The Heard Museum (Phoenix, Arizona) has developed and updated an integrated curriculum for use in grades K-3. The goals for this curriculum are to: (1) share museum resources with schools; (2) promote cross-cultural understanding through a focus on rain, a universal requirement for life; (3) help students understand that Native Americans are contemporary people maintaining identity and values in the modern world; (4) develop an awareness of the varied expressions of rain in the art, literature, and customs of the native people of the greater southwest; and (5) use culturally specific materials as a vehicle for developing essential skills, especially as they relate to the Arizona Student Assessment Program. The curriculum may be used in any order. This unit contains: (1) art prints of artifacts in the Heard Museum collection related to rain; (2) specific cultural information and materials relating to a particular Native American tribe or nation featured through the art prints; this cultural information is the basis for some of the lessons in mathematics, science, and language skills; (3) mathematics lessons with a special emphasis on measuring and comparing; (4) science lessons, usually hands-on or observational units; (5) language skills, including reading, listening comprehension, writing, vocabulary, and poetry skills; and (6) art projects. (BT)
After the Rain:

Heard Museum
2301 North Central Avenue
Phoenix, Arizona 85004-1323

http://www.heard.org/rain/rain_pdf_main.html

Updated 2001
Introduction

The Heard Museum has developed this integrated curriculum for use in schools in grades K through 3. The overriding goals for this program are to:

- 1. Share museum resources with schools;
- 2. Promote cross-cultural understanding through a focus on rain, a universal requirement for life on earth;
- 3. Help students to understand that Native Americans are contemporary people maintaining identity and values in the modern world;
- 4. Develop an awareness of the varied expressions of rain in the art, literature and customs of the native peoples of the Greater Southwest;
- 5. Use culturally specific materials as a vehicle for developing essential skills, especially as they relate to the Arizona Student Assessment Program.

This curriculum is divided into six units that can be used in any order.

Each unit contains:

- 1. Art Prints of artifacts in the Heard Museum collection related to rain. While these prints are used for art history and aesthetics lessons, these artifacts are also used to begin lessons in math, science and language skills.
- 2. Specific cultural information and materials relating to a particular Native American tribe or nation featured through the art prints. This information includes a map, text from the RAIN exhibit applicable to the people, and other information of special interest to children. This cultural information is the basis for some of the lessons in math, science and language skills.
- 3. Math lessons with a special emphasis on measuring and comparing.
- 4. Science lessons, usually hands-on or observational units.
- 5. Language skills, including reading, listening comprehension, writing, vocabulary and poetry skills.
- 6. Art projects

This K-3 curriculum was developed teachers by Arlene Old Elk (Dine') and Jackie Stoklas during a year-long residency at the Heard Museum, made possible by the Lila Wallace-Readers Digest Museum Accessibility Fund. Additional information was developed by the Heard Museum Education Department staff.
Rain

The Southwest United States and Northwest Mexico exist in a rain shadow cast by mountain ranges to the west. Rainfall is light and undependable. There are two rainy seasons: summer and winter. Often, summer rains are brief and highly localized, as clouds suddenly boil up from the south in the afternoon and early evening. Winter storms come from the Pacific Ocean and may arrive in waves, soaking the ground. In higher elevations, the rain becomes snow. In between these two seasons are dry periods, when great care must be taken to ensure life and growth until the next rain.

The indigenous people of the Southwest welcome rain into their lives and land, praying for the blessing of rain through a variety of ceremonies and creative expressions. Many expressions of rain and water focus on rain's connection to making life and growth possible. Expressions may be enduring, such as embroidered figures on a ceremonial garment. Some are intended to be temporary, such as body paint on a ceremonial participant or the pigments of a sand painting. Other expressions take the form of music, song, oratory, poetry, and prayer.

For all of the cultures in this exhibit, rain has deep meanings that reflect a culture's unique experience with the universe. This deep spiritual relationship is far from the stereotype of the "Indian Rain Dance", or feeble jokes suggesting a superficial and simplistic magic.

As you look at specific designs or symbols, please remember that they are part of a whole and have meaning as part of that whole. Expressions of rain span centuries. Some of the forms change, but the intent of people to bring the blessings that come from rain into their lives and the world remains unchanged.
Dawn's Light, Day Light, Night Light

Activity: Multi-media art project

Focus Activity: Look again at the painting by Mary Morez (Dine) and review the discussion about the work with your class.

Outcomes: Students will experience creating a textured background.

Vocabulary: texture, dawn, collage

Materials: *paper, *paint, *materials for collage

Suggested Criteria:

1) Only one color may be painted onto each sheet of colored paper.

2) Students must use a different technique on each paper.

3) The image must fit the mood created by the background.

Procedure:

1) Discuss the way Mary Morez created dawn's light using two colors.

2) Ask students how the painting would be different if she had used only yellow paint to suggest dawn.

3) Give students an opportunity to add paint to colored paper by spattering one, dripping one, and painting patches on a third.

4) When the paint has dried, place some examples in the chalk tray and discuss them. If students need scaffolding ask them:

   - Which paper makes you feel cheerful? (sad?, angry?, confused? . . .)
   - Which paper looks like morning? (nighttime?, a stormy day?)
   - (Holding one) What would you put on this background?
5) Tell students they need to choose one of their backgrounds for a picture.

6) If collage is a new art form demonstrate how to cut or tear the forms for the collage image. Remember the product will be better if students have pictures to look at. A picture dictionary is a good way for students to have access to pictures.

Student Assessment: This activity is a good one for discussion. Students can share tips they've discovered. Have them share some things they especially like about their own or someone else's artwork. Ask who has ideas for future products using this technique.

Teacher Assessment:

1) Was the image appropriate for the mood of the background?

2) Did the student follow the stated criteria?

3) Did the student discuss the artwork including ideas about the effect of the texture and why the image was chosen?
Mosaic Art Technique

Activity: Students will create an image by inlaying paper or foam pad pieces into a background.

Focus Activity: Discuss the photo reproduction of Leo Poblano's "Emblem of the Bow Priest Society." Be sure the students realize that a portion of the shell has been removed so that the other materials could be set down into it to form the Knife-Wing Bird.

Outcomes: Students will experience inlay using tag board and paper scraps (or foam pad pieces).

Vocabulary: inlaid, mosaic, Knife-Wing Bird, emblem

Materials:

Suggested Criteria:

1) Inlay materials may not lap over the frame.

2) All of the interior of the cut out must be filled.

3) Glue must not drop over the sides.

Procedure:

1) Have students fold a sheet of newsprint into quarters.

2) Direct students to make four different designs that could be used for inlay. Remind them to limit the number of details.

3) After students have made the four designs direct them to choose one for an inlay project.
4) Students will draw the perimeter of the inlay onto the background piece (tag board or plastic).

5) Students cut the perimeter of the image out, leaving a piece that looks like a stencil.

6) The background piece needs to be glued to another piece that is cut the same shape.

7) Students can use the piece they have cut out of the background piece to trace the shapes they wish to inlay on the colored paper or other colors of foam pad.

**Assessment:** Did students follow the stated criteria?

**Extension:** A pin or tie tack base can be glued to the back of the plastic foam design and given as a gift.
Paper Weaving: A Rainbow Mat

Activity: Students will weave mats using paper.

Focus Activity:
- Discuss the sequence of colors used by all the artists for making rainbows.
- Discuss how some artists use a white or black line to separate the colors in their rainbows.
- Look at the Diné dye chart (see Cultural section) and discuss how a weaver gets her colors.
- Talk about weaving a rainbow.

Vocabulary: Over, under, weave, alternate, opposite (advanced students symmetry)

Materials:
- *One large sheet (11" x 17") of construction paper per student (black or white is best).
- *Construction paper weaving strips in rainbow colors (1" wide x 17" long)

Procedure:
1. Fold the base paper in half, forming a rectangle 17" x 5.5".
2. Using a ruler and pencil, draw lines from the fold to the outer edge. Stop the lines one inch from the edge. The lines should be one inch apart.
3. Cut along the lines from the fold to the edge. Remember to stop the cut one inch from the open edge. Then place the paper flat on the table.
4. Demonstrate the over-under weaving process by weaving in the cut strips. Select colors so that the weaving will look like a rainbow.
5. A drop of glue can be placed at the ends to hold the weaving stable.
Cut paper at one inch intervals. Then, weave in one inch strips of another color.

Assessment:

Was the student able to weave accurately?

Was the student able to recognize mistakes?

Extension: If laminating is available, mats can be laminated and given as gifts.
The Navajo Emerge

Diné (din-EH) is the name the Navajo people call themselves. It means "The People." The Navajo have their own history and traditional views about how they came to live where they do.

Today, many young Navajo children learn their history from their elders. The history they learn is more than lists of dates and events. To Diné, history means learning about relationships between people. It means learning about Navajo values and proper ways to act. And it means understanding how certain things came to be in the world.

The Navajo cannot say just when the first people came to live in the land they call Dinétah (din-EH-tah). Dinétah, the Navajo homeland, is bounded by four sacred mountains. Each is marked by a beautiful jewel. To the east, Blanca Peak wears white shell. To the south, Mt. Taylor wears turquoise. The San Francisco Peaks to the west wear abalone shell. The La Plata Mountains to the north wear black obsidian. These mountains can be seen on a map that shows Arizona, New Mexico and Colorado. The beautiful jewels can be seen in many pieces of Navajo jewelry.

Diné say that the mountains were created by First Man and First Woman, Holy People of the Diné. First Man and First Woman and other Holy People made fire and designed the first hogan. In time, Night and Day, and the Sun, Moon and Stars were created. The Seasons and Harvests were provided. Sickness, death and other frightening things that are part of our lives are also described in Navajo history. Songs and prayers of the first people are still used by the Navajo as reminders of the earliest times.

One morning at dawn, First Man and First Woman heard a baby cry. They searched and found a baby girl. They named her Changing Woman. They loved her and raised this child with care. As First Man and First Woman cared for their child, so do Navajo people care for their children today.

According to the Navajo, Changing Woman's own children, Monster Slayer and Child Born of Water, destroyed many dangerous creatures on Earth. Changing Woman taught many things to the animal beings that lived between the four sacred mountains. Finally, she went far away to the West to live with the Sun. But before she went, she created the first four Navajo clans from the skin of her own body. These first people returned to Dinétah. There, the Navajo people followed the teachings of the Holy People. They have increased and prospered.
Dine Children

Children are dearly loved among the Diné. The family and the hogan are the centers of Diné life. When a child is born, there is much cause for celebration of new life in the family. Relatives and friends join in a very special blessing ceremony called Hozho (Hoh-JOH) before the baby is born. Hozho is the Diné belief of living in harmony and respect with the natural, spiritual, and social worlds. The baby is blessed and wished a long and happy life.

With much love and pride, the father makes an elaborate cradleboard for the new baby. The cradleboard did not originate with the Diné. They borrowed the idea from the Pueblo people and made it a part of Diné life. The cradleboard is fashioned from two boards laced together with an attached foot rest. At the top, an arched wooden bow is placed to serve as protection if the baby falls over. A cloth is attached to the top and rests on the bow. This cloth can cover the whole cradle, keeping out light, flies, and harsh weather. A piece of turquoise bead is usually placed on the cradleboard for a boy and a white shell for a girl. A pouch may be found on the cradleboard, containing pollen or herbs for protection.

The maternal grandparents are very important as they help in rearing and instructing the child on Diné values, proper behavior, clan relationships, and the oral tradition of the emergence of Diné people. Diné children are seldom punished. Parents lavish much love and affection on the children, often indulging their whims. Children are seldom permitted to cry, especially the last-born. A considerable freedom of action is allowed, but the child knows the limits. Courtesy and respect to elders and parents, and obedience are strictly enforced.

Growing up Diné means receiving instructions all through childhood, and learning through doing and observing. Important elements are taught by Diné parents to their children. Diné children are extremely close and affectionate with their parents and siblings. They share a home in proximity with one another, contributing and working together, and sharing laughter in good times and tears in bad times.

The Diné child is taught to know and respect Diné beliefs and his or her relationship to the Holy People. Respect for parents is a part of life, like breathing. Sometimes parents use storytelling to instruct the children, pointing out the moralities. Not all Diné children are instructed, disciplined, and trained in the same way. Like other American parents, there are important differences among Diné parents and grandparents.

Diné children are taught about food. They are taught how to obtain, prepare, and use the food. It's stressed that food should not be wasted but should always be offered to friends and strangers. Accumulation of too much of anything is not good. Moderation in all things is stressed for balance in Diné life.
Diné children are taught about taboos that deal with the proper behavior of children. Taboos are places, things, or actions that are filled with negative power and, therefore, must be avoided. Many of these taboos are simply common sense. Others are indications of the Diné respect for nature and life. Some taboos originated in sacred stories and some are part of healing ceremonies. There is no Diné word for taboos. The word Baahazidii (Bah-IA-zidy) is sometimes used, meaning feared, injurious, or dangerous.

Baahazidii

1. Don't point at a rainbow with your fingers. Your fingers will get sores and drop off. Use your thumb.

2. Don't look at the sun when it dies (eclipse). You will go blind.

3. Don't use partially burned wood. Lightning may have struck the tree. It will cause illness or bad luck.

4. Don't ride a horse during a storm. You'll get struck by lightning.

5. Don't harm or kill horned toads. They are grandfathers who guard arrowheads. You'll have stomach-related problems.

6. Don't say shush (bear) in the mountains. An unfriendly bear will come to you.

Children are encouraged to participate in family chores and other affairs. It's not unusual for a family to give a child a lamb for a pet. The child is expected to care for the animal and assume all responsibilities of a sheep owner. A Diné child is expected to contribute a gift for ceremonial feasts and other celebrations.

Life for the Diné children isn't all work. After the chores are done, children play games, ride bicycles, play video games, see movies, swim, and attend social and ceremonial affairs, such as rodeos and pow-wows with their families.

Diné children are given war names by their parents. These names are considered private property and are not used to address or identify a person when talking. In everyday conversation, Diné refer to each other by precise kinship terms rather than by names. Nicknames are given, possibly earned over several years. A girl might be given the name Nazbah, [NAAZ-bah] (One Who Went to War), but might actually be called Zaadha'la'ni [zzaad-hah-LANNI] (One Who Talks Too Much) for being lively and outgoing. Later on, as the girl grows older into womanhood, she may be called Olt'ali bit'isii [ol-tie-BIT-seh](Daughter of One Who Can Read), but never in her presence because it's considered bad manners. Diné people today haven't a problem saying their own names but traditionally, one is not suppose to repeat one's own name because it's bad luck. Children are teased by uncles and grandparents that their ears will dry up and fall off if they say their own names.
Celebration

A baby's first laugh is considered very important in the first year of the child's life. Families consider it so important that they have a celebration for this happy event. Families and close friends are invited to come and celebrate a baby's first laugh. The father of the child usually fixes a special mixture of salt in a ceremonial basket to distribute to guests. The mother of the infant prepare other foods to be served and older sisters and/or aunts prepare goodies to be distributed to guests at this special celebration. In the past, roasted pinon nuts, fresh fruits, baked bread or tortillas were distributed to guests. Currently, goodies include candies, fresh fruit, and salted nuts which are distributed to guests in paper bags. The baby is usually dressed in his or her best outfit which the mother has made days before the celebration takes place. At this time, the grandparents of the infant can present a gift to their new grandchild. This gift can be a name, or something to hang from the baby's cradle board: a turquoise stone for a boy or a white shell for a girl. Sometimes the gifts are elaborate, like a turquoise and silver bracelet. It's a great time for a family to get together so that relatives and close friends can see the newborn infant. After everyone has something to eat, the children play together and the adults have a chance to visit and exchange local news. This is a good time for cousins to bond and form good relationships. Children are very important to Diné families. A family is considered to be wealthy if they have many children.

Rain in Life

Living on the Colorado Plateau, between the four sacred mountains, Diné are in a place shaped by water and wind into fantastic shapes. The area has a variety of environments. Lower elevations of around 5,000 feet may receive 8 inches of precipitation a year, while the Chuska Mountains at 8,000 feet may receive 20 to 25 inches annually.

![Average Annual Inches of Rainfall](image)

Navajo Reservation Average Annual Rainfall Statistics

Although it snows in winter, the Rocky Mountains block Canadian air masses, and the presence of moisture trapping mountains can make this region drier than the desert in winter. When rains come with thunder, lightning and wind, they are male rains. The steady, quiet rain is female rain. Within one storm, both kinds of rain may fall.
Rain in Ceremony

The concepts of male and female rain reflect the duality and balance that is fundamental to the Diné. Aspects of male and female are throughout the natural and spiritual world of the Diné: present in animals, people, and deities, as well as in lightning, mountains, hooghans, and rainbows.

Water sprinkler, a deity of celestial waters, makes rain and is the water carrier in the Nightway Ceremony, which lasts for nine days and includes Yeii Bicheii Dances to which the public may come. It is a late autumn ceremony, done for healing, after the thunder and lightning stop, at the end of the growing season. Rain is a part of the ceremony because it is a fundamental part of life’s balance. In the Nightway Ceremony, Water Sprinkler recreates and depicts the forces of rain in nature. His role in the ceremony is also that of a clown, one who makes people happy and who, by extension, represents the rain itself, a phenomenon that makes people happy.

Expressions of Rain

Expressions of rain in ceremony are reconstruction of nature and of the universe. For Diné artist Joe Ben, baskets of the "wedding basket" design, used in a wedding or healing ceremony, symbolically create a sense of time, place and the environment. They provide a foundation for the ceremony. Ceramic water drums are also a part of the rain imagery of ceremony, as are shell beads on necklaces and bandoliers. Lightning and rainbow designs are painted on ceremonial rattles. Necklaces of turquoise, abalone, white shell and jet contain stones that are used in most Diné rituals, with turquoise a central ingredient in prayer offerings for rain.

Rain is integrated with the origins of weaving that include legends of Spider Woman. In Diné legend, the spindles used by Spider Woman in teaching the Diné to spin were made of zigzag, flash and sheet lightning, with the fourth spindle made of a rain streamer. The textiles that are sand painting designs and the depictions of Yeii Bicheii ceremonies have their links to rain through the ceremonies they represent.

The Diné Today

Today, the largest Indian tribe in the United States is the Diné Nation with approximately 200,000 enrolled members and 25,000 square miles of land. Many of the people still live on the reservation, that is, land set aside by the United States government for Indian use. Some Diné live off the reservation in cities and towns in different parts of the country, but Dinétah is always home. The Diné reservation is located in northern Arizona and the four corners area of Arizona, Utah, Colorado and New Mexico.
We are all of the five-fingered race, the human race. In some ways, we are all alike, but our lives can be very different because of where we live and the environment we live in. We speak a different language, dress differently, have a different religion, eat different foods and live in different shelters.

**Dinétah**, in the high desert of the Colorado Plateau, can be very hot and dry in the summer and bitterly cold in the winter. **Diné** have to build homes that will reflect the summer heat and keep the home cool in the summer. A good shelter also keeps out the cold wind and snow in the winter. **Diné** live in hogans, round-shaped shelters made of cedar or pine logs with mud-earth filling in the cracks. Every **Diné** hogan faces east to pay respect to Father Sun, a **Diné** deity. **Diné** offer prayers before sunrise for the world and for themselves, and give humble thanksgiving to the creator. They ask the Great Spirit to help them walk in beauty. The hogan is more than just a place to eat and sleep. It is the center of **Diné** family life and is considered to be a gift from the Holy People. It is here that tradition, religious teachings and social organizations are taught from birth.

There are two main types of hogan dwellings. The fork stick hogan is the male hogan mainly used for ceremonies. The male hogan is patterned after the **tacheeh** (*tah-chay*), the sweat bath hogan. The second type of hogan is the walled-logs or crib hogan. This hogan is considered the female hogan because it resembles the flared skirt of the **Diné** woman. It is identified with the woman because of the various household utensils and other items that belong to the woman into whose care the hogan is given.

Traditionally, the hogan didn't have windows, only a smoke-hole at the center-top of the structure and the door. Today, you can find furniture, appliances and even a television set in some hogans. There is usually a permanent homestead where corrals, storage dugouts or hogans and summer ramadas are built for sleeping and cooking outdoors.
Nearby, usually out of sight behind a hill, is a sweat house, built like a miniature forked hogan. The tacheeh serves as a bath house. Rituals are conducted in this sweat house, with prayers and chants to cleanse the mind and body in order to get back into harmony with life. After a sweat bath, one may plunge into cold water and then roll in the snow or in dry sand to dry off.

Questions and Answers about the Diné

How did some of the early Spanish missionaries and explorers describe the Navajo people?

- The Navajo people were described as hunters and gatherers who did little farming.
- The missionaries also wrote that the Navajo traded with other groups of Indians such as the Pueblo peoples who lived nearby.

What was Navajo life like in the 1600s?

- Family was the center of Navajo life. Life centered on the home and the home centered on the woman. All property belonged to the woman of the family.
- All members of the family shared the daily work of caring for the animals, the farmed fields, the home and the daily needs of the family.
- Families were very close and closeness of relationships gave the people a sense of well-being.

How did the arrival of the Spanish explorers cause changes in the Navajo way of life?

- The Europeans imposed many elements of their culture on the Navajos and other Native peoples. Some of the changes improved Navajo life and were welcome. Other changes were not regarded as beneficial such as slavery, style of government and religion.

What are some of the elements of Spanish culture that were adopted by the Navajo?

- Raising sheep, goats and horses; growing new crops; and the use of metal tools and containers. Sheep became not only a new source of food, but a source of wool used to make clothes and blankets.
- While the Navajos learned silversmithing from the Mexicans, it was the Spaniards who introduced the Navajo to the use of metals.
- The design of the "squash blossom" used in necklaces seems to be of Spanish origin also.
What did the Navajo learn from the Mexicans?

- They learned the techniques of making silver jewelry and ornaments. Remember that the Navajo had already learned the use of metals in jewelry from the Spanish. Then, from the Mexicans, they learned techniques for making silver jewelry.

What was life like for the Navajo people in the 1800s?

- The political changes in Spain, Mexico and the United States affected life for many groups living in the Southwest, and the Navajo were no exception.
- The different governments competed for the land in the Southwest, and pressures to conform to different ways of life were placed on the Navajo and other native residents.
- In 1864, the Navajo were forced by the United States government to leave their homes and walk to Bosque Redondo in New Mexico.

Why did the United States government force the Navajo people to take the "long walk"?

- The government evidently wanted to remove the Navajo from their lands so that non-Indian settlers could move in.

What happened to the Navajo people once they were at Bosque Redondo?

- The sheep herds and the fields they left behind were destroyed. The Navajo people were imprisoned for four years. Many of them died from sickness and starvation.

In 1868, after four years at Bosque Redondo, the Navajo people were freed. What happened then?

- They were allowed to move to an area of land that had been defined for them. This new reservation included only 10% of the land the Navajo had originally occupied.

Has life changed for the Navajo since their return from Bosque Redondo? How?

- Yes. Although the federal government provided new livestock to every Navajo family, times have changed. The economy on the reservation shifted away from family self-sufficiency. Development of industry and the production of goods for the American marketplace, satisfying tourists' demand for Navajo arts and crafts, have caused changes.
The government, under the terms of the treaty, agreed to provide health care and schools for the education of the Navajo children. Schools have been established on and off the reservation to make equally available the benefits of American society to all Americans.

Today, life for the Navajo is a blend of old and new.

Do Navajo people still live in traditional hogans?

- Some people do and some don't. Navajo homes can be found with both old and new styles of architecture. Hogans are built and lived in while other styles of homes are constructed nearby by some. Hogans are particularly important for the maintenance of the Navajo religion.
- Luxuries and modern technology available to all Americans, such as television and telephones, are also to be found in many parts of the Navajo reservation.

Do the Navajo still use horses to get around?

- Cars and trucks have replaced the horse as the principal form of transportation. However, many Navajo people still own horses, which they care for with pride. For those who care for sheep, horses are often an efficient way to get around.

How is the Navajo tribe governed?

- Since the 1920s, the Navajo have had a tribal council that helps establish the rules, procedures and laws by which the tribal members live. The Council includes representatives from different reservation districts.
- An elected Tribal Chairman heads the Navajo Nation. Its capital is located at Window Rock, Arizona.

How has the Navajo economy changed since the 1800s?

- Fewer families are fully dependent upon their animals and summer harvests for survival. Many Navajos go to work each day in exchange for wages. Others work in the production of arts and crafts to be sold to both Navajos and non-Navajos.

Is the production of arts and crafts important to the tribal economy?

- Yes. For many families, it can be the only source of income.
- The Navajo Tribal Council is encouraging tribal members to pursue the arts. Through art, Navajo artists can preserve respected traditions.
What's the market for Navajo arts and crafts today?

- Navajo arts are widely sold and appreciated by the greater society. The creation of Navajo art and craft objects requires long hours of work by very skillful artists. Most people are not aware of just how many hours it takes to make a small rug, for example. They complain that the prices are "too high." This situation has prompted non-Navajos to start making imitations of Navajo products and to sell them for a lower price.

How does that effect the Navajo economy?

- Sometimes Navajo artists cannot compete with non-Indians who make and sell so-called "Indian Art." This competition makes life very difficult for Indians who depend on their art for income.

What can be done to change this situation?

- (Answers will vary. Let students come up with solutions.)
NAVAJO DYE CHART:
One Way to Make a Rainbow

Remind the students that they have learned that the Navajos are well known for their arts. They are known especially for their textiles. Textiles and other arts are not made just because they are useful objects or because they can be sold to non-Indians. Navajo arts are an expression of the self, expression of the things the artist knows and appreciates about his or her world.

Navajo weavers, for example, have said that when they are in a bad or frustrated mood, they should not weave. To do so would be to put those bad feelings into their work.

Show the Navajo Dye Chart to the students. Tell them that this chart includes some of the elements from nature that Navajos use in their textiles.

This chart brings together samples of natural coloring materials in raw form with yarns that have been dyed with those of natural materials. The good things in life -- gifts of Mother Earth, sheep (wool) and the act of creative thought as exemplified by weavings.

Ask the students to look at it and think about any qualities that make one think of good feelings, nature, harmony, beauty, and peace.

Woven With Love

Find the images from the coloring book, Woven with Love, published by the Heard Museum. The pictures and text explain the process for weaving a Navajo rug, show some designs, and demonstrate how the textiles were and are used. There are also some pages which encourage the students to create their own rug designs.

You are invited to duplicate the images for each student so that each child can make a booklet. The master images are numbered on the reverse side should you need to reestablish the sequence.

Navajo Wearing Blankets

Over 100 years ago, Navajo women wove blankets that were used as clothing. These blankets had wonderful colors and designs. The blankets showed the love and care the weaver felt for her work and the people who would wear her blankets. Let's learn more about these special Navajo blankets that were WOVEN WITH LOVE (Children's illustrated versions are also available).

Many years ago, Navajo women made beautiful blankets. Navajo people wore blankets the way people wear sweaters today. The blankets were very colorful. Many blankets were red, dark blue, white, and brown or gray. How were these blankets made?

Navajo blankets were made from wool. The wool came from sheep. For many years, sheep have been important to the Navajo people. When we make something, we need tools. Here are the tools the weaver used -- shears, wool cards, spindle, weaving fork. On the next pages, we will show you how the weaver used these tools. Look for them. The weaver needed wool for her blanket. Every winter her sheep grew thick wool coats. She used SHEARS that look like big scissors to cut the wool off her sheep.

After she clipped the wool, the weaver combed the wool with WOOL CARDS to take out the tangles. Then she twisted the wool into yarn using a SPINDLE. Did you ever see a blue sheep? What colors are sheep? Some are white; some are light brown; some are dark brown. If a weaver wanted blue or green colors in her blanket, the yarn had to be cooked in dye to color it. Next the weaver made a loom to weave her blanket on. A Navajo loom looks like a wooden frame. Inside the frame, the weaver wrapped strong wool yarn called the warp.

The weaver hung the warp yarn on the loom. Finally the weaver was ready to sit in front of her loom and weave a blanket. She added many rows of yarn and used her WEAVING FORK to put them tightly together.
The weaver thought for a long time about the design she would weave in the blanket. She thought about the colors she would use. Here are the designs she thought of -- Stripes, Crosses, Pictures, Zigzag Lines. Blanket Designs Here are some Navajo blanket designs. You can draw one of these designs in the blanket outline, or you can imagine your own design.

**Design a Blanket**

More Blanket Designs Here are some more Navajo blanket designs. You can draw them or make your own design in the blanket outline. Blankets are IMAGINATION CLOTHES. When we wear clothes with sleeves, we don't have many choices about how to wear them. But when you wear a blanket, you can imagine lots of different ways to wear it. Over one shoulder! Over both shoulders! Across the front of you! Blankets can keep your head and hands warm. They are like a hat and gloves and coat -- all in one! There are so many different ways to wear a blanket. Blankets are really IMAGINATION CLOTHES!

Navajo blankets are special. Navajo women made the blankets with care and love and imagination. And people who wore the blankets also could use their imagination.

Navajo women do not make blankets any more, but they still imagine wonderful designs. They put the designs on rugs and other things that decorate the home. They also imagine designs for saddle blankets. Navajo weavers still use their imagination to make beautiful things.
Navajo Wearing Blankets

Over 100 years ago, Navajo women wove blankets that were used as clothing. These blankets had wonderful colors and designs. The blankets showed the love and care the weaver felt for her work and the people who would wear her blankets. Let's learn more about these special Navajo blankets that were WOVEN WITH LOVE.

Illustrations by Tom DeLapp
Text by Ann Marshall, Curator of Collections
Many years ago, Navajo women made beautiful blankets. Navajo people wore blankets the way people wear sweaters today. The blankets were very colorful. Many blankets were red, dark blue, white, and brown or gray. How were these blankets made?
Navajo blankets were made from wool. The wool came from sheep. For many years, sheep have been important to the Navajo people.
When we make something, we need tools. Here are the tools the weaver used -- shears, wool cards, spindle, weaving fork. On the next pages, we will show you how the weaver used these tools. Look for them.
The weaver needed wool for her blanket. Every winter her sheep grew thick wool coats. She used SHEARS that look like big scissors to cut the wool off her sheep.
After she clipped the wool, the weaver combed the wool with WOOL CARDS to take out the tangles. Then she twisted the wool into yarn using a SPINDLE.
Did you ever see a blue sheep? What colors are sheep? Some are white; some are light brown; some are dark brown. If a weaver wanted blue or green colors in her blanket, the yarn had to be cooked in dye to color it.
Next the weaver made a loom to weave her blanket on. A Navajo loom looks like a wooden frame. Inside the frame, the weaver wrapped strong wool yarn called the warp.
The weaver hung the warp yarn on the loom.
Finally the weaver was ready to sit in front of her loom and weave a blanket. She added many rows of yarn and used her WEAVING FORK to put them tightly together.
The weaver thought for a long time about the design she would weave in the blanket. She thought about the colors she would use. Here are the designs she thought of --
STRIPES, CROSSES, PICTURES, ZIGZAG LINES
BLANKET DESIGNS

Here are some Navajo blanket designs. You can draw one of these designs in the blanket outline, or you can imagine your own design.
After the Rain: Rainbows

DESIGN A BLANKET
MORE BLANKET DESIGNS

Here are some Navajo blanket designs. You can draw them or make your own design in the blanket outline.
DESIGN A BLANKET
Blankets are IMAGINATION CLOTHES. When we wear clothes with sleeves, we don't have many choices about how to wear them. But when you wear a blanket, you can imagine lots of different ways to wear it.
Over one shoulder! Over both shoulders!
Across the front of you! Blankets can keep your head and hands warm. They are like a hat and gloves and coat -- all in one!
There are so many different ways to wear a blanket. Blankets are really IMAGINATION CLOTHES!

Navajo blankets are special. Navajo women made the blankets with care and love and imagination. And people who wore the blankets also could use their imagination.
Navajo women do not make blankets any more, but they still imagine wonderful designs. They put the designs on rugs and other things that decorate the home.
They also imagine designs for saddle blankets. Navajo weavers still use their imagination to make beautiful things.
Important Things

Activity: Using the model, "The Important Book of the Diné," students will write a "book." Depending upon the make-up of the class, students will also learn some words in other languages.

Focus Activity: After having discussed the cultural information on the Dine' provided in this kit, read "The Important Book of the Diné." Note: The Dine' words used in this text are the same ones highlighted in the activity "Summer Rain" (Personal Narrative Grades 2-3).

Outcomes:

1. Students will understand more about the Diné and learn some Diné words.
2. Students will write an "Important Book" about their own lives.

Materials:

- "Important Book of the Diné."
- * paper and *pencils

Procedure:

1. Explain that the "Important Book of the Diné" was written by a Diné girl. In this book, she has used words from her language to identify people and things that are important to her.

2. Discuss with the class some things they learned from having this book read to them. What things are the same in their experience? What's different?

3. Start working with the students to write their own book. If you have students in the class who speak another language, encourage them to share the words for people and things in their language.

4. Since there are a number of sections or segments in this book, students will probably need to spend several days completing this assignment.

5. With illustrations, these "Important Books" might make excellent gifts for the children to give to their parent(s).

6. If these relatives are not appropriate for a particular child, encourage them to transfer the identification to another person: uncle, aunt, cousin, etc.. You might also encourage children to complete only a portion of the segments.
Assessment:

- Did the students personalize the narrative to their own lives?
- Did they understand the organization of each "important" narrative?
Shi ma *(shi-MAH)*

The important thing about *Shi ma* (my mother) is that she loves you no matter what.

*Shi ma* gives you the foods you need to keep your bones healthy and strong.

*Shi ma* makes nice velveteen shirts and skirts for you to wear to nice places.

*Shi ma* cooks corn tortillas and hominy stew when your stomach is hungry.

*Shi ma* tucks you in bed at night and sings softly before you close your eyes to sleep,

But the important thing about *Shi ma* is that she loves you no matter what.

Shi zhé éé *(shi-JAH-ah)*

The important thing about a *Shi zhé é* (my father) is that he cares for you.

*Shi zhé é* builds the hogan to keep you safe and comfortable.

*Shi zhé é* makes the *Aweetsaal* out of cedar or oak for the baby to be carried in.

*Shi zhé é* builds the corral to keep the cows, horses and sheep safe and comfortable.
Shi zhé é tends to the crops and makes sure we all get plenty to eat.

But the most important thing about Shi zhé é is that he cares for you.

Shi ma sani (shi-MAH-sana)

The important thing about Shi ma sani (my grandmother) is that she is wise.

Shi ma sani teaches you to speak the Diné language, the names for herbs, plants and special songs to sing while weaving a rug, riding a horse, and just being a happy person.

Shi ma sani teaches you not to hurt animals and insects, that animals and insects are our friends.

It is Shi ma sani who said, according to a Diné legend, Spider Woman taught Dine' women how to weave rugs and blankets.

Shi ma sani gives you a goat in the spring as a gift for always doing your chores.

But the important thing about Shi ma sani is that she is wise.

Shi cheii (Shi-CHAY)

The important thing about a Shi cheii (my grandfather) is that he is kind to me.

Shi cheii is a special teacher, who teaches you to be kind, because the holy people are always watching.
Shi cheii makes sure your goats and lambs will get plenty to eat.

Shi cheii takes care of the horses and cows.

Shi cheii loves to tell you stories and legends around the fire on winter nights.

But the important thing about Shi cheii is that he is kind.

Shi deezhi (Shi-DAY-zah)

The most important thing about Shi deezhi (my young sister) is that she is your friend and sister at the same time.

Shi deezhi always needs many questions answered and help from you. She needs help reaching things she cannot reach, and help getting dressed and fixing her hair.

Shi deezhi is always proud to wear your clothes and shoes that you've outgrown.

You can play for hours with Shi deezhi. You can play together and teach her games like cat's cradle. You can tell her secrets and you can be sure the secrets will be kept between you two.

Shi deezhi likes to help you make fry bread and hominy stew and she likes to help you gather corn, melons and squash from the garden.

But the most important thing about a Shi deezhi is that she is your friend and sister at the same time.
Shi tsili (Shi-TSILA)

The most important thing about a Shi tsili (my young brother) is that he is your brother and friend at the same time.

You can spend many hours playing with Shi tsili and actually have fun playing with a boy's things. Shi tsili helps you to mold clay figures into horses, cows and farm animals when you play together. Shi tsili lets you borrow his jacket on a cold, windy day.

Shi tsili tells you that you tried your best, even if you didn't win a game. He is always your biggest fan.

You can tell a secret to Shi tsili and know the secret will stay between you two. You can fight and quarrel with Shi tsili and are friends again soon.

Shi tsili asks you to teach him how to social dance so that he knows what to do when a girl asks him to dance. Shi tsili shows you how to ride horses when everyone seems to be busy doing other things.

But the most important thing about a Shi tsili is that he is your brother and friend at the same time.

Aweetsaal (Ah-WEET-sal)

The important thing about an Aweetsaal (a cradleboard) is that it is a safe and comfortable traveling bed.

A stone of white shell is used to decorate the headboard of a baby girl. A stone of turquoise is used to decorate the headboard of a baby boy.

The rainbow arc is to protect the baby.
Beneath are Mother Earth and Father Sky to watch the baby grow healthy and strong.

The blanket cover is of white clouds. Along the sides of the Aweetsaal are loops made of zig-zag lightning, Sunbeam straps hold the baby snugly together.

But the important thing about an Aweetsaal is that it is a safe and comfortable traveling bed.

**Mosi Yazhi (Musa-yah-zah)**

The important thing about a mosi yazhi (kitten) is that it licks your face to show its love.

*Mosi yazhi* has soft, shining fur and likes to purr as it sleeps.

If you give *mosi yazhi* milk, it will lick it's paws and curl up in your lap.

*Mosi yazhi* likes to spend hours looking for mice to play with.

*Mosi yazhi* likes to play with Shi ma sani's yarn as she sits at her loom weaving a rug.

But the important thing about a *mosi yazhi* is that it will lick your face to show its love.

**Kelchi (Keh-CHAH)**

The important thing about kelchi (moccasins) is that they are something to wear on your feet.

*Kelchi* are made from soft buckskin and the soles are made from cowhide. *Kelchi* are made to dance in at a social dance with a favorite partner.
*After the Rain: Rainbows*

*Keichi* are made only for you to wear, once they are blessed in a Beauty Way Ceremony, no one else should wear them except you.

*Keichi* help you to walk in beauty

- in front of you
- behind you
- on top of you
- beneath you

All around you, you may walk in beauty.

But the important thing about *kelchi* is that they are something to wear on your feet.

**Hogan**

The most important thing about a *hogan* is that it is where you live.

A *hogan* is where you eat, play and sleep with your family.

A *hogan* is round in shape and is made out of logs and mud and the door always faces the east to greet the morning sun.

A *hogan* must be blessed by an elder before you live in it.

A *hogan* is where the family comes together for celebrations, for baby's first laugh, a girl coming of age, traditional weddings and other important ceremonies.

But the important thing about a *hogan* is that it is where you live.
Ts’ aá (Tsah)

The important thing about a ts’ aá (basket) is that it is used for serving traditional food at ceremonies.

Ts’ aá is made by women from sumac and mountain mahogany and coiled into a plaque.

Ts’ aá is used for storage of food, nuts, berries and corn pollen.

Ts’ aá is used at a Diné wedding ceremony to serve traditional food to the bride and groom.

The design on a ts’ aá represents rain, black clouds and mountains.

But the important thing about a ts’ aá is that it is used for serving traditional food at ceremonies.

Tsedaaashjeé (SAY-dash-jay-ee)

The important thing about tsedaashjeé (grinding stone) is that it helps grind corn for tortillas.

Tsedaaashjeé is something every mother should have in her home.

Tsedaaashjeé can be used to grind corn, seeds, piñon nuts and other foods.

Tsedaaashjeé can be used to grind plants and herbs and to crush hard meat.

A brush made out of bent grass goes with the tsedaashjeé to help brush the ground material off the stone.
But the important thing about tsedaashjee' is that it helps grind corn for corn tortillas.

'Asaateeli (Ah-SAHT-ee-lah)

The important thing about 'asaateeli (ceramic pot) is that you eat out of it.

'Asaateeli is made from special clay and baked in an oven to make it last and last.

'Asaateeli is used for storage of seeds and ground corn.

'Asaateeli is used for cooking, storing and serving food.

'Asaateeli is used in Navajo ceremonies to hold herbs. It is used to serve food to the Yei during the Night Chant since they only eat food cooked in traditional pots.

But the important thing about 'asaateeli is that you can eat out of it.

Diné (Din-NEH)

The important thing about being a Diné is Hozho na sha (I walk in beauty).

The Diné are also called Navajos, a name given to them by others a long time ago.

The Diné live on the Navajo Reservation near the four corners area.

The Diné are proud of their language, legends, songs, games and dances.
The Diné are the largest Native American tribe in the United States.

But the important thing about being a Diné is Hozho na sha (I walk in beauty).
Personal Narrative (K-1)

Activity: Students will write a personal narrative.

Focus Activity: Read "My Home in Kitsillie."

Outcomes:

1) Students will understand that some books are written by the people in them and some are written by people who are not in them.

2) Students will write their own personal narrative.

Vocabulary: personal, narrative, share, audience

Materials: "My Home in Kitsillie," paper, pencil, drawing materials

Procedure:

1) Explain that "My Home In Kitsillie" is written as a personal narrative. Personal narrative means telling about yourself. Remind students that they don't know Desirée so she had to explain things that she wouldn't have had to explain to a friend.

2) Ask students to tell what kinds of information Desirée shared in the book. (Where she lives, things she likes, family information . . .

3) Choose some kinds of information appropriate for the students in your class. (The amount and kinds of information are dependent on your students' interests, abilities, and the time you can give to the activity.)

4) Discuss the idea of audience with your class. Try to find an audience of strangers to read your students work (another class, especially at another school, or visitors to the school library).

5) After you have chosen the kinds of information and students understand that they are sharing information about themselves with strangers have students write their own personal narrative. The procedure you use depends on the writing process format normally used in your classroom. This can be a daily journal assignment that is later put together in a published format, or a formal writing assignment.

Assessment:

- Did students share information necessary for a stranger to understand the narrative?
- Did students write in the first person?
- Was the narrative an account of the students life or fiction?
My Home in Kitsillie

Yá at ééh, my name is Desiree Yazzie.
My Diné name is Dez.
My Diné name was given to me by my grandmother.
My mother's clan is Coyote Pass.
My father's clan is Bitter Water.
I live in a community called Kitsillie on the Diné Reservation.

These are my pets.
I have a kitten. Her name is Ash.
I have goats, lambs, and a horse.
I have to take care of my pets each day.
I make sure they have water to drink and food to eat.
I also make sure their homes are clean and safe.
My goats and lambs were given to me by my grandparents for doing my daily chores.

This is my mother, Dorothy. She takes care of us.
She fixes my hair each day and helps me get ready for school.
She is a school administrator.

This is my father, Wayne. He goes to work each day.
He is a supervisor with a construction company.
He has many workers working for him.
Today, they are repairing a house.

This is my grandmother, Anna Redhair.
She makes my skirts and blouses in the style that Diné women wear.
I like to wear the style of clothing that was worn by my grandmother and her grandmothers to social dances and ceremonial events.
Grandmother Anna also gives me turquoise and silver jewelry to wear with my outfit.

This is my grandfather, Allen Redhair.
My grandfather is a famous storyteller.
At night time, I like to sit and listen to Grandfather's winter stories.

My grandparents live in a Diné style hooghan.
I live next door to them, I like living near them.
I go to school at Black Mesa Community School. I ride the bus everyday to school.

This is my classroom teacher, Mr. Don Walker. He is helping me with my school work.

I enjoy doing creative writing on the computer at school. In my class, I write stories about my heroes and holidays.

After school and after my homework is done I have to do my chores. I like to help my grandmother with her rug weaving. I help her with carding and spinning the wool. My grandmother is weaving a beautiful and colorful rug.

When someone leaves, we say Há goo nee, which means "I hope we meet again in the future".

Text: Arlene Old Elk

Thanks go to Desiree Yazzie, her parents Wayne and Dorothy Yazzie, and her grandparents Allen and Anna Redhair, of Kitsillie Community, Pinon, Arizona for their time and efforts.

We also thank Desiree Yazzie's teacher, Don Walker and the staff of Black Mesa Community School, Pinon, Arizona for their cooperation.
Personal Narrative / Grades 2-3

Activity: Reading, analyzing, and writing a personal narrative about rain.

Focus Activity: Read the book "Summer Rain." The Dine' words used in the text are the same ones used in "The Important Book of the Dine'." It may be useful for your students to work on the activity "Important Things" either immediately before or immediately after this activity.

Outcomes:

1. Students will understand the concept "personal narrative."
2. Students will analyze the kinds of information included in the personal narrative "Summer Rain."

Vocabulary: trotting, tended, artist, patiently, admiringly

Materials: "Summer Rain"

* paper and *pencils

Procedure:

1. Read "Summer Rain."

2. As a class discussion, as a small group activity, or individually, students need to analyze the story for words that show thoughts, emotions, actions, sensory details (things seen, smelled, heard, etc.) Have the students create a worksheet listing all the senses if they are having trouble picking these out of the text.

3. After completing the worksheet discuss why author Arlene Old Elk (Diné) needed to describe what she saw, heard, and smelled. Be sure students understand the audience's need for information.

4. Give the students a "think time" to remember a time when it rained.

5. Give the students a few minutes to discuss their memories.

6. Have students organize their thoughts listing a sequence and their impressions. Caution them to write only a word or two for each idea -- complete sentences often inhibit children's writing on the final draft.

7. Give students time to write a personal narrative about rain.
Assessment: If carefully supervised, children can help each other assess their work. After they listen to a classmate's narrative, have them tell their favorite part (word, event, description) and then ask a question. The question will suggest areas of confusion or areas where more information would be helpful.

Extension: Personal narratives do not always need to be "literature." When children write an explanation of their involvement of a mishap on the playground, they are writing a personal narrative. Diary or journal entries meant to be shared and field trip reports can be written as personal narratives.
Personal Narrative
Older Students

Activity: Reading a personal narrative about rain, understanding the vocabulary words, and using a thesaurus to replace words while keeping the same meaning.

Focus Activity: Read the book "Summer Rain." The Dine' words used in the text are the same ones used in "The Important Book of the Dine'." It may be useful for your students to work on the activity "Important Things" either immediately before or immediately after this activity.

Outcomes:

1. Students will understand the concept "personal narrative."
2. Students will use a dictionary to discover the meanings of words, and select the correct definition based on context.
3. Students will use a thesaurus to find synonyms for words in the story.

Materials:

- "Summer Rain"
- * paper and *pencils
- *dictionary
- *thesaurus

Procedure:

1. Read "Summer Rain."

2. Discuss with the students how some words have two or more different meanings, and may also be different parts of speech. Words that appear in the story include: loom, corral, wash, miniature, skin, function, still, show, squash.

3. Using a dictionary, look up the various meanings and parts of speech. Then, by finding the word in the story, decide on the correct meaning and part of speech.

4. Discuss with the students how some words are different but have the same, or almost the same, meaning. Words that can be explored in the text include: quickly, instructed, respect, returned, exciting, finally, planned.
5. Using a thesaurus, look up some synonyms for the words. Then, decide on an appropriate word to use.

Assessment:

1. Could the students use the dictionary and thesaurus effectively?

2. Could the students make appropriate decisions on meaning, parts of speech and synonyms?

Extension:

- Repeat this exercise using a different story.
- Have the students repeat this exercise with their own stories written in the activity "Hidden Story."
Summer Rain

by

Arlene Old Elk

The dark clouds moved quickly from different directions covering the blue skies. The strong wind swiftly came in, as it moved the branches on the juniper tree. They swayed back and forth, just like, men and women sway back and forth at a summer social function.

The goats and lambs were getting restless. They looked and ran around wildly looking for their mothers. Mazi yasi, the family kitten, stretched lazily near the loom where she was sleeping on a sheep skin. She went outside to join lai chaii, the family dog, who was guarding the hogan. They both sniffed the air and couldn't sit still. The horses in the corral were neighing and trotting back and forth. The children were playing outside on the rocks near by.

Grandmother Aszhaan Ashii (Salt Woman) went outside her hogan and instructed the children to come quickly inside the hogan. She said that it was going to rain soon. The children went inside the hogan and sat down. Grandmother told them to sit quietly.

Pretty soon, a female rain started, it was a gentle rain, as it came down softly and soaked Mother Earth. Grandmother explained that it was important for everyone to sit quietly to show respect for the rain. We sat and listened to the sound of the rain for what seemed like a long time. After a few hours, the rain stopped and Grandmother said it was time to go outside. As we stepped outside, the earth smelled so good. The blue skies returned. The horses had settled and seemed to be in a calmer mood. The goats and lambs were kicking and prancing around. They seemed so happy!

Grandmother was very pleased, since it had been hot and dry all summer. She went outside and faced the east and said a prayer of thanks to the rain gods for giving us rain. Grandfather was pleased too, he knew the melons, squash, beans and corn he tended in the garden would bring good food to everyone now. Father and Mother were also happy that it rained. It meant that the children would soon be eating healthy fruits and vegetables. Mother couldn't wait to start baking bread in her bread house. Right away father went to the garden to see how much rain fell on our crops.

The children were excited! They danced with joy outside. They all knew what they wanted to do. They ran as fast as their legs could carry them towards the wash. They found the spot where they usually played. They loved to spend hours and hours playing there. Today there was wet mud clay to play with. They spent the entire afternoon playing, using the mud clay to model people figures and animal figures such as horses, cows, dogs, cats and farm animals. There was a village to build, roads to build, trees and plants to make. It was always exciting to see what someone else created out of the mud clay.
After we finished, we looked at our works of art to decide who was the most outstanding artist. Everything looked so good. It was hard to decide. We simply couldn't make up our minds. We quickly ran home to ask Shi-ma (mother) to come and look at our art work, but she was too busy nursing her new baby in the awee-tsaal singing her a lullaby song. We asked Shi-zhe'e (father), but he was too busy giving water to the horses. We couldn't possibly ask Shi-chai (Grandfather), he was too busy making sure the crops received plenty of rain water. We finally decided to ask Shi-masonnie (Grandmother) to look at our work of art. Of course she was busy weaving her rug, but she said she would come with us. We followed Grandmother, making sure not to run ahead of her. We got there and she walked back and forth looking at our clay village of people and animals. She looked and looked and we patiently watched her wrinkled face for any signs of emotion, but she didn't show any. Finally, she said it wasn't a good idea to think our work was better than anyone else's. She said each one of us were talented and that she was extremely proud of us. That made our hearts happy. We were all winners!

She said she had to get back to her weaving and she left. Slowly, she disappeared over the hill. For a long time we sat there admiring our work of art. Then we decided to let the sun bake our clay projects and tomorrow we would return and put on the finishing touches. There were all kinds of possibilities, we could paint the village and add skirts and ruffles to women figures. We still had miniature baskets to weave and a miniature loom to set up just like Grandmother's. Yes, we planned to come back the next day.

What joy the rain can give to everyone, especially the Diné children on a summer afternoon.
Special Day

Activity: Using the model, "Aweetsaal: The Dine' Cradleboard", students will write a narrative about an important day in their lives.

Focus Activity: After discussing the cultural information available in this kit, read "Aweetsaal: The Diné Cradleboard." Note: The Dine' words used in this text are found in "Summer Rain" and "The Important Book of the Dine'."

Outcome:

1. Students will understand more about the Diné.
2. Students will write about an important day in their own lives.


Procedure:

1. Read aloud the story "Aweetsaal: The Diné Cradleboard."

2. Discuss with the class all the things that Shanabah saw, felt, smelled, and did while in her aweetsaal.

3. Discuss Shanabah's special day.

4. Ask students to think of a special day in their lives. If there are students from different countries and backgrounds in your class, encourage each child to draw on something different or unique.

5. Begin by asking students to start telling about their special day before the day happens: what leads up to the day? What happened before that time?

6. Ask students to share their rough draft with a friend, and then re-write it.

7. Ask students to read aloud what they have written.

Assessment:

- Did students draw on their own lives to write this narrative?
- Did they tell of the special happening by telling about the events leading up to the event?

Extension: Students could illustrate their special day stories.
Desbah is very happy. She is going to have a baby soon. She sings to her baby everyday, while she does her daily chores:

She na sha, She na sha, She na sha,
Lakai Hozoni la a ya hey na ya
Aa ha la, Aa ha la, go na sha,
Aa ha la, Aa ha la, go na sha,
She na sha, She na sha, She na sha

Kee, the baby's father, is happy too. He is looking for an oak tree to make the aweetsaal. Aweetsaal is a cradleboard that the Diné have used for a long time as a baby carrier. Father is thinking happy thoughts while he is busy making the aweetsaal.

The baby arrives early one summer morning, when the lambs and goats are jumping, kicking and prancing around and the flowers are smelling sweetly.

Kee and Desbah decide to call their baby Shanabah. Desbah proudly puts Shanabah in the aweetsaal. Softly she tells her baby:

The rainbow arch above your head is to protect you.
Beneath you are Mother Earth and Father Sky
to watch you grow into a healthy person.
Straps of lightning hold you tight
as well as the lace of sunbeam bright.

Grandmother and grandfather watch proudly as mother puts Shanabah in her new aweetsaal. Even masi yazi (kitten) looks on proudly. Shanabah feels so comfortable and safe in her snug bed. She can hear her mother's soft voice as she sings a lullaby song. Shanabah loves to hear her mother's voice. At bedtime, the only other sound Shanabah hears is the fire crackling in the wood stove. As the warmth of the fire fills the hogan, Shanabah falls asleep.

Shanabah loves her aweetsaal. Sometimes mother stands aweetsaal against the hogan so that Shanabah can watch her mother grind corn. There is blue corn, yellow corn, red corn and white corn. They all look colorful in the basket. The basket has a beautiful design of clouds, lightning, rain and mountains. After the corn is ground,
Shanabah loves the smell of the corn tortillas that her mother is making for dinner. When she smells the tortillas, Shanabah knows that father will soon be coming home from tending the flock of sheep all day.

Besides watching mother, Shanabah also loves looking up at the sky through the opening in the hogan. She sees clouds moving swiftly by; the blue sky seems so still. She hears the wind howling and the dogs barking outside. At night time, Shanabah sees the stars dancing in the sky and the big, bright moon looking at her.

As the days go by, she grows to love her aweetsaal. Mother sometimes takes Shanabah outside. She loves to watch her mother work on her loom. It is grandmother who tells how Spider Woman taught the Dine' how to weave rugs and blankets. Mother works proudly on her loom of many colors: red, gray, white and black. It is a beautiful design of lightning and thunder.

One day, Shanabah and her mother are sitting outside waiting for father. It is a nice day. A butterfly flutters by. Shanabah has never seen beautiful colors like that before. A rabbit darts out and runs quickly behind a juniper tree. Shanabah enjoys seeing the sights outside. She loves the red mesas near their hogan. All of a sudden as they are sitting there, waiting for father to take the sheep in the corral, a little goat starts nibbling on Shanabah's ear. At first she smiles. Then -- all of a sudden -- a giggle comes from within her! She laughs and laughs as the goat tickles her. Mother smiles. This is Shanabah's first baby laugh. This calls for a celebration!

All the relatives are invited for the baby's first laugh celebration. It is important that a celebration be given so that the baby will not be selfish. Grandmother and mother are very busy preparing food to give away to all the people who are coming for the celebration. Father prepares the special salt that is part of the give away.

Finally, the big day comes and Shanabah is dressed in a bright velveteen skirt and blouse. The relatives arrive and some of them bring gifts. Grandfather has made Shanabah a turquoise bracelet, just big enough to go around her chubby wrist. Grandmother gives a gift of turquoise earrings that Shanabah will wear on her first birthday.

Mother helps Shanabah give everyone the salt, food and other goodies. Everyone wishes Shanabah a happy and healthy life. Shanabah hears the children talking, laughing and playing outside. Everyone has something to eat and has a good time.

It is a long day for Shanabah. Finally, it is time for everyone to go home. People wave good-bye. Shanabah is getting tired. She wishes for the comfort of her aweetsaal to hold her tight. Gently, mother wraps Shanabah in her aweetsaal and softly sings the lullaby song. After Shanabah goes to sleep, mother gently places aweetsaal down on the earth. Masi yazi curls up next to Shanabah. The hogan is quiet and peaceful as the sun sets against the red canyons in the west. It has been a very important day for Shanabah.
Navajo Cradleboard

Ear Hole
Rainbow
Short Rainbow
Lightning Bolt (left)
Lightning Bolt (right)
Earth-Right
Dark Sky (left)
Various Waters
Short Rainbow
Sunbeam
Card Game

Activity: Card game with rainbows

Focus Activity: Look at the art prints and pick out the rainbows. Notice how many artists show a rainbow with just a few colors, rather than with all colors. Notice too how sometimes there is a line between the colors of the rainbows. This is a kind of "short hand" used by the artists to show us a rainbow.

Outcome: Students will gain experience in counting and addition.

Materials: 30 rainbow cards (10 with one color; 10 with two colors; 10 with 3 colors)

Procedure:

1. Shuffle deck and then place all cards face down, individually, in neat rows.

2. The first player turns over two cards at random. If the cards match, the player keeps the pair. If the cards are not a match, the player turns them back, face down, in their same places.
3. Each player takes a turn until all the cards are paired up and collected.

4. There is only one try per turn, even if the player is successful in gaining a match.

5. To find who wins the game, add up the rainbows:

- 1 color rainbow = 1 point
- 2 color rainbow = 2 points
- 3 color rainbow = 3 points

Assessment: How easily could the students add up their scores?

For Older Students: For additional practice, multiply the points. For example, 1 color rainbow = 1 X 35; 2 color rainbow = 2 X 46; 3 color rainbow = 3 X 57. Then add up the scores. (Suggestion: the multiplier might be the number of students in the class, or the street address of the school.)
Flying Rainbow

**Activity:** Estimating a distance a rainbow will fly; charting actual distance; writing a report of the results.

**Focus Activity:** Look at the art prints. The rainbows in the art prints are like real rainbows: they're never in the same place or direction. Where are the rainbows in the prints? North, south, east, west? Up, down, left, right? Around?

**Outcome:** Students will estimate, measure, compare and write about the flight of their rainbows.

**Materials:**

- *duplicate copies of the Rainbow Pattern and Flight Log for each child
- *tag board
- *pencils
- *markers in rainbow colors
- *scissors
- *tape measure
Procedure:

1. Read the directions for making a flying rainbow with your students. Remind them that the design choice is theirs, but it must be made of one or more rainbows and it must fly. Be sure to stress the need for writing their name on the rainbow in order to avoid confusion during the test flight stage of the experience. Note: Rainbows made from the pattern fly better if slightly bent in the center.

2. The test range needs to be a clear lane with a take-off line. It can be inside or out. Explain that the test flight is the most serious step in aircraft design. So that no one is distracted there may be no loud noises and no one in the flight lane during take-off. Monitor flight time and measurement time so that no one is in the flight path during test flights.

3. Remind students to record all information in their flight log at the appropriate time.

4. There are many possibilities for recording the flight information in graphic form. If you are using this experience to test that skill give no help at this point. If this is a learning tool, a class discussion of possible graphs or charts could precede students making their own.

5. Before students begin writing their report, review the standards for a good report.

A good report:

- explain the design of your rainbow including any changes or modifications you made to improve its flight.
- give a summary of your findings during the test flight stage of your experience.
- give your strategy for estimating flight distances.
- give suggestions for things you might do differently next time you need to estimate distances.

Assessment:

- Did students identify a strategy for estimating distances?
- Did students try different ways of solving flight problems?
- Were reports of the account clear and logically organized?
Pattern for Rainbow

(to be cut out of tag board)

This rainbow pattern is provided for those who might wish to use it. You may use any shape as a rainbow to fulfill the requirements of this assignment.
### Rainbow Flight Log

<table>
<thead>
<tr>
<th></th>
<th>Estimate</th>
<th>Flight Distance</th>
<th>Number Sentence</th>
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<td>1</td>
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<td>7</td>
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</tr>
</tbody>
</table>
Stamping Rainbows

Activity: Estimating "How many rainbows will it take to go from here to there?"

Focus Activity: Look at the art prints. Compare the rainbows in the prints. Which one is longest? shortest?

Outcome: Students will estimate, count, compare, determine odd or even.

Materials: Ruler with rainbows on it (1 rainbow = 1")

Procedure:

1. Select an item to be "rainbow measured" -- a desk, a book, a child's height, etc..

2. Have each child estimate the number of rainbows it will take to go that distance. Have students write down their guess.

3. Measure the item. Count the number of rainbows.
4. Compare the actual number with the estimates. The student with the closest estimate wins the game, and gets to select the next item for "rainbow measurement."

Assessment: Did the estimates become more accurate with more measurements?

Extension: Using the rainbow stamp included in this kit students might make their own rainbow rulers.

For Older Students: Set a number value for each rainbow (for example, one rainbow = 2.5 inches or 1.75 inches). After measuring, multiply the number of rainbows by the value to arrive at an answer.

Use the rainbow measuring tape to discover the perimeter of an object, or the hypotenuse of a triangle.
Coiled Basket

Artist: Unknown

Culture: Hopi

Size: Height 11 7/8"; Depth 12 3/8"

Media: Coiled yucca, galletta grass

Date: 1970s

Catalogue Number: NA-SW-HO-B-302

Description:

Kachina - This Kachina is Kwahu, the Eagle Kachina.

Rainbow - The rainbow is a symbol of new life.

Corn - Beside Kwahu is an ear of corn.
Vocabulary for discussion of Art Elements:

Line - curved, straight

Shape - cylinder, round, flat

Color - warm neutral, natural, dyed

Space - discuss use of top-to-bottom, side-to-side, 3-dimensional, 2-dimensional, inside, outside

Texture - rough, coiled, woven

Art Principle:

Concept - Balance

Ask: What parts of this are symmetrical? Is the whole design balanced or unbalanced?

Cultural Context:

Hopi villages are built on top of mesas. Each Hopi mesa is home to several different villages. Many traditions are shared by all the Hopi villages, but each village has much that is uniquely its own.

The coiled technique used to make this basket is done only at Second Mesa. Galletta grass and yucca leaves are bundled together, wound in a flat spiral and entirely covered with a yucca thread that also stitches one coil to another.

The artist, who made this basket, dyed fibers to make the designs on it. The rainbow above the Kachina's head is a symbol of new life. The corn beside him is an important food for the Hopi.

Hopi corn is different than corn grown in the grasslands. This is important because there is usually only 10 to 13 inches of rain or snow falls each year at Hopi. Hopi corn grows well with this smaller amount of water. Corn grown in the grasslands grows best with as much as 20 inches of rainfall a year.

This Kachina is the Eagle Kachina called Kwahu. He comes to Hopi villages during night ceremonies in March. He dances with the motions and cries made by eagles.

About the time this basket was made, U.S. soldiers were fighting in Vietnam. Neil Armstrong had recently been the first man to walk on the moon. And big companies were just beginning to use computers. It would be ten more years before computers were small enough and inexpensive enough for schools and homes.
After the Rain: Rainbows

Image for comparison:
"Emblem of the Bow Priest Society" by Leo Poblano (Zuni Pueblo)

Questions for comparison:
Each piece has a rainbow. How are they the same? How are they different?

Look at the wings on the Knife-Wing Bird and the wings on the eagle. What shape are they? Which one has a rough texture?
Artist: Leo Poblano

Culture: Zuni Pueblo, New Mexico

Size: Diameter 3 11/16"; Height 3 5/16"

Media: Silver, spiny oyster shell, jet, turquoise, coral, mother of pearl

Date: 1930s-1950s

Catalogue Number: 348S

Description:

Knife-Wing Bird - The Knife-Wing Bird is the central figure in the emblem of the Bow Priest Society. The Bow Priest Society is the group of people who make the most important decision at the Pueblo of Zu-i.

Rainbow - This is the Knife-Wing Bird's bow.

Snake - This is the arrow for Knife-Wing Bird. It represents lightning.

Animal with an arrow - The arrow represents the life or spirit of the animal.
Headpiece - The Knife-Wing Bird is wearing a cloud-shaped headpiece

Bird - This bird is the Knife-Wing.

Vocabulary for the discussion of Art Elements:

Line - curved, broken, regular, irregular
Shape - circle, organic, symmetrical, triangle
Color - even, uneven, bright
Space - 2-dimensional. Ask students to look from top-to-bottom, side-to-side.
Texture - surface, smooth, shiny

Art Principle:

Concept - movement

Cultural Context:

In the late 1800s, Zu-i artists cut and polished colorful stones and shells. They used these with silver to make jewelry for their families and neighbors. In 1880, the railroad was built through New Mexico and it was easier for people from the East to some to Zu-i. It was also easier for store keepers in the West to send things to the East. This meant that Easterners learned about the beautiful silver and in-lay jewelry and other objects that Zu-i artists were making. They wanted to buy these pieces. Zu-i artists began making more and more jewelry and decorative items to sell or trade for things they wanted at the trading post.

In 1918, C.G. Wallace went to work at Zu-i Pueblo. Part of his job as a store keeper was to get materials from far away, like spiny oyster shell, mother of pearl, and coral, for Zu-i artists. After artists finished making the jewelry and decorative pieces, Mr. Wallace sold them to shops in the East.

C.G. Wallace and Leo Poblano worked together on many pieces of art. Mr. Wallace got the materials for Mr. Poblano. Mr. Poblano used them to make beautiful works of art which Mr. Wallace, traded or bought from Mr. Poblano and sold. In this way, both men made money.

Image for comparison:

Kwahu Kachina basket
Questions for comparison:

Each piece has a rainbow. How are they the same? How are they different?

Look at the wings on the Knife-Wing Bird and the wings on the eagle. What shape are they? Which one has a rough texture?
Artist: Joe Ben, Jr.

Culture: Diné (Navajo)

Size: Width 28"; Height 31 11/16"

Media: Masonite, gesso, azurite, diamond, gold, lapis, coal, hematite, chrysocolla, gypsum, sand, sandstone

Date: 1993

Catalogue Number: 345-1

Description:

Sky - The background of this painting is the sky. In the sky you see crosses and dots, these are stars. There is a five-pointed star.

Sun - The horned-figure on center top is the sun.
Moon - The sun's light reflects off the moon to the right of the sun.

Rainbow - Diné do not point at a rainbow with their fingers. This is considered disrespectful. You should show respect because the rainbow is a sign of new life.

Crosses - The crosses are stars.

Morning Star - The Morning Star is the cross on the left side of the painting. This star represents Changing Woman.

Evening Star - The Evening Star is on the right side. This star represents White Shell Woman.

Pollen Boy - Corn Pollen is important in prayer ceremonies.

Four triangles - The triangles are a bank of clouds.

Row of diamonds - This is the Milky Way.

Rectangles - This is a bed of clouds. In the clouds you see rain. Female rain is a soft gentle rain. It is represented in white and yellow rain symbols. Male rain is a storm. It is represented by blue and black rain symbols.

Zig-zag - The short zig-zag below the clouds is lightning

Colors:

White - White represents dawn and east.

Blue - Blue represents the blue sky and south.

Yellow - Yellow represents evening light and west.

Black - Black represents night and north.

Vocabulary for discussion of Art Elements:

Line - straight, curved, diagonal, horizontal, vertical, zig-zag, crossed

Shape - illusion, depth, overlapping, enclosed

Color - warm, cool, neutral, contrast

Texture - real, rough, shiny
Art Principles:

Concept: Contrast

Ask: What do you see first? Why do you think you saw that first? (Contrast and position on the page are topics for discussion if the answer is the four rectangles.)

Cultural Context:

1993 was a very rainy year in Arizona. It was so rainy that many rivers flooded. It was also a year of firsts. It was the first year William Clinton was president of the United States. It was the first year of Peterson Zah's second term as tribal chairman of the Navajo Nation. It was the year grocery stores were being built in remote areas of the reservation.

Joe Ben, Jr. painted "Rain in the Line of the Sky" in 1993. He wanted to show the sky because it tells us about rain. It tells us how much it will rain and when it will rain. Mr. Ben was raised on the Navajo Nation where he learned the traditions of his people. Now he lives in Phoenix, Arizona and travels to Paris, France to teach art.

Image for comparison:

"Untitled" by Mary Morez (Dine')

Questions for comparison:

Which work of art makes you think of daytime? Why?

Which work of art makes you think of nighttime? Why?

What do you see in Mary Morez's Father Sky that is also in Joe Ben, Jr.'s "Rain in the Line of the Sky"?

Both pictures have many symbols but they also have realistic images too. What do you see that looks like a symbol? . . . real?
Artist: Mary Morez
Culture: Diné (Navajo)
Size: Height 36 3/16"; Width 48 9/16"
Media: Acrylic, canvas
Date: c. 1970
Catalog Number: IAC446

Description:
Gray person - Mother Earth
Black person - Father Sky
Black circle - This is the place where plants are attached to Mother Earth like a baby is attached to its mother.
White and blue circles - These circles represent the sun and moon.
Horn - A horn is a sign of power.

Lines from horns - The lines coming from the horn are raindrops.

Feather - The feather stands for a bird.

Stars (white spots) - The white spots on Father Sky represent four constellations.

Crossed lines - The crossed lines represent the Milky Way.

Rainbow - The rainbow ties Mother Earth and Father Sky together.

Corn - Corn pollen is used for prayers.

Yellow - The yellow background is the dawn.

**Vocabulary for discussion of Art Elements:**

Line - horizontal, vertical, diagonal, zig-zag

Shape - circular, rectangular

Color - warm, cool, neutral, bright

Space - enclosed

Texture - surface, simulated, rough, even, uneven

**Art Principles:**

Concept - Contrast (color and texture)

Repetition (circles)

Balance (Symmetry)

**Cultural Context:**

Mother Earth and Father Sky are symbols that were given to Dine' at the beginning of their history. Dine' healers use these symbols at healing ceremonies.

It is interesting to remember that Ms. Morez painted this picture of Mother Earth and Father Sky shortly after the first man walked on the moon. It was a time when earth and sky seemed to be coming even closer for many people --- an exciting time!
Artist's Response:

Mary Morez thinks of the circle of life when she remembers this painting. She thinks about how important it is to take care of Mother Earth and to keep life in Hozho (beauty, peace, joy, and harmony) in daily life.

Images for comparison:

"Rain In the Line of the Sky" by Joe Ben, Jr. (Dine')

"Women with Water Jars" by Gilbert Atencio (San Ildefonso)

Questions for comparison:

What is the same in all three works of art?

There is a moon in two of the art works. Which moon looks like the one you see at night? Which moon looks the most friendly?

Which work of art uses the brightest colors? Which one uses the colors that are most like the earth?

Four is an important number to the Dine' (Navajo). Where do you see items in fours?

If you could only choose one of these pictures to represent rain in an exhibit which would you choose? Why?
"Women with Water Jars"

Artist: Gilbert Atencio

Culture: San Ildefonso Pueblo, New Mexico

Size: Height 29 11/16"; Width 39 5/8"

Media: Watercolor, paper

Date: 1960s

Catalog Number: IAC71

Description:

Three ladies - These ladies are carrying water to their homes. This is the way water was taken to homes for cooking and drinking before water was piped into homes.

Water jars - These water jars are decorated in designs slightly different from those painted on jars.

Plants - The cattails especially are associated with water.

Rainbow - The rainbow represents good things.
Sun - This stylized sun is a round circle with three areas of color.

Rain - Draw attention to this way of representing rain instead of the dots children often use.

Lightning - Notice lightning on both sides of the painting.

Clouds - There are both terraced (stepped) and curved clouds.

Butterflies - Butterflies are a water symbol for many Pueblo people because they are found near water.

Pond - Small ponds are sources of water.

Symbols on water jars - Many people who paint jars think of them in sections: for example, the neck, the middle, the bottom, the inside and the outside. When they are planning the design of the piece, they plan how to do each section differently. This is a good time to have students look at the three jars to see how they are different in each section.

First jar - on the neck are terraced clouds.

The middle jar - this jar has an avanyu (water serpent) on it with clouds above it.

Last jar - This seems to have bird designs on it.

(These jars are not like those usually made at San Ildefonso Pueblo. The shapes are not their traditional shapes, and polychrome - more than two colors- are not done as frequently as they once were).

Vocabulary for discussion of Art Elements:

Line - continuous (the rainbow is a continuous line around the jar), curved, straight, zig-zag, dashed

Shape - organic, geometric, rounded, curved, rectangular

Color - bright, neutral

Space - Have students look at the picture from side to side, top to bottom looking at the way the artist has used the space on the paper.

Texture - rough, wet, slick, soft
Art Principles:

Concept - contrast Discuss with students the contrast between the natural looking women carrying the water jars and the weather symbols.

Cultural Context:

Gilbert Atencio painted "Women with Water Jars" during the time that the American Indian Youth Movement was encouraging Native Americans to remember the art and traditions of their ancestors. This was also the time that Dr. Martin Luther King and Cesar Chavez were telling people to be proud of their history and family traditions.

Gilbert Atencio is known for painting the abstract symbols from the history and traditions of San Ildefonso Pueblo with life-like figures. His paintings can be considered a blending of history and present styles of Native American artists.

Artist's Response:

"When my aunts were still alive, when they told stories about when they were young," Gilbert Atencio said. "I could picture in my mind just how the people looked and what the people did in their day and age. And that is what I went by when I started drawing pictures."

"For non-Indians who buy my work, I do it so they will appreciate Indian art and understand the Pueblo Indians -- For more understanding between non-Indians and Indians." (quoted in "When the Rainbow Touches Down," by Tryntje Van Ness Seymour. The Heard Museum, Phoenix, 1988.)

Questions for Discussion:

How did the artist show that it is raining?

What objects look real? What objects look like symbols?

What time of day do you think it is? Why?

Would you like to visit this pond? Why?
Zia Water Jar

Artist: Unknown

Culture: Zia Pueblo, New Mexico

Size: Height 9 15/15"; Diameter 11 1/2"

Media: Clay

Date: c. 1900

Catalog Number: 241P

Description:

Red base - This style of water jar is traditionally painted on the underbelly.

Black rim - The black bands around the rim of this water jar are typical of Zia water jars painted in the late 1800s.

Curved red stripes - These stripes curve all around the water jar. They are a rainbow.

Bird - Zia potters leave line breaks between tail feathers when painting birds. Students might speculate about what these birds eat after examining the birds' beaks.
Flowers (plants) - The bird and floral designs became popular after 1850 and show how new ideas came from looking at European designs.

Vocabulary for discussion of Art Elements:

Line - curved, pointed, natural, organic, continuous

Shape - stylized, organic

Color - polychrome (that is, more than two colors)

Space - Discuss use of space top-to-bottom, side-to-side, 3-dimensional

Texture - smooth

Art Principle:

Concept - movement (Discuss how the rainbow moves your eye around the jar.)

Cultural Context:

The end of the 19th century and the beginning of the 20th century were a time when people were creating new things. The ice cream cone was first sold at the 1904 World's Fair. The Wright Brothers made the first successful airplane flight. The teddy bear was created and named after the president of the United States, Theodore (Teddy) Roosevelt. Arizona and New Mexico did not become a part of the United States until 1912, but Native Americans and Euro-Americans were living in these territories, farming and trading with one another.

This water jar shows how Native Americans and Euro-Americans traded ideas as well as things. The Zia artist who made this water jar used birds, rainbows, and plants to decorate it. These symbols had been used by ancestors of Zia Pueblo for many generations. The way the artist made the birds and flowers on this water jar is similar to designs that were made by Euro-Americans artists of that time.
Mixing Light

Activity: Students will mix colored lights using 3 flashlights covered with colored cellophane.

Focus Activity: Look at the paintings by Joe Ben, Jr. Atencio's is more realistic, showing a rainbow, rain and the sun, as well as women, pottery jars and plants. Ben's painting is symbolic and shows the rainbow in a black sky. Ben shows us no light, some parts of the spectrum, and all light mixed together (white) in one painting.

Outcomes: Students will understand that colored light when mixed together changes colors.

Vocabulary: shine, cellophane, transparent, translucent, filter

Materials: 3 flashlights, colored cellophane (red, yellow, and blue), *a dark room

Procedure:

1) Cover a flashlight lens with red cellophane, one with yellow cellophane and one with blue cellophane.

2) Turn the lights out in the classroom.

3) Shine the lights against a blank wall so that each makes a separate spot and students are aware that they show light the color of the cellophane.

4) Overlap the light spots in different combinations of two.

5) Combine the lights so that all three colors meet in the center. You should get a kind of white when the three color spots overlap.

Assessment:

- Can students explain that different colored light mixes together to make a new color?
- Do students understand that the colored lights have mixed together to create the white light?
Extension:

- Can students find translucent colors in their own environments that can be used in this experiment? What do other colors do in the same experiment? Are there other substances that can be used?
- What happens when you mix paint colors together? Why is the result black instead of white?
After the Rain: Rainbows

Rainbow: Here One Minute and Gone the Next

Activity: A demonstration of separating white light into a rainbow and the rainbow into white light again.

Focus Activity: Rainbows often don't last very long. Sometimes we even miss seeing them! Look at the ladies in Gilbert Atencio's painting: Do you think they know about that rainbow?

Outcomes: Students will understand that a prism can sort white light into a color spectrum.

Vocabulary: prism, separate, mixture, spectrum

Materials: prism, *a white surface or paper to cover the surface

Procedure:

1) Shine a light through a prism so that the color spectrum is seen on the other side.

2) Discuss what has happened reinforcing the concept that white light is really a mixture of colors.

Assessment:

- Can students draw what they saw?
- Can children write or verbally describe what they saw?
- Does students written, or oral, discussion reflect understanding of white light.
- Do they understand that it is really a mixture of colors and that the prism has separated them?
Spinning Colors

Activity: Spinning colors on a disk (also a game!)

Focus Activity: Look at the rainbows in the art prints. Notice that the artists have put a line between the colors of the rainbow. White and black are used. When all colors of paint are mixed together, the result is black. When all colors of light are mixed together, the result is white.

Outcomes: Students will see that when something is moving quickly, our eyes may deceive us. Something of many colors, rotating rapidly, appears white in our eyes.


Procedure:

1. Color the sections on a disk in 7 rainbow colors.
2. Make a small hole in the middle of the disk and put a sharp pencil through it.

3. Spin the disk quickly. What do you see? (You should see a grayish white instead of the colors.)

Or:

1. Color the sections on the disk in 7 rainbow colors.

2. To make an old-style Hopi toy, put two holes in the disk so that it looks like a button.

3. Put a 24" string through the disk and tie the ends together.

4. Put one hand in each loop and (with the button disk in the middle of the string) flip the button away from yourself several times.

5. Gently move your hands apart and together, making the button whirl. This action is similar to using a yo-yo, so several tries may be required before you get the hang of it!

6. As the disk spins, what do you see? (You should see a grayish white instead of all the colors.)

Assessment: Do students understand that they see colors mixed together to make the disk appear white?

Extension:

- Make a disk that you divide into three sections and color in the primary colors. This should give the same results because the other colors are made out of primary colors.
- Divide a disk in half and put a different color on each side. What happens when it is spun?
Water, Mirror, and Rainbows


Focus Activity: Look carefully at Gilbert Atencio's painting, "Women with Water Jars." Review how Atencio shows a rainbow and rain in this painting. Discuss how this activity shows why these two natural phenomena are linked.

Outcomes: Students will see that water can be used to separate light into rainbow colors.

Vocabulary: spectrum, separate

Materials: *water, *a transparent (either glass or clear acrylic) container for the water, a mirror, *a white card, *clay

Procedure:

1) Take a dish of water outside on a sunny day.

2) Position a flat mirror so that the sunlight hits the mirror and is reflected through the water.

3) Adjust the white card so that it "catches" the rainbow as it emerges from the other side of the dish. Once you have the correct position you can keep the mirror still with modeling clay.

Assessment:

- Do the students understand that the light is coming from the sun?
- Do the students understand that the water is separating the sun's light, not creating new colors?

Extension:

- Using a clear glass of water students can project a rainbow onto the sidewalk or wall.
- What happens with other liquids? Does cooking oil separate the color, or syrup?
I. DOCUMENT IDENTIFICATION:

Title: After the Rain: Rainbows

Author(s): Arlene Old Elk and Jackie Stoklas

Publication Date: 2001

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