Bloom* (1873)*,* and *Orchard in Bloom* (1872), are a couple of examples of art work inspired by the marvels of spring blossoms. If you have access to a print of one of these or other similar paintings, or if you are actually able to view in real life - it would be an extraordinary thing to take a class to see - a tree or several trees in the full bloom of spring, allow your students to experience as much as possible such a painting or such a sight. Notice the brilliance of the flowers, the way the tree trunks and branches are growing. Think how you might attempt to reproduce the beautiful blooms with many small splotches of paint against a a background of green or other color.

Shall we try our hand at producing a brilliant spring tree-inspired art work ourselves? To begin with, we will need a background for which we could use a couple of sheets of construction paper, one color for the sky and one color for the ground.

First place the sky sheet on your desk. Now carefully and deliberately tear one edge of the ground colored sheet to make a soft edge on the horizon line. Glue the two pieces together.

Now choose a color or colors to create a tree trunk and branches for one or more trees. Make the trees as interestingly shaped as you wish and large enough to cover most of the paper background. You may decide to draw and cut out of paper and glue in place the tree trunk or you may prefer to paint the tree trunk onto the background. If you choose to use paint for the tree trunk, you will

need to let the paint dry before continuing. In the meantime, you may wish to make a second background, perhaps in a different format (horizontal or verticle) from the first one. By the time your second background is together and a new tree trunk painted, the first paint may be dry on the original background.

Next decide what color or colors your blossoms will be - white, pink, a combination etc. Then with a brush, dab one or more colors all over the tree branch area, thick in some places and thin in others until you have a bright exciting spring tree blooming right before your very eyes. Another technique that may be useful in this case is to use an old tooth brush with paint on it to give a more mottled effect.

Add any other finishing touches you think may be desired to give your painting pizzaz, and then, stand back and VOILA! what a masterpiece of color and beauty you have created! What a remarkable bulletin board or other display can be made with a whole classroom full of gorgeous fruit trees in full bloom!

Piece(*s of Pasta*) on Earth

This project will start with a walk down the aisle. A walk down the *pasta* aisle of a supermarket, that is. How many different types of pasta might you find? Of course there are the all time favorites- straight long strips of spaghetti and semi-circular shaped macaroni. These may be followed by lasagna, orzo, manicotti, rigatoni, linguine, ravioli, angel hair, bows, alphabet letters, cous cous, ziti, fettuccine, shells, pennerigate, rings, ruffles, rotini, vermicelli, ditalini, ribbons, cavatappi, gemelli, cellentani, farfalle, tortiglioni, fusilli, conchiglie, and on and on with scores of variations of colors, shapes, and sizes. With all these various types of pasta available for use, what might we do with it in an artistically creative fashion?

One thing that comes to my mind is a three-piece art work I've seen of the three wise men of Matthew chapter two made out of cardboard and pasta. Each of the three wise men was carefully and meticulously made from numerous different pieces of pasta carefully chosen for the various facial features and the decorative costumes they wore. Each piece of pasta was carefully glued in place and the entire thing was then painted and displayed as part of an annual Christmas decore.

Would you like to try your hand at such a project? First we need some outline shapes drawn and cut out of cardboard. You may wish to do three kings, too, or an angel, or any other person or animal having to do with the Christmas story. The entire nativity scene could be done in this manner if enough materials and time were available.

Next, one must decide which kind of pasta to use to glue on each individual part of the chosen cardboard shape to produce the desired textural and visual effect. Carefully position and glue each piece using a strong white glue and leave it to dry.

Once the glue is dry, you may paint each piece, either in a solid color or in various colors, depending on the desired effect. If each finished product is to be displayed as a separate piece, you may wish to mount them on separate pieces of colored backgrounds. If you are making a nativity scene or an ensemble of separate pieces, you may wish to make a bulletin board display or a 3-D display where individual pieces stand up.

With care and planning, you will produce a classroom full of wonderful and unique Christmas art pieces.

Materials List:
- cardboard
- various types of pasta
- glue
- scissors
- pencil
- paint
- brushes
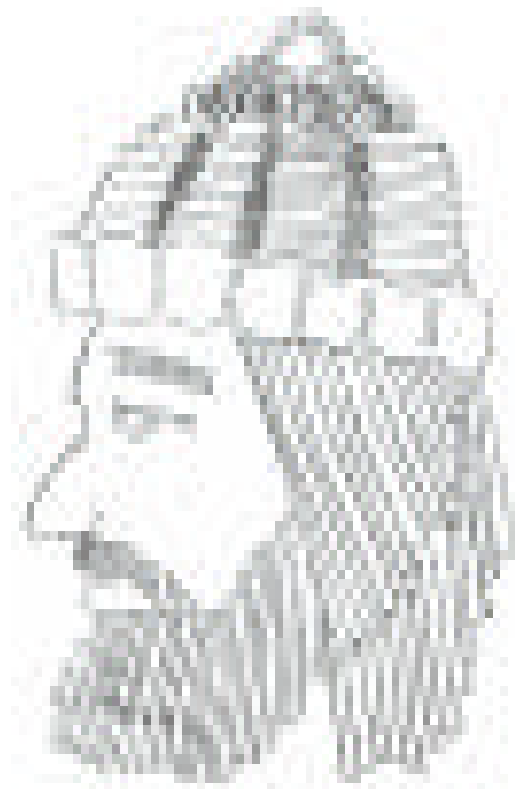
How Ya Feelin', Art ?

One teacher I know, at the beginning of the year, displays and uses as a prompt for various activities a poster on which are depicted a series of 30 cartoon-type faces each of which expresses a distinct and different emotion. Perhaps you've seen this series of simple line drawings through which the artist skillfully captures every feeling from *shy* to *confident*, from *hysterical* to *disgusted*, from *overwhelmed* to *ecstatic.* The basic same head of a boy used for each, but the variation in the eyes, mouth, eyebrows, forehead, hair, etc. definitively defines each emotion in a humorously exaggerated, but nevertheless convincingly accurate manner. It is amazing how the artist was able to so perfectly capture the multiple ways the human face can change to show the inner feelings even without a word spoken or a sound uttered.

One of the activities many kids and adults of all ages enjoy doing during the month of October is carving or painting faces on pumpkins. This has become a household tradition in homes all across America, and the pumpkin, more than any other fruit or vegetable, perhaps, lends itself so well to this kind of creative flare because of its head-like shape, its relatively large size, its fairly soft but strong skin, and its basically hollow interior.

For this project you may choose to use real pumpkins, if they are readily available, or large pieces of paper on which students draw and paint their own large life-sized pumpkins. If the painted paper pumpkins are used, it would be desirable to have one or more real pumpkins on display as examples so that students may replicate a true pumpkin shape and appearance. If the paper pumpkins are used, the drawing and painting of the pumpkin shapes will need to be done before the following steps are taken so that the paint will have a chance to dry.

The next part of this project is to have students think of and compose together a list of several different emotions that may be expressed through facial gestures. Some may wish to model the expressions, to provide a stronger sense of what these emotions are. On white paper students may then sketch a few examples of their choice until they find one or more sketches with which they are particularly pleased. A transparency of the emotions chart mentioned above may be projected on a screen or wall for added ideas and emphasis.

Once a particular emotion and its visual expression has been successfully drawn, this sketch may be copied onto a large painted or real pumpkin with poster paint using which ever colors one may choose.

If care taken and thought are equally great, some wonderfully expressive pumpkin faces will no doubt emerge! Put your finished pumpkins on display for all to enjoy.

mapart

Three hundred eighty-one years ago when the Pilgrims sailed for North America from Europe they had not planned to end up in what became known as the Massachusetts Bay Colony, but rather in Virginia where a colony of Europeans had already been established. However, due to circumstances beyond their control, their ship, the Mayflower, got off course and came to land just off of what is now called Cape Cod. Eventually the Pilgrims anchored ship and decided to build a community which they named Plimouth. And, of course, the rest of the story is a well known and much beloved part of American history, especially the part about the first Thanksgiving feast held the following year after the Native Americans helped them to learn how to survive in this new and wild land, so different from their former European home.

Did the Pilgrims have a map when they started out on their voyage? No doubt they did, but it was most likely a somewhat crude one, and when they landed several hundred miles north of where they had intended to go they probably had little idea of where they really were. They could not look on the map and pinpoint their location. They could not get on the road from Plimouth and travel south to Virginia - there was no road. They could not go to nearby Boston to purchase the building supplies they needed for their houses - there was no Boston, only forest. If accurate maps had been available at that time, might the Pilgrims have continued on their journey until they reached their expected Virginia destination? How different might the history of America turned out had the Pilgrims not landed and settled on the harsh New England coast, but on the sandy beaches of Virginia?

Today their are excellent maps detailing almost any feature one might wish to know about,whether natural or man-made anywhere on the globe where men have been. There are political maps, physical maps, topographical maps, land maps, ocean maps - just about any kind of map one might imagine giving a great variety of information on a variety of subjects.

Today's project is entitled **mapart**. Have you ever taken a look at a map as a potential piece of art? Maps are full of interesting shapes and spaces. For this project, you will need to either copy or trace by hand a map on white paper or have photocopies or computer copies available of a particular map. You may wish to use a detailed map of your community showing streets, road, waterways, railroad tracks, lakes, ponds, coastline, etc. An enlarged map of a relatively small area, (rather than one showing several states, provinces or countries), will work best for what we shall be doing here. Depending on the size and appearance of the map(s) you have available, each student may either use a copy of the same map, or each may take a section of a larger map to work on. We shall not be concerned about map labels, place names or even the compass rose. What we shall focus on here is rather the shapes and spaces formed by the lines indicating roads, railroad tracks, rivers, and other natural and man-made boundries.

Begin by looking for and choosing as a starting place a particular shape on your map defined by certain lines surrounding it. Now, using paint or markers color in with a solid color or with a certain texture the starting space. Next, find another space elsewhere on the map and color it the same way using the same color and/or texture. Continue this process until you feel you have enough spaces colored in that particular way, and then choose another color or texture and fill in other spaces. The number of colors you use is up to you, but aim for the most pleasing combinations that your eye tells you to use until your map becomes a veritable tapistry of colorful shapes and spaces. If you wish, you may outline in black marker, beforehand or as you go along or at the end, each space to sepa-rate it from the adjacent ones. Keep in mind that the purpose is not to focus on the original function of the map but to transform it into a work of art. (Water areas may be any color - not neccessarily blue). The final outcome may resemble stained glass windows. (Below are two examples, the first being *Bill, WY*, and the second being *Snow, AR).*

It should be interesting to see how varied and how colorful a classroom full of originally colored maps can be. And even though the map labels are basically unimportant, the students may be getting a geography lesson of reinforced at the same time.
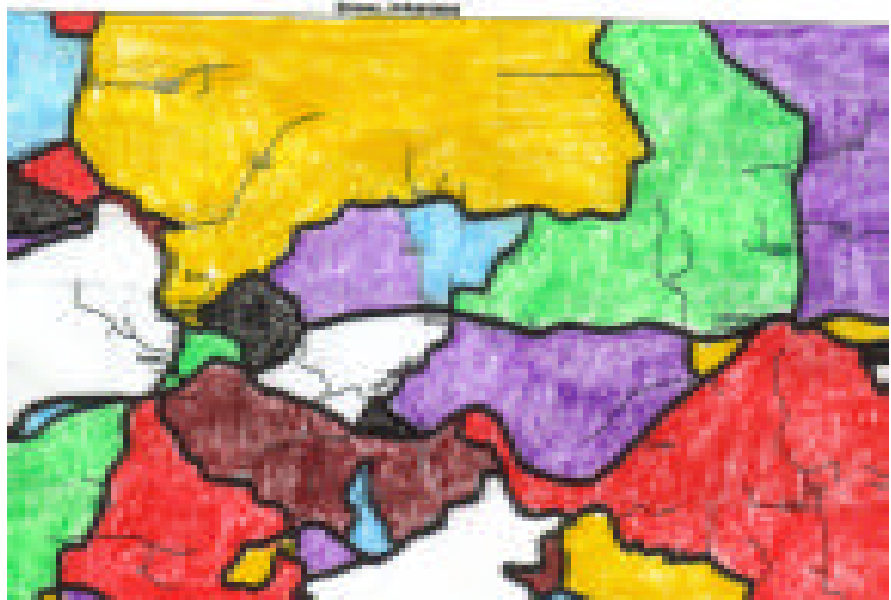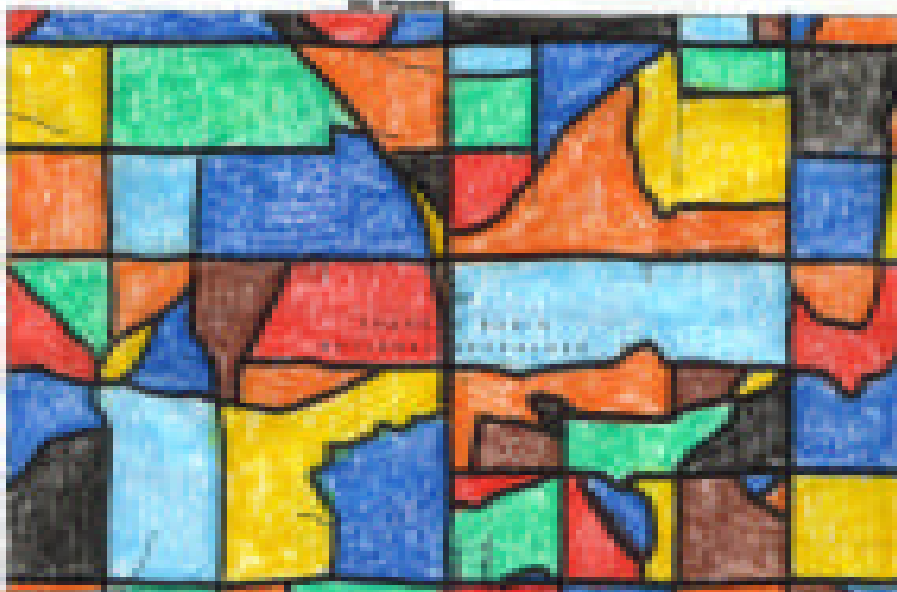
Sign Language

Do you ever take special notice of signs? There are so many signs that we probably pass by every day whenever we go anywhere away from home. Chances are we pass by most of them without really giving them more than a glance.

Let's consider some kinds of signs you may have passed on the way to school today. Let's see... there were probably road signs naming roads and towns, signs giving instructions to drivers such as STOP, YIELD, etc., signs for restaurants, doctors' offices, gas stations, stores, churches, schools, and hundreds of others. Some we must pay attention to such as SPEED LIMIT signs. Others we ignore unless they are important to us such as when we are trying to find a certain road, business, or other location. Some signs are eassly recognized just by their shape or color or a picture on them. The "golden arches" of MacDonald's restaurants, or the tricolored triangle of Citgo gas stations are good examples. We can easily spot these signs from a distance and identify them without reading the words which go with them. Most signs, however, do require one to read them in order to understand their meaning.

Does your school building have a sign to identify it from other schools? If so, is it a new sign or an old one? Is it easily read or not? Does it catch your eye or not? What, in fact, makes some signs catch your eye more than others? What makes you look twice at some signs and to overlook others? Is it color? Is it shape? Is it size? Is it a combination of these and/or other things?

Think about your school for a minute. Does it have a unique name? (Maybe you can think of another name you'd like better for your school). Think about a brand new school sign designed by you that could be built to stand out in front of your school to catch the attention of everyone who passes by. I bet no school has a school sign designed by kids - *kids* are what school is all about, right?!

What would a school sign designed by kids - by <u>you</u> - look like? Would it have a special shape? How big would the words be? Where would it be located? What color(s) would it be? What would it say? Would it be made of wood, of stone, of bricks, of metal, of cement, of glass, or of some other material? Use your imagination to think about all these things and see what you can come up with; draw some rough sketches, and when you have a great design, make a nice final copy as large as you wish to put on display. You may wish to use the computer to print off the kinds of font you think would be most effective. Use scissors, paper of whatever colors you need, glue, rulers, pencil, markers, and any other materials and tools that will help you to design a super sign.

Who knows, maybe a *real* school sign of your design will be constructed - maybe your school will be the first to have a school sign designed and built by *kids!*

(The examples shown below are some sign designs minus the lettering and/or pictures that you would wish, of course, to include on your sign designs)