



## FINDING OUT ABOUT HERBS IN NEW MEXICO

Level: middle - high school / grades 7-12

Course: science, social studies

### Time Needed

one week

### Materials

The first activity is a reading for comprehension assignment that should be done during class time. You will need to make a copy of Reading Part I, Reading Part II, and the Three-tiered Study Guides for each student prior to beginning the activity. The readings are taken from a book entitled Nature's Healing Arts: from Folk Medicines Modern Drugs by Lonnelle Aikman (Washington, DC: National Geographic Society, 1977).

The second activity involves veiwing a video tape entitled *Los Remedios de la Gente - The Healing Herbs*. To obtain a copy of this tape call: Realidad Productions in Santa Fe, New Mexico: (505) 983-8956. The cost is approximately \$25. This is an excellent tape that discusses herbs in New Mexico and cultural uses by curanderos and curanderas. Highly recommended. Approximately 30 minutes.

### Procedures

#### Activity 1 - Reading for Comprehension

In this activity, students will not only learn about herbs in New

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Mexico, but they will also develop reading skills at three levels: accreting information, structuring knowledge, and tuning knowledge. This reading technique helps students develop a greater understanding of the reading material and can be used to lead the class into terrific groups discussions. You will need more than one class period.

## Objectives

- \* Students will understand how the historical use of herbs in New Mexico is culturally connected to the people of this land and has a strong influence in the way many people today practice medicine.
- \* Students will learn to become more critical readers.

## Procedures

1. Arrange the students into groups of three or four.
2. Pass out a copy of Reading Part I to each student.
3. Have the students read silently and allow sufficient time.
4. Pass out the Three-tiered Study Guide and read the student directions for Part I
5. Give the student-groups sufficient time to finish Part I Literal Level - Accreting Information.
6. When all the groups are finished, have each group present their results. Have the class come to a consensus on each of the statements before you move on to Part II.
7. Continue with Part II Interpretive Level Structuring knowledge and Part III Tuning Knowledge. Perform the same as Part I

## Reading - Part I: Finding Out About Herbs in New Mexico

Excerpt from: *Nature's Healing Arts: From Folk Medicines to Modern Drugs* by Lonelle Aikman (Washington, DC: National Geographic Society, 1977)

- (1) Deep in the hot, dusty hills in Belen, New Mexico - 30 miles south of Albuquerque - I met Tibo Chavez, an herb enthusiast with a heritage completely different from that of Billy Joe Tatum. Mr. Chavez is practicing attorney who served as a state senator for 20 years, and as lieutenant governor for two terms. But his passionate avocation is rooted in the hundreds of herbs, mostly medicinal plants, which he constantly collects, both in the wild and on his 200 acre farm.
- (2) This fascination with herbs is part of his overall interest in preserving the history and culture of New Mexico, and it reaches back to his Spanish family, which was one of the earliest to settle in the Southwest.
- (3) "As far as I know," said Tibo, "the original Chavez arrived with Juan de Onate, who was an explorer and colonizer. He led an expedition into what's now New Mexico in 1598.
- (4) In those days, and for many generations after, medical treatment meant brewing teas and mixing poultices and such from available plants. Even after the first doctors came here to the Rio Grande Valley in the late 1800's, many people distrusted their remedies.

- (5) The few families who could afford to call in a physician often considered it a status symbol; some prepared their own prescriptions on the side with recipes inherited from ancestors.
- (6) "I myself grew up with herbs," said Tibo. My mother used most of those I plan to show you. She always had jars and cans around filled with this and that herb. One of my earliest memories is of sipping a tea made from *manzanilla*, the "little apple," also known as chamomile. It was used for colic and other infant ailments.
- (7) Gradually, herbs became a lost art in my family as the feeling grew, especially among the more educated and affluent, that it was just the poor and ignorant who clung to the old ways.
- (8) It was not until I got into politics and went out into the country that my faith was revived by hearing of illnesses cured by herbs after doctors had failed. And also by my personal experience, for instance, in drinking *yerba buena*, a spearmint tea used to cure a stomachache.
- (9) For years now, I've taken nothing but nature's medications. Some members of my family follow this example. My youngest son once had some pimples and used a salve made from comfrey, and the pimples went away.
- (10) Even when I had a heart attack, I told my doctor that I would diet and take it easy, but I would stick to herbs for my heart instead of swallowing his medicine.
- (11) The doctor agreed that I looked fine, and later I took him a clump of mastranzo, or horehound, which he planted in his yard. Whether he ever uses it, I don't know, but I'm sure he wonders about my herbs."
- (12) So enthusiastic is Tibo Chavez about herbal medicine that he frequently gives talks on the subject at the University of New Mexico and elsewhere. He has published an illustrated book on popular *remedios* of the area. He never makes specific suggestions for treatment, however. "I'm certainly no doctor," he says. "I just report on the history and usage of the plants."
- (13) "But we may be coming to the end of an era," he told me sadly. "Our old-time *curanderos* and *curanderas* - men and women healers - are getting along in years. We've got to visit them now, and see their herbs and way of life before it's too late."
- (14) With Tibo to introduce me to his friends, I met poor and well-to-do healers, Spanish-American, Native-American, and Mexican-American healers, as well as garden variety herbalists. And I saw and handled enough medicinal plants to stock a hospital.

## Reading - Part II: Finding Out About Herbs in New Mexico

Excerpt from: *Nature's Healing Arts: From Folk Medicines to Modern Drugs* by Lonelle Aikman (Washington, DC: National Geographic Society, 1977)

- (15) "My son cut his hand on a piece of rusty barbed wire last week," said Filemon Baca, a descendent of one of the first Spanish families to farm the area. "I made an ointment out of the leaves and roots of a *contra yerba* - a kind of thistle - and the wound cleared up without infection."



- (16) At the small adobe home of Mrs. Alejandro Moya, the widow and inheritor of the curandero skill of her sheepherder husband, talk ranged from herbs and flowers that grow in the valleys to those that flourish only in the uplands.
- (17) The desert's *amole*, or yucca root, I learned is made into a sudsy shampoo that eliminates dandruff.
- (18) The lush, green *osha* of the parsley family is a product of the mountains." The osha was a wonder plant to Alejandro Moya," Tibo remarked, and still is to curanderos who can get it, and especially to high-land sheepherders who consider it a medicine kit in itself.
- (19) They chew the dry root for toothache, headache, and indigestion, make it into poultice for sores, and boil it into a tea to treat a cold. They also drink it to prevent hangovers, and believe that the very presence of the plant keeps snakes away."
- (20) For rheumatic pains, Mrs. Moya liked *estafiate*, Rocky Mountain sage, and *treto*, purple sagebrush, administered in hot baths. Tibo told of having suggested to an uncle suffering from severe arthritis a solution of *yerba de la vibora*, turpentine weed, in regular soakings.
- (21) "It worked so well," he said, "that my uncle's doctor asked for samples of the medicine to study."
- (22) The group, which included several members of the Moya family, spoke of using such remedios as *prague*, field marigold, for stomach trouble; *canutillo*, Mormon tea, for kidney and urinary disorders; *eneldo*, related to dill, for chest congestion; and *inmortal*, of the milkweed family, to ease childbirth.
- (23) In many areas of the Southwest, I met family and professional healers who use not only common herbal medicines, but also such strange substances as deer's blood; many of these would raise the eyebrows of any physician.
- (24) To me, one of the strangest of Mrs. Eufalia Otero's medications is deer's blood. Mrs. Otero is a popular curandera who has patients come from dozens of miles away, and pay eight dollars a visit for her treatments. She obtains deer's blood from butchers and hunters, and gives it in carefully measured doses for heart trouble. This practice presumably grew out of an old belief honoring the strength and nobility of the deer's heart.
- (25) Modern science does, indeed, explain the success of much folk medicine by the presence of helpful chemical substances found and identified in many plants and natural products. In other cases, doctors attribute the good results of earth-born treatment simply to psychological factors. Many cures, of course, combine a little of each.
- (26) In the Southwest, four distinct cultures have mingled, each contributing its own dose of herbal lore and faith healing.
- (27) "When the Spaniards settled here, they brought their own medicinal plants, which have now been thoroughly interchanged with those of the native Indians," said Tibo Chavez as we drove north from Belen to visit some of his Tiwa Indian friends on the Isleta Reservation.



(28) "Later, with the opening of the Santa Fe trail, came the contributions of the Anglos, which merged with the other two and with the remedies, lore, and plants that for centuries have been coming into our valley from the peoples of rural Mexico."

## Three-Tiered Study Guide for Part I Reading

### Part I. Literal Level - Accreting Information

#### Student Directions

Read the first statement with others in your group. Write the paragraph number on the numbered line if the statement contains information from the text (exact words or a paraphrase). You must be able to give evidence to support your opinion. If any person in the group has a problem with words in either the statements or the reading selection, be certain to help them develop an understanding of those words. React to all ten statements.

- \_\_\_\_ 1. Herbs can be used a medicinal plants.
- \_\_\_\_ 2. Herbs have been a part of New Mexico's history and culture since Juan de Onate's expedition in 1598.
- \_\_\_\_ 3. People who lived in the Rio Grande Valley in the late 1800s had more faith in herbal medicines than in the first doctors that came.
- \_\_\_\_ 4. Manzanilla could be prepared as a tea and was given to young infants with upset stomachs.
- \_\_\_\_ 5. Herbs were used only by the poor people.
- \_\_\_\_ 6. Yerba buena is used to make a spearmint tea used to cure a stomachache.
- \_\_\_\_ 7. Mastranzo is an herb that can be used to help the heart.
- \_\_\_\_ 8. Curanderos and curanderas are men and women healers.
- \_\_\_\_ 9. A salve made from comfrey can be used to cure pimples.
- \_\_\_\_ 10. Remedios is a Spanish word that means remedies.

### Part II. Intrepretive Level - Structuring Knowledge.

#### Student Directions

Write the paragraph number on the numbered line before each statement which expresses an idea that can be reasonably supported with information from the reading selection. Be ready to discuss the supporting evidence with others in your group.

- \_\_\_\_\_1. Herbal remedies were used as the basic form of medicine up until the 1900s.
- \_\_\_\_\_2. The people of New Mexico today do not practice herbal medicine any more.
- \_\_\_\_\_3. Only the poor people of New Mexico know how to use herbs.
- \_\_\_\_\_4. The Spanish-Americans were the first to introduce herbs to New Mexico.
- \_\_\_\_\_5. Doctors do not believe that herbs really work.
- \_\_\_\_\_6. Tibo Chavez is interested in herbs because it is a money-making hobby.
- \_\_\_\_\_7. Herbs used for remedies did not taste very good.
- \_\_\_\_\_8. Herbs grow wild throughout all of New Mexico.
- \_\_\_\_\_9. The culture of herbs in New Mexico will soon be lost forever.
- \_\_\_\_\_10. People who use herbs as medicines today never have to see a doctor.

### Part III. Tuning Knowledge

#### Student Directions

Read through the statements. Think about the ideas and experiences that you have had which are similar in principle to what you found in the reading selection. Check each statement which you think is reasonable and which you can support by combining ideas contained in the reading selection with your own related ideas and experiences. Be ready to present evidence from both sources to support your decisions.

- \_\_\_\_\_1. Technology will always lead us to the best answer.
- \_\_\_\_\_2. Cultural similarities are not always easy to identify.
- \_\_\_\_\_3. Modern medicine saves more lives than old-time medicine.
- \_\_\_\_\_4. It is easier to give up on values if no one around seems to care.
- \_\_\_\_\_5. Never lose faith.

## Three-Tiered Study Guide for Part II Reading

### Part I. Literal Level - Accreting Information

#### Student Directions

Read the first statement with others in your group. Write the paragraph number on the numbered line if the statement contains information from the text (exact words or a paraphrase). You must be able to give evidence to support your opinion. If any person in the group has a problem with words in either the statements or the reading selection, be certain to help them develop an understanding of those words. React to all ten statements.

- \_\_\_\_ 1. The yucca root can be used to make a sudsy shampoo.
- \_\_\_\_ 2. Highland sheepherders consider osha a medicine kit in itself.
- \_\_\_\_ 3. Curanderas practice healing that are strange to doctors.
- \_\_\_\_ 4. There is an old belief that deers have strong hearts.
- \_\_\_\_ 5. Herbal remedies in New Mexico have been influenced by Chinese cultures.
- \_\_\_\_ 6. Herbal remedies and folklore from the people of rural Mexico have only been recent.
- \_\_\_\_ 7. Osha is used by sheepherders to prevent hangovers.
- \_\_\_\_ 8. The roots of a contra yerba contain an antibacterial agent.
- \_\_\_\_ 9. Modern science cannot explain how herbs work.
- \_\_\_\_ 10. Herbal lore and faith healing in the Southwest can be attributed to the mingling of four cultures.

### Part II. Intrepretive Level - Structuring Knowledge

#### Student Directions

Write the paragraph number on the numbered line before each statement which expresses an idea that can be reasonably supported with information from the reading selection. Be ready to discuss the supporting evidence with others in your group.

- \_\_\_\_ 1. Herbal remedies can cure many types of illnesses.
- \_\_\_\_ 2. Highland sheepherders rarely saw a doctor.



- \_\_\_\_3. Curanderas practice some form of witchcraft.
- \_\_\_\_4. Curanderas and herbalists are the same thing.
- \_\_\_\_5. Deers feed on various herbs for strong and healthy hearts.
- \_\_\_\_6. Physicians do not trust herbalists.
- \_\_\_\_7. There is an herb for almost any kind of cosmetic that you can think of.
- \_\_\_\_8. There are many herbs that deal with illnesses that involve internal medicine.
- \_\_\_\_9. In some cases herbs can work just as good as sutres for big skin cuts.
- \_\_\_\_10. You must believe psychologically in the healing power of herbs for them to work properly.

### Part III.    *Tuning Knowledge*

#### *Student Directions*

Read through the statements. Think about the ideas and experiences that you have had which are similar in principle to what you found in the reading selection. Check each statement which you think is reasonable and which you can support by combining ideas contained in the reading selection with your own related ideas and experiences. Be ready to present evidence from both sources to support your decisions.

- \_\_\_\_1. Believe only what you can see.
- \_\_\_\_2. Fables are stories just for kids.
- \_\_\_\_3. It is easier to work independently than to work with others.
- \_\_\_\_4. The United States of America has no real culture of its own.
- \_\_\_\_5. There is no such thing as a miraculous recovery.

## Activity 2 - Viewing videotape

### "Los Remedios de la Genta- The Healing Herbs"

In viewing the video, "Los Remedios de la Genta- The Healing Herbs," students will learn about the more popular herbs in New Mexico and how they have been used traditionally. The students will learn about a curandera —traditionally healer— and about a famous herbologist of New Mexico- Michael Moore.

### Objectives

- \* Students will be able to name ten herbs found in New Mexico and will be able to discuss how each one is used.
- \* Students will be able to discuss how traditional herbal remedies have been kept alive in New Mexico.

### Procedures

1. Pass out the handout entitled Herbs from Video "Los Remedios de la Genta"
2. As the students view the film, have them write down how each of the herbs on the list is used.
3. When the film is over, have students share what they wrote down for each herb. Make sure all students know the specific use of each herb.
4. Have students make flash cards. On one side they will write the name of the herb and on the other side they write how it is used. Allow students to pair up with a partner and test each other using their flash cards.

### Follow up Activities

1. Have students interview their parents, grandparents or relatives. Students should ask if they are familiar with any herbs and the traditions behind them. As a class, have students compile a booklet of the information they collect.
2. Contact a local herb store and ask a knowledgeable herbalist to come speak in your class. Ask the herbalist to bring samples of the popular herbs in your area and talk a little about each one.
3. Make a simple tea using chamomile, spearmint or peppermint.
4. Buy some seeds at local nursery and plant an herb garden.

### Bibliography

See lesson plan "Finding Out about Herbs in Latin America" for bibliographic references.