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Thematic Approach to Teaching Science in Kindergarten for Use with First and Second Language Students

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THEMATIC APPROACH TO TEACHING SCIENCE
IN KINDERGARTEN
FOR USE WITH FIRST AND SECOND LANGUAGE STUDENTS

A Project Report
Presented to
The Graduate Faculty
Central Washington University

In Partial Fulfillment
of the requirement for the degree
Master of Education

by
Gerene Marie Sadberry

July, 1992

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Thematic Science units were established for the Wapato kindergarten in both Spanish and English. Approximately three hundred students are participants in the program for which this curriculum was designed. This study suggests how selected science objectives may be implemented using the thematic approach. Each theme contains a media resource list of items available from the Wapato Primary Media Center and suggested activities which will help to integrate the science unit with other subject areas. The intent of the curriculum design is that children learn language and science naturally when they are developed in a meaningful context.

DEDICATION

This project is dedicated to the kindergarten students of the Primary School, of the Wapato School District, Wapato, Washington. Their need for a comprehensible science program was my motivation throughout the entire project.

I wish to also thank my committee members, Dr. Jose Licano-Palma, Dr. Dale Otto, and Dr. Gregory Chan.

Finally I wish to thank my husband, Bruce Docken, without whose understanding and support I would never have been able to realize the dream of a higher education degree. Thanks, Bruce!

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Judith Markham, our media specialist, has provided me with information regarding the availability of materials in our building and also informed me of new materials as soon as their processing was completed. Judy understood the need for a current list of resources and always kept me updated. Thanks, Judy.

To Dr. Jose Licano-Palma I owe a thank-you for the encouragement and knowledge you shared with me when this project was just a wishful thought. Through your classes I learned an appreciation for what I always thought was "the best way" to teach the bilingual students of our district. You gave me support and confidence when you validated my ideas.

To the best friend a person ever had, I say, "Thank you, Juanita Justo Miranda." Her hours of help in

proofing the Spanish translations will be remembered each time a worksheet is used with a Spanish dominant student. Through the use of the Spanish worksheets Juanita will impact the lives of many of the Wapato Primary students. Hopefully this will assist in enriching many of their lives by validating the use of their home language and encouraging them in their ability to become advantaged bilinguals.

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CHAPTER I INTRODUCTION

Focus of Study: Reasons and Justification

Science is often taught as an isolated subject. However, as the title indicates: "Thematic Approach to Teaching Science in Kindergarten for use with First and Second Language Students," this study proposes that science be removed from isolation and integrated into the total kindergarten curriculum.

The terminology used within the title is often open to subjective interpretation. Thus, for clarification, a definition of terms used in this project are discussed below.

"Thematic Approach" refers to a method of teaching which integrates a subject into a total curriculum program. Through the thematic approach students will no longer be subjected to isolated bits of information on a given topic. Students will see the subject used in a global context as it relates to literature, forms of communication, thinking, and life experiences. The subject will become purposeful and functional when related to the content and the students' personal experiences.

For the purpose of this study the thematic

approach and the whole language approach will be used synonymously. These teaching techniques recognize the student as an active learner who needs to interact in meaningful ways. Relevant activities encourage the development of language in the content areas.

The term "science" is defined by the student learning objectives which are written as part of the Wapato Primary School kindergarten curriculum. Science topics include the following: 1) animal classifications (mammals, birds, fish, insects, and reptiles), 2) elements which make up the universe (solids, liquids, and gases), 3) the four seasons, 4) the five senses, 5) magnets, and 6) the relation of objects to water (sink and float).

Kindergarten refers to the twelve classrooms of students (approximately 300) who range in age from five to seven and are presently enrolled in the Wapato Primary Kindergarten program. Included within this program is one room dealing with the developmentally handicapped, three Spanish/English bilingual rooms, and eight basic education classes. All kindergarten students participate in an extended day program which allows for daily attendance of 5 hours 45 minutes.

The Basic Education Act (B.E.A.) students are

defined as all kindergarten students who speak English as their primary language. It is understood that no two teachers will use these materials in identical instructional programs. Inherent in this curriculum is the need for relevancy to the students' capabilities and life experiences. What the child knows and what the child is capable of understanding are used to effectively guide the students' learning through the science curriculum regardless of developmental ability.

The Limited English Proficient (LEP) student is any student who does not speak English as his/her primary language. In the Wapato District these students often include native speakers of Spanish and/or Pacific Rim languages. These students have the potential of becoming advantaged bilinguals and thus will be taught the thematic science content in both their native and English languages. Washington State RCW 28A.180.030 defines the bilingual program as "transitional," which, in the Wapato District, means that the home language will be progressively phased out until the sixth grade, when it will be discontinued. Thus, the time for reinforcing the students' native language and building content area in the home language should begin while the student is in kindergarten. The instruction of the thematic science approach

suggests that cultural, linguistic and experiential knowledge be incorporated into each lesson as the teachers facilitate the students' learning.

Materials which will be used for instruction in the thematic science approach for kindergarten will include a multitude of manipulatives and pictures for use in the classroom. Also included will be literature which may be written in the students' primary language, the second language (English), and/or translations of materials from/to either language. Field trips will be an important component to build life experiences which are essential to the program.

Definition of Key Concepts and Terms

Additive Approach - A positive approach, as perceived by the student, regarding his or her home language and culture.

Advantaged Bilingual - Anyone who has increased their home language skills and learned a second language through the additive approach.

Bilingual Education - Instruction in two languages; also anyone who has a home language other than English and is learning English as a second language.

ESL - English as a second language instruction which usually takes place as a separate subject area often without regard to content area instruction.

Limited English Proficient (L.E.P., LEP) - Any student who is learning English as a second language and is still striving toward mastery.

Methodology - A specific plan for instruction.

Subtractive Approach - A negative approach, as perceived by the student, regarding his or her home language and/or culture.

Thematic Approach - The integration of all content areas when teaching any subject. In this report it is synonymous with the Whole Language teaching methodology.

General Background Information

The Primary School is located in the Wapato School District, Wapato, Washington, 8 miles south of Yakima. It is an agricultural area where the population is comprised of approximately seventeen percent (17%) Anglo, one-half percent (1/2%) African-American, one-half percent (1/2%) Asian-American, sixty-five percent (65%) Mexican-American, and seventeen percent (17%) Native-American.

Approximately 300 children participate in the kindergarten program which is located within two buildings on a single campus. All kindergarten students are enrolled in an extended day schedule (8:30 - 2:15) with no "pull-outs" for learning disabilities or language instruction.

Commencing the summer prior to the 1988-1989 school year Wapato teachers began training in the Whole-Language/thematic approach to teaching language arts. During the subsequent years additional staff have been trained in whole language integration and all kindergarten teachers have participated in the development of thematic units for social studies and language arts curriculums.

Kindergarten classrooms also have a minimum of two-hour paraprofessionals. Many of these support

staff members have chosen to be included in training sessions related to theme building and the philosophy behind this methodology.

Limitations of the Study

Many studies have been written regarding the use of the thematic approach to language arts. However, recent articles relating to the thematic approach to teaching science are limited.

Science has typically been taught in a hit and miss fashion. Because of time constraints in many classrooms science has often been left until the end of the day "if there is time." Helping teachers realize the need for an integrated science curriculum will be instrumental in its adoption and usefulness in the Wapato Primary.

Nature and Order of the Presentation

The need for teaching students a comprehensible curriculum is undisputed, although the use of experience based thematic lessons is still waiting for universal acceptance.

Chapter II, Review of Literature, begins by briefly discussing techniques and methodologies for teaching

the non-native English speaker. It continues by documenting the need for LEP students to learn content areas in a variety of contexts which relate to language experiences. Finally, Chapter II discusses the specific need for integrating science into the curriculum.

Chapter III recounts the procedures used by the researcher to design this project. Chapter IV is a summary of the outcomes of the project and a list of materials available for theme development. The Master's project finishes with a summary, conclusions, and recommendations section.

The appendix contains information which should be valuable to the teacher and/or researcher who want to know more about bilingual methodologies and theme building.

Chapter II

Review of Existing Literature

Methodologies for Teaching Limited English Speakers

As early as 1802 the Congress of the United States allocated funds for the purpose of teaching Non-English speaking Native Americans "civilization among the aborigines" (Castellanos, 1985). Although this instruction of the Native American was not labeled "bilingual", there is some indication that their instructional program was very similar to methods which many districts employ today. Since the 1800's bilingual education has experienced inconsistent acceptance. Many documented studies have been written to expound on the variety of bilingual programs which have been employed through the years and the populations which they have affected (Castellanos, 1985; Lessow-Hurley, 1990; Spolsky, 1989; Schulz, 1991).

The purpose of this chapter is not to provide an additional recounting of the history of bilingual education but rather to briefly discuss some of the various hypotheses and methodologies used for teaching limited and non-English speakers of the modern day.

Prior to the 1950's a language teaching technique

known as the "grammar-translation" method was widely used. As the name implies, this manner of teaching a second language focused on the use of abstract, role generalized language, emphasizing the translation of grammar and vocabulary. This method provided students few opportunities to learn or use oral language skills (Castellanos, 1985).

The Audio-Lingual Method is a second language teaching technique. It focuses on the learning of language structures through patterned sentences and pronunciation drills (Spolsky, 1989). Although this method was initially revolutionary to second language instruction it soon met with a myriad of problems and criticisms. Many students who were taught by this method were able to "parrot" sentences but had difficulty in communicating their own thoughts in varying situations.

Asher's Total Physical Response (TPR) is a third technique used for the instruction in second language learning (Asher, 1986). This strategy emphasizes that first and second language acquisition are parallel learning models. Asher believes that before a person can begin to speak a second language the learner needs to hear and respond to the language, much like infants hear and respond when learning their primary language

(using both the right and left segments of their brain).

Krashen's Acquisition/Learning Hypothesis (Monitor Model) stresses that language learners basically develop language through acquisition, ie: comprehensible input (Terrel, Andrade, Egasse, & Munoz, 1986). This fourth technique for gaining second language fluency debates the validity of consciously teaching the second language as opposed to "acquiring" (unconscious) the target language. Krashen's Monitor theory states that the young learner, through comprehensible input, will most easily "acquire" a second language, much like he/she acquired their first language. However, the older language student often "learns" more of the second language through formal instruction. According to Krashen, a language that has been acquired is more available for use in spontaneous communication in diverse situations (Schulz, 1991).

The Natural Approach is a fifth language teaching approach which emphasizes proficiency. Proficiency in the ability to receive and give comprehensible communication. Krashen and Terrel developed the Natural Approach in the belief that language only occurs through the comprehension of messages. Language

learners (first and subsequent) need time to process and become familiar with comprehensible input (receptive language) before being required to vocalize the language (S. Krashen & T. Terrel, 1983). The Input Hypothesis is an integral part of the Natural Approach in that most new vocabulary and grammatical forms are introduced in communication contexts before students are expected to produce them in speech or writing (Terrel et al. 1986).

A sixth language teaching technique is known as the Cognitive Approach. Diego Castellanos (1985) discusses the Cognitive Approach, as reviewed by Chomsky, as language acquisition which is "an internal mental operation controlled by the individual." The Cognitive Approach consists of these principal tenets (Castellanos, 1985):

1. The goal of second language teaching is to develop in the students the same language abilities possessed by native speakers.
2. The students' cognitive structures serve as the necessary prerequisites to their performance.
3. Since language is basically a creative activity, textual materials and the teacher

should introduce situations that promote the creative use of language.

4. Since language is not an inventory of sentences to be learned, but is a system of rules and expectations which generate sentences, grammar should be taught deductively.

5. Learning should be meaningful to the students. They should know what they are doing and why.

Students who are motivated learners acquire a second language more easily than students who are poorly motivated. The Affective Filter Hypothesis contends that students need stimulating instruction, as opposed to rote memorization. This encourages students' increased attention thus allowing for ease in learning the second language (Terrel et al. 1986).

A final method of instruction for language minority children is the practice of placing limited English speakers in special education classes or regular education classrooms two, three, or more years behind their age-mates. In these instances lack of knowledge of the English language is considered a form of retardation (Rigg & Allen, 1989).

Language teaching of the grammar-translation and the Audio-Lingual Method are generally believed to be archaic and without valid application (Castellanos, 1985). The placement of second language students in special education is considered illegal. The four remaining techniques which have been discussed are currently the most often employed strategies of instruction for students learning a second language. To implement these techniques a variety of methodologies may be used.

Once the technique for second language instruction has been selected a method of implementation must be chosen. Judith Lessow-Hurley has summarized four program models for use in the implementation of the various techniques. These programs include: Transitional, Maintenance, Enrichment/Two-way, and English Immersion (Lessow-Hurley, 1990). These methods of teaching limited English speakers are characterized as being "additive" or "subtractive" depending upon whether they support the students' self-worth or negate the students' cultural heritage.

The transitional bilingual program model is a subtractive model (negating the speakers' cultural heritage) whereby the student's native language is used only for support of the target language. This method

of teaching the target language focuses on the language to be learned with little use or emphasis on the native language. Problems related to this approach often include few role models involving the target language, exit testing which does not consider the specialized use of the second language in academics, and the unrealistic expectation of second language mastery in as few as three years. Also apparent in this subtractive approach is the disregard of the student's self-esteem. Little appreciation is shown for the students' primary language or culture (Lessow-Hurley, 1990).

A second model, language maintenance programs, are additive models which promote bilingualism. These programs emphasize a dual-language approach whereby skills are taught in the student's native language and are later transferred to the target language. Studies by Hakuta & Gould, as cited by Lessow-Hurley (1990), state that students' self-esteem and learning are enhanced if they are taught concepts in their primary language.

Enrichment/Two-way programs have also been employed for teaching bilingual concepts. Like the Language Maintenance Approach, this third method of instruction

also emphasizes a dual-language learning and is an additive model. It is, however, not limited to Non-English speaking students. Enrichment programs include the teaching of the second language to language majority students as well as teaching the limited English speaker the target language. This program has also been aptly named the "two-way" approach as each language comprises about 50% of the curriculum (Lessow-Hurley, 1990). Lack of qualified teaching staff and parental concerns and/or a misunderstanding of the program has limited its success.

The fourth language program discussed by Lessow-Hurley (1990) is the English Immersion Model. This method of instruction, depending upon its employment, can be seen as either additive or subtractive. Immersion is additive when a language student, with respect for cultural relevancy, is placed in a second language program. Immersion is subtractive when a language student is placed in an immersion program without the benefit of culture and self-esteem acknowledgement and inclusion.

The choice of a program model (Transitional, Maintenance, Enrichment, or Immersion) and the choice of technique (TPR, Krashen's Monitor Theory, Natural Approach, or Cognitive Approach) that is made for

Instruction of the second language learner are dependent upon a multitude of variables, all which influence learning.

Cognitive style, socio-economic class, ethnic group, academic ability, and language use outside the school are just a few of the things to consider in regard to the learner. Furthermore, motivation, age, degree of home language mastery, and anxiety level should also be included in the factors which influence language acquisition (Viberg, Juvonen, & Lindberg, 1989).

The instructor also must take into account conditions relating to her/himself and the school in which the learning will take place. These additional variables consist of School/District bilingual philosophy, community/parent support, access to peer models, and the teacher's first and second language ability. Material availability, and quantity and quality of time available for teacher/student interaction are also crucial elements for program implementation (Schulz, 1991).

Finally, before implementing a bilingual program we must remember that bilingual education is NOT a

remedial program but rather a developmental program at least and an ENRICHMENT program at best (Dismuke, 1991).

Thematic Approach and the LEP Student

In the late sixties and early seventies behaviorists committed many teachers to a "skills movement." This teaching methodology isolated skills from content and placed content into segmented bits of information. After watching students struggle over isolated bits of information, countless teachers became disenchanted with this view of learning. Students could bubble in the right answer on a test that measured skills, but often could not transfer the knowledge to content areas. Students who were able to transfer skills were often unmotivated because the process was not a pleasurable activity (G. Manning & M. Manning, 1989).

The Limited English Proficient (LEP) student in this country, or in any other country where English is the majority language, must become fluent and literate in English. Language instruction for all students must promote communication and literacy skills that insure the highest achievement in school subjects. There has to be a high level of teacher expectation with student

participation in the learning process (D. Freeman & Y. Freeman, 1988).

We must give priority to teaching students English language proficiency. We must be concerned with the content being presented and the materials to which students can relate and identify (I. Carrillo & F. Carrillo, 1984). Programs must build on the language and cultural richness of its students. (Dismuke, 1991).

Obviously, there is not a single teaching methodology which would be appropriate for all bilingual and LEP students. However, effective bilingual programs do have several features in common. These programs often have a strong emphasis on language development, and utilize staff members who are competent and who are sensitive to the needs of students from language minority populations (Anderson & Lapp, 1988).

Renate Schulz advocates a content and problem-solving approach to second language instruction. A content and problem-solving approach also provides opportunities for interaction in communicative contexts. This approach provides "real" learning situations and is not limited to receptive skill modalities. Appropriate written, oral, and visual input is essential (Schulz, 1991). It is also

Imperative that LEP students learn not only the content area concepts appropriate to their ages, but also, be given the opportunity to learn in their language of choice (first or second language) (I. Carrillo et al. 1984).

The integration of language and content instruction in the second language classroom is an area of growing interest (Snow, Met, & Genesee, 1989). Castellanos writes that the cognitive method of second language teaching is based on the following principles (1985) which relate to language and content integration:

1. Build on what the students already know.
2. Help the students relate new material to themselves and their life experiences, and their previous knowledge.
3. Avoid rote learning (except perhaps in the case of vocabulary).
4. Use graphic and schematic procedure to clarify relationships.
5. Utilize both written and spoken language in order to appeal to as many senses as possible.
6. Attempt to select the most appropriate teaching-learning situation for the student involved.

7. Employ the first language, visuals, or demonstrations as a base from which to build conceptualization of meaning and form in the second language.
8. Use inductive, deductive, or discovery-learning procedures of each student.
9. Distinguish between various backgrounds and potentials of each student.
10. Stress the functional use of grammatical patterns, not abstract rules per se.
11. Attend to student attitudes as well as to comprehension of content.
12. Give students a chance to question and practice.

For young children, the cognitive approach and language development go hand in hand (Snow et al. 1989). Language is a tool through which the child comes to understand the world. With this method of instruction the children will be involved with input which is understandable and interesting to the learner (Cullinan, 1990).

Another important consideration for determining language teaching methods is the quality of learning to

be promoted, as distinct from the quantity. With quality learning, at any stage during the learning growth process, there is not only the observable growth of the student but also the potential of further growth to be achieved as a result of the foundation which is being established and incubated (Prabhu, 1990).

In the traditional classroom, language and content teaching seldom overlap (Snow et al. 1989). However, several authors write that a growing number of ESL teachers are being asked to teach language in the content areas (Freeman et al. 1988, Snow et al. 1989). This is an important approach to teaching ESL students which emphasizes the potential learning and language growth while assuring academic success and cognitive development. This method of teaching is known as "Whole Language." (Freeman et al. 1988).

Whole Language focuses on the understanding of the concepts being taught through thematic lessons rather than the memorization of isolated skills, facts, and details. Lessons progress from whole to part, instead of being taught as separate subject areas. The thematic lessons build on students' strengths, background knowledge, and interests rather than emphasizing and focussing on students' areas of deficit. Children bring meaning to the theme based

lessons because the lessons build on prior knowledge, experiences, and have a purpose (Freeman et al. 1988).

The thematic approach incorporates listening, speaking, reading, and writing into the lessons. Each language process interrelates as students become more able language users through the classroom activities. It provides for learning during social interactions which are an integral part of the whole language philosophy. Students respond to one another's areas of knowledge as they generate vocabulary and teach each other. Through these interactions language takes place globally, not linearly, reflecting the process in which the students' first language was acquired.

When asked to use both oral and written language in varied ways and for varied purposes students will see the connection between experiences and oral and written language (Rigg et al. 1989). This content and language integration provides both a cognitive and motivational basis for language learning (Snow et al. 1989).

By incorporating social interaction and skill areas whole language lessons reflect the teacher's faith in the learners as achievers. Students respond to a learning environment in which they are perceived to be achievers. In this manner they are able to proudly

attain the high levels of expectation (Freeman et al. 1988) which is inherent of the thematic approach.

In the thematic approach, the content determines the language objectives. Careful planning ensures that the language is acquired through experiences, the use of concrete materials, manipulatives, and a variety of activities which provide opportunities for students to match language to its referents (Snow et al. 1989).

In a recent U.S. Department of Education study, the thematic approach in conjunction with native language instruction, has shown that English language minority students are able to keep pace academically with the general student population and outpace other at-risk students (NEA TODAY, 1991).

We can see through the use of the thematic approach that language is a vehicle for learning, not an object for study (Cullinan, 1990). Teachers do not need to concentrate on a language development approach that delays academic cognitive skill and content instruction until a certain level of English has been reached (Short, Crandall, & Christian, 1989). With this approach, LEP students begin academic studies earlier, while receiving linguistic support and training in academic cognitive skills (Short et al. 1989).

Bilingual teachers may want to further the use of content in the English portions of their programs. These teachers can provide academic language training in English and help the students transfer their cognitive development from their native language to English. Moreover, this approach satisfies two-way bilingual program objectives, since instruction in the content component of the course is offered in both the students' native language and their second language (Short et al. 1989). The goal for each teacher should be to develop academic achievement in the content areas and language proficiency simultaneously (Prabhu, 1990).

Science through the Thematic Approach

Language retention is promoted by learning vocabulary items as a meaningful and active cognitive process. By grouping content related vocabulary items together and using them in varying contexts (i.e. science), teachers provide the necessary concept-relatedness required for meaningful learning (Salomone, 1991) in both the first and second languages.

It is, of course, impossible to prescribe "good" science teaching methods. What suits one teacher may not suit another, what suits some students, may be

Inappropriate for others. Even so, teaching science to the entire class together remains one of the methods most often used by teachers (Harlen, 1983). This can be done by using the whole language approach to science teaching.

Using science in a thematic approach emphasizes the combining of science with other content areas. The science unit becomes the core for inquiry as specific skills and activities are integrated. By becoming familiar with all subjects and creatively integrating teaching units, science need not be taught as isolated concepts (Larter & Cheng, 1984). As teachers and students become more familiar with science they will take more of an interest in learning the material (Koepke, 1991) and, with the use of the thematic approach to science, the shift will be from the transmission of knowledge to the transaction of knowledge (Monson & Pahl, 1991).

Most teachers today consider it only natural to present new words in context because they believe that context is helpful in providing the full range of meaning. Also words which are studied in context are more easily retained. As educators know, the ease for learning a word or concept may determine the approach to teaching it. By applying the thematic approach to

science, words and concepts become more concrete, will require less explanation, and will become more "learnable" (Laufer, 1990). Whole science words and concepts which are presented to LEP students can be related to subject matter, student experiences, and the language of the student, as they can become functional, meaningful concepts.

The following is a checklist which may be used with the thematic approach of whole science (Freeman et al. 1988):

1. Does the lesson move from the general to the specific?
2. Is there an attempt to draw on student background, knowledge and interests? Are the students given choices?
3. Is the content meaningful? Does it serve a purpose for the learners?
4. Do students work together cooperatively? Do students interact with one another or do they react to the teacher?
5. Do students have an opportunity to read and write as well as speak and listen during lessons?

6. Does the teacher demonstrate a belief that students will be successful learners?

Science programs may vary somewhat in their science content, learning activities, and teaching format. However, the elementary science program should correlate science, whenever possible, with other phases of the school curriculum (Victor, 1989).

It is not uncommon for a teacher to find that children differ in ability (Victor, 1989) however, the collaborative nature of scientific work strongly reinforces the need for frequent group activities. In the science classroom, wondering should be as highly valued as knowing, and students should be actively engaged in their learning (American Association for the Advancement of Science, 1990). Whole science, or the thematic approach, is indicative of this philosophy.

Summarily, the science curriculum becomes whole science when allowed to be integrated into all subject areas (Malecki, 1990) and languages. The studies and research indicate that a whole-language approach to a bilingual science curriculum is very appropriate. Bilingual and regular education children are in the process of acquiring language, and whole language is consistent with language acquisition theories. B.E.A. and LEP students need to be in an environment where

they can use what they already know, and where they can be accepted for who they are. Whole science curriculum secures this.

CHAPTER III

PROCEDURES OF THE STUDY

Description of Information Required for the Study

The need for a new science curriculum was determined by the Wapato School District policy of curriculum updating. Each five to 10 years every curriculum area within the district is evaluated and updated. This occurs for each subject on a rotating basis. The last science curriculum adoption for the kindergarten was in 1983.

The 12 Wapato kindergarten staff members are excited about having a new science curriculum. A feeling of ownership by the teachers is essential for its success and use. For this reason the teachers have been consulted on each phase of the program development.

Methods Used to Achieve Curriculum Design

Through the author's interview with each of the 12 Wapato kindergarten teachers it was determined that the teachers would like a science curriculum which would integrate easily with other programs currently employed at this level. It was decided that a thematic approach curriculum would allow for integration and consistency

with the whole language arts and whole language social studies programs presently used by the Wapato School District kindergarten. The research documented in Chapter II also supports the use of a whole language science program. With this method of instruction students more easily retain information, transfer knowledge to other content areas, relate information to their various learning styles, and interrelate learned knowledge with their life experiences.

A survey of the 12 participating staff members was used to decide which of the six science student learning objectives (SLOs) they would like to have developed into the thematic units. The results of the survey indicated that the units of interest included: animal classifications, the seasons, and the five senses. It was felt by the teachers that the remaining three SLOs (magnets, sink and float, and solids, liquids, and gases) did not require thematic development because the subject areas are taught periodically throughout the year when applicable situations arise.

Whole language science activities and materials were compiled by the author from the 12 participating teachers' classroom materials and a survey of the media center resources. The author also made a

recommendation to the district for the purchase of supplemental literature for classroom libraries and additional "hands-on" science experiment equipment such as: animal models, prisms, aquariums, terrariums, plants, seeds, and food samples. The district was also asked to purchase subject related videos, magnifying glasses, and microscopes. A budget for science related field trips was also requested.

After determining the units that would be developed for the thematic approach, the author considered the needs of the target population. The writer interviewed pertinent staff and it was decided that for consistency with current programs and the high population of Spanish speaking students the need for a bilingual curriculum was paramount. The research in Chapter II shows that whole language thematic instruction is an effective curriculum for limited English speaking students.

Inservice for the 12 participating staff members prior to implementing the thematic science units was determined to be unnecessary because of the teachers' previous knowledge and experience in the use of this approach. The teachers also noted that for consistency in the integration of these themes with other subject areas, these units were written as a list of resources

and ideas, rather than structured lessons which would require an explanation before implementation.

The School Board members and the district administrators will be inserviced in the project through a presentation by the author at a School Board general meeting during the summer of 1992.

Parents of kindergarten students will be shown the science materials and units for study as part of an orientation which will take place for new kindergarten students and their parents prior to the first week of the school in the fall of 1992. Parents will be given the opportunity to review the materials and ask questions regarding the program at that time.

Implementation of the program will commence with the 1992-1993 school year as the kindergarten classrooms begin studying the seasons and animal life in preparation for their first field trip. This life experience will be a trip to the Central Washington State Fair during the first week of October, four weeks after the school year begins.

Teacher observations and student/teacher conferences will be the primary means of evaluation during the initial introduction of concepts. As the kindergarten year progresses, the students will become familiar with other methods of evaluation such as

illustrations, writings, and developmentally appropriate tests.

To promote student success with the materials and concepts the evaluation procedures will be created by the individual teachers when applicable. Mastery of the concepts will be determined by the Wapato School District SLOs which state accuracy levels necessary for mastery. The Wapato School District SLOs (1988) for the three areas of concern are:

1. Given each of the four seasons the student will observe and produce two examples of various weather conditions associated with that season with 80% accuracy.
2. Given pictures of animals student will sort them into groups of mammals, fish and birds with 100% accuracy.
3. Given 10 common objects student will classify the identity of each by sight, hearing, touch, smell, or taste with 80% accuracy.

Furthermore, teachers are encouraged to maintain a file for each pupil. These files should contain work samples and the teacher's annotations of observations and conferences conducted with the student. This will provide documentation of skill areas which have been

mastered and also those objectives which need additional study. These files are valuable resources when planning for higher skill development and also during parent/teacher conferences.

CHAPTER IV

RESULTS OF THE STUDY

Information Resulting from the Study

The development of a science curriculum for use in the Wapato School District Kindergarten Program has been achieved through numerous consultations with the 12 kindergarten staff members. These teachers have contributed to the project through the sharing of their time, materials, ideas, and activities. Consistent philosophical beliefs in science integration and bilingual language development are apparent in the many diverse materials and resources.

Description of the Project

This project consists of three bilingual science themes. These themes are: 1) the four seasons, 2) the five senses, and 3) animal classifications (birds, insects, mammals, reptiles, and water animals).

Each theme includes a list of materials (books, filmstrips, videos, and kits), both in English and in Spanish, available through the Wapato Primary Media Center. For ease of access by the teachers the materials are listed by the title and the Dewey Decimal number.

Following the lists of available media are suggestions for science integration with other subject areas taught in the kindergarten program. Areas of integration often overlap. However, for the purpose of this study the author has arbitrarily assigned activities to a single subject area. This overlapping of activities from subject to subject will become apparent as the reader becomes familiar with the areas of study. Subject areas include: writing, art, songs, cooking, social studies, math, reading, and language arts.

Also included in the appendix are worksheets which may be selected by the teacher for the introduction or reinforcement of theme concepts. Two sets of worksheets have been included with each theme, one with English captions, the other with Spanish captions. It is understood by the staff that although most kindergarten students are unable to read, the use of the student's first language in written form is essential for the emerging reader. Teachers also agree that papers which are written in the home language and are to be taken home assist parents in the understanding and reinforcement of the concepts taught at school.

INCLUSION OF THE PROJECT

THEMATIC APPROACH TO TEACHING SCIENCE

IN KINDERGARTEN

FOR USE WITH FIRST AND SECOND LANGUAGE STUDENTS

THEMES

TABLE OF CONTENTS

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	Birds.	40
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	Mammals.	51
	Reptiles.	63
	Water Animals.	67
II.	FIVE SENSES.	72
III.	SEASONS.	79

BIRDS

BIBLIOGRAPHY

The following titles are available in the Wapato Primary Library. These books may be read by the teacher or by the student for enjoyment, vocabulary development, and/or used for their pictures when discussing science or science related subjects.

ENGLISH TITLES

Animals in the Wild	598.2/Sev	
Are You My Mother?	E/Eas	
Baby Birds and How they Grow	598.2/McC	
Benedict Finds a Home	E/Den	
Best Nest	E/Eas	
Bill and Petee	E/Dep	
Bird Life	598.2/Pie	
Come Again Pelican	E/Fre	
Eagles	598.2/Lan	
Egg to Chick	574.3/Sel	
Filling the Bill	E/Fis	
Flap your Wings	E/Eas	
Henny Penny	398.2/many authors	*
How Birds Live	598.2/Bre	
How and Why Wonder Book of Birds	598.2/Mat	
Hummingbirds	598.2/Gri	
Little Red Hen	398.2/many authors	*
Parrots in the Wild	598.2/Moo	
The Parrot Book	E/Ger	
Penquins	598.2/many authors	
Percy the Parrot Strikes Out	E/Car	
Quiet! There's a Canary in the Library	F/Fre	
Robins	598.2/Mas	
Thumbelina	398.2/many authors	*
Ugly Duckling	398.2/many authors	*
What's Inside	598.2/Gar	
What makes a Bird a Bird?	598/Gar	

SPANISH TITLES

Las Águilas	468/Bai	
El Águila y La Paloma	468/Kru	
Animales en la Ciudad	468/DeS	
Animales que Vuelan	468/Fic	
La Bandada de Palomas	468/Cel	
Donato el Pato	468/Bre	
?Eres Tú Mi Mamá?	468/Eas	
La Gallinita Roja	468/many authors	*
La Oca de Oro	468/Gri	
Los Pájaros son animales	468/Hol	

Spanish Titles (Continued)

El Patito Feo	468/many authors	*
El Patito Quico	468/Dal	
Patos	468/Ste	
El Petirrojo	468/Lag	
Pollos	468/Ste	
Soy un Pájaro	468/San	
La Vida en el aire	468/Rlu	

STORY EXTENTIONS

HENNY PENNY - Use story to discuss birds that live on a farm, real versus pretend. Talk about why farmers raise chickens, turkeys, geese, and ducks. Talk about what enemies the farm birds might have and why. Also relate to thinking for one's self.

Dramatize story

Use with sound filmstrip: 372/Sto

Video 398.2/Hen

LITTLE RED HEN - Use story to discuss birds that live on a farm real versus pretend. Talk about why farmers raise chickens, turkeys, geese, and ducks. Talk about what birds eat.

Also relate to work ethic, helping others.

Dramatize story

Use with sound filmstrips: 372/Sto, 468/Fai, 398.2/Chl,

F/Lit

Video: 398.2/Lit

THUMBELINA - Use story to discuss why birds migrate south in the winter. Discuss real versus pretend.

Discuss how to set up birdfeeders.

Also relate to personal safety; don't go with strangers and what action we should take if a stranger tries to take us.

Use with video: 398.2/Thu

UGLY DUCKLING - Use to discuss types of waterfowl.

Discuss and compare how baby birds differ from adult birds.

Also relate to feelings and friendships.

See sound filmstrips: F/Lit, 468/Cue (2 different)

Kit: F/Ugl

Videos: 398.2/Ugl (Troll), 398.2/Ugl

ADDITIONAL MEDIA

Sound Filmstrips (S.F.S.)

590/Tal Ariel, The whooping Crane

S.F.S. (continued)

598.2/Ani Birds
 F/Lit and F/Col Cold Blooded Penguin
 598.2/Fas Fascinating Birds
 590/Fis Filling the Bill
 599/Adv Glu, Emperor Penguin
 598.2/Gol Golden Eagles
 590/Lif Life Cycle of Birds
 590/Tal Tor, The American Bald Eagle
 598.2/Wil Wild Ostrich of the Kalahari

Kits

598.2/Hor Birds do the Strangest Things
 598.2/Bir Birds and How they Grow
 598.2/Wha What is a Bird?

Videos

372.4/Ani Animal Alphabet
 590/Ani Animals that Build
 398.2/Gol The Golden Goose
 590/How How Animals get their Food
 590/How How Animals move
 598.2/Pen The Penguin (2 different)

BIRDS

Interrelation of Science and other subject areas

All worksheets (dittos) are available in both Spanish and English. Any additional work the teacher assigns may be completed in the student's or teacher's language of choice.

The following list of ideas for subject integration is written in English. The teacher may choose to translate ideas into Spanish for ease of use and the continued Spanish language development of the student.

Writing

1. Cut and arrange in order sequencing papers which are included in the theme. Have students dictate captions for teacher to write under each picture.
2. Cut and arrange in order sequencing papers which are included in the theme. Have students dictate captions for teacher to write on the board for students to copy below each picture.
3. Have students dictate sentences for teacher to write on the blackboard. Have students copy the sentences onto lined paper and illustrate.
4. Have students write and arrange in order a book.

Writing (continued)

Include papers which state, "A _____ can fly. A _____ can fly. A _____ can fly. But a _____ CANNOT fly". Repeat the pattern for a multiple page book. Variation: Discuss bird habitats. Have students use the pattern: A _____ lives on the farm. A _____ lives on the farm. A _____ lives on the farm. But _____ doesn't.

5. Use bird brainstorming to make a bird fold-a-book.

Art

1. Cut 2 large birds using the same pattern. Have students sew or staple the birds together leaving an opening large enough to stuff papers into the bird. Then complete sewing or stapling the bird. Decorate with wings, feathers, a beak, and legs.
2. Use the enclosed ditto to make tagboard patterns for students to trace. Use the tagboard pattern and various colors of butcher paper to make a bird that flies. Cut a slit in the body of the bird for wings to slide through. Color or decorate the bird.
3. Use the enclosed ditto of a bird that likes to sit on your finger. Color the two birds, place a penny in the bottom of the tail and paste the two side together.
4. Water paint, tempura paint, or color birds of students' choice.
5. Use a black balloon as the body of a penguin. Add student drawn and cut wings, belly, beak, eyes, and feet.
6. Color, cut, and put together with a brad the duckling hatching from the egg which is included in the theme.

Songs

1. Nursery Rhyme song of Four and Twenty Blackbirds Baked in a Pie and any others the teacher deems appropriate.
2. Use song of Ugly Duckling which is on the Read-a-long story tape. Transcribe words and illustrate for a book.
3. Zippity Do Da, Zippity A, My oh My What a Wonderful Day, ask music teacher for words if unknown.
4. De Colores

Cooking

1. Make hard-boiled eggs.
2. Discuss and relate to the chicken or turkey we eat for lunch at school or at home.

Social Studies

1. Use the atlas, globe, or map to discuss where birds live.
2. Go on a walk around the community to find types of birds.
3. Talk about kinds of jobs people could have who work with birds (zoo keeper, pet store owner, ornithologist, or veterinarian).

Math

1. Count the number of birds we know.
2. Sort the birds according to their abilities (swim, fly, eat fish, run, etc.)
3. Make a sequence of birds (blue bird, ostrich, duck, blue bird, ostrich, duck, etc.).
4. Do the dot to dots included in the theme.
5. Complete the ditto of counting the flower petals for the hummingbird which is included in the theme.
6. Have students dictate to the teacher math boardwork. Example: Make 8 green hummingbirds, Make 6 black ostriches. Have students read the sentences and then draw and color the correct number of birds.

Science, Language, and Reading

1. Complete color word dittos of birds (included in theme).
2. Discuss types of food birds like to eat.
3. Discuss where birds live or build their nests.
4. Play "Around the World" using pictures of birds.
5. Play "I'm thinking of a..." using descriptions of birds for students to guess.
6. Discuss, cut, and sequence dittos included in the theme.
7. Discuss actions we should take if we see a bird in the wild.
8. Borrow a bird for classroom observations during the time studying this unit.
9. Go to a zoo, pet store, or on a community walk to observe birds.

INSECTS and SPIDERS

BIBLIOGRAPHY

The following titles are available in the Wapato Primary Library. These books may be read by the teacher or by the student for enjoyment, vocabulary development, and/or used for their pictures when discussing science or science related subjects.

ENGLISH TITLES

All Upon a Sidewalk	575.7/Geo	
The Ants	595.7/Ros	
Beetles	595/Wat	
To Be a Bee	595.7/Ros	
Big Bug, Little Bug	E/Ber	
The Bug Book	595/Dug	
Butterflies	595.7/Oda	
The Butterfly	595/But	
Buzz, Buzz, Buzzing Bees	500/Ful	
Catch a Cricket	595.7/Ste	
Caterpillars	595/Wat	
Close-up of a Honeybee	595.7/Fos	
Cockroaches	595/Ker	
Ferdinand	E/Lea	*
Fiona's Flea	E/Kel	
The Housefly	595/Fis	
I Like Bugs	E/Bro	
I Like Caterpillars	595.7/Con	
Insects	595/Ins	
Insects - Man's Greatest Rival	595.5/Ins	
Insects we Know	595.7/Ins	
Honeybees	595.79/Lec	
Ladybug	595/Wat	
Ladybug, Ladybug Fly Away Home	575.7/Haw	
Life of a Honeybee	595/Fis	
Look...A Butterfly	595/Cut	
Look at Insects	595.7/Klr	
Mother Goose	398.2/many authors	*
New True book of Spiders	595/Pod	
Over in the Meadow	E/many authors	
Quick as a Cricket	E/Woo	
Too Big For Me	E/Mel	
Read about Spiders	595/Mor	
Spider Silk	595/Gol	
Spiders	595/Rie	
Very Busy Spider	E/Car	
Very Hungry Caterpillar	E/Car	
When Insects are Babies	595.7/Con	
When it Comes to Bugs	E/Fis	
Where Does the Butterfly go When it Rains	E/Gar	

SPANISH TITLES

Abejas	468/Bar
Animales en la Ciudad	468/DeS
Animales que dan Miedo	468/Far
Animals que Vuelan	468/Fic
Las Aranas Son Animales	468/Hol
?De Quién es esta Casa?	468/Gar
?Dónde Está la Mariquita?	468/Vil
Ferdinando	468/Lea
Los Insectos Son Animales	468/Hol
Insectos que Viven en Familia	468/Far
La Mariposa	468/Dad
La Mariposa	468/Hob
La Mariposa	468/Vil
El Mundo de los Hormigas	468/Whe
El Mundo de los Insectos	468/Lob
La Oruga Muy Hambriente	468/Car
Pancho Hormiga y Alvaro Pulgón	468/LaF
Poesías de la Madre Oca	468/Rel
El Reino Subterráneo	468/Pac
Soy Grande, Soy Pequeño	468/Stl
La Vida Bajo la Tierra	468/Riu

STORY EXTENTIONS

MOTHER GOOSE - When studying insects include rhymes which have insects. Examples: Eency, Weencey Spider, Little Miss Muffet, and Ladybug, Ladybug, Fly Away Home.

Discuss how many people are afraid of spiders and insects yet many bugs do us no harm and in many fact help us.

Dramatize Rhymes, talk about words that rhyme.

See Sound Filmstrips: 398.2/many authors

See Videos 398.2/many authors

FERDINAND - Use story to discuss how it feels to be stung by a bee. Discuss the variety of bees: honeybees, wasps, yellowjackets, bumblebees, etc. Relate to the story that we all have likes and dislikes and need to think for ourselves.

See Sound Filmstrip 398.2/Fer

ADDITIONAL MEDIA

Sound Filmstrips (S.F.S.)

595.7/Anl Animals that Build their Homes: Wasps

E/Dis Bootle Beetle

468/Cue La Ciudad de las Abejas

595.7/Anl Insects

595.7/Ins Insects and How they Grow

S.F.S. (continued)

590/Lif Insects - Life Cycles

575.7/Wha What is an Insect?

E/Lit Where Does a Butterfly go When it Rains?

Kits

595.7/Ica I Can Read About Insects

595.7/Ins 6 insects in plastic

Videos

590/Anl Animal Guessing Games

590/Anl Animals and Arachnids

590/Anl Animals that Build

590/Anl Animals that live in Groups

595.7/Bac Backyard Bugs

595.7/Ben Benefits of Insects

595/But The Butterfly

595/Ins Insects (Tell Me Why)

595/Ins Insects

INSECTS AND SPIDERS

Interrelation of Science and other subject areas

All worksheets (ditto) are available in both Spanish and English. Any additional work the teacher assigns may be completed in the student's or teacher's language of choice.

The following list of ideas for subject integration is written in English. The teacher may choose to translate ideas into Spanish for ease of use and the continued Spanish language development of the student.

Writing

1. Cut and arrange in order sequencing papers which are included in the theme. Have students dictate captions for teacher to write under each picture.
2. Cut and arrange in order sequencing papers which are included in the theme. Have students dictate captions for teacher to write on the board for students to copy below each picture.
3. Have students dictate sentences for teacher to write on the blackboard. Have students copy the sentences onto lined paper and illustrate.
4. Have students brainstorm bug characteristics then write and arrange in order a book. Use the sentence framework from the book I LIKE BUGS.
5. Have students brainstorm bug characteristics then write and arrange in order a book. Use the sentence framework from the book BROWN BEAR, BROWN BEAR.
6. Use brainstorming to write an insect fold-a-book.

Art

1. Make bugs out of potter's clay. When the bugs have dried paint them with tempera.
2. Make bugs out of paper mache or sawdust mixed with glue.
3. Make caterpillars out of 1/2 of the bottom of an egg carton, paint with tempera, add pipe cleaner antennae.
4. Use a large butterfly pattern. On the fold of a large piece of construction or butcher paper cut 1/2 of a butterfly. Open up the butterfly, drip tempera paint on one side, refold and press. Open butterfly to dry.
5. Have students make a mural by cutting and pasting or drawing bugs. Add a pond and trees.
6. Make a spider using a black construction paper body. Add eight narrow black construction paper legs which have been "fan folded". Complete spider by adding yellow and black eyes and a string to hang.
7. Make construction paper bees using yellow paper for the body, black paper for strips, eyes, and antennae.

Songs

1. Add music to appropriate nursery rhymes.
2. To the tune of WHEN JOHNNY COMES MARCHING HOME, write new words. Example: The ants went marching one by one,

Hurrah, Hurrah!
 The ants went marching one by one,
 Hurrah, Hurrah!
 The little one stops to suck his
 thumb.
 And they all went marching down
 to the ground
 To get out of the rain
 Boom, boom, boom!

Rows 1,3,5, and 6 change through the song. Change only the changing parts.

The ants went marching 2 by 2...
 The little stops to tie his shoe.

The ants went marching 3 by 3...
 The little one stops to play with a bee.

The ants went marching 4 by 4...
 The little one stops to shut the door.

The ants went marching 5 by 5...
 The little one stops to take a dive.

The ants went marching 6 by 6...
 The little one stops to play some tricks.

Songs (continued)

The ants went marching 7 by 7...
The little one stops to visit heaven.

The ants went marching 8 by 8 ...
The little one stops to shut the gate.

The ants went marching 9 by 9...
The little one stops to read the sign.

The ants went marching 10 by 10.. .
Teacher's glad this is the end.

COOKING

1. Make cupcakes and decorate to look like ladybugs.
2. At Halloween time buy black licorice spiders. Save until studying this unit.
3. Make muffins, tortillas, toast, or ? - spread with honey.

Social Studies

1. Go on a walk around the community. Collect bugs that live in our neighborhoods.
2. Discuss the kinds of people who work with bugs (bee keepers, pet store owners [animal feed], orchardists, etc.).
3. Talk about how we use bees in our orchards.

Math

1. Complete dot to dot paper included in this unit.
2. Help the bee find the 6 flowers, included in unit.
3. Count the body parts of a caterpillar.
4. Sing the song about the ants (listed above).
5. Count and compare the number of legs of various bugs.
6. Sort bugs according to their abilities (fly, crawl, spin webs, sting, etc.).
7. Do boardwork using student suggestions. Example: Make 6 green grasshoppers, Make 8 yellow and black bees. Have students read and then draw the correct number of bugs.

Science, Language, and Reading

1. Complete color dittos of insects (included in theme).
2. Discuss types of food bugs like to eat.
3. Discuss where bugs like to live.
4. Play "Around the World" using pictures of spiders and insects.
5. Play "I'm thinking of a..." using descriptions of insects and spiders.

Science, Language, and Reading (continued)

6. Discuss, cut, and sequence dittos included in the theme.
7. Borrow or buy an ant farm for study during this unit.
8. Invite a bee keeper in to visit the class.
9. Complete the butterfly book which is included in the theme.
10. Use library resource of bugs which are displayed in plastic or collect and preserve our own. Discuss where we found our bugs.

MAMMALS

BIBLIOGRAPHY

The following titles are available in the Wapato Primary Library. These books may be read by the teacher or by the student for enjoyment, vocabulary development, and/or used for their pictures when discussing science or science related subjects.

This category has an extensive bibliography. Therefore the author was not totally inclusive when selecting books for this category. Also, because of the exhaustive list, many subcategories have been established. The reader may use or know many more appropriate titles available through the library.

ENGLISH TITLES

ANIMALS AROUND THE WORLD

All the Desert Fox	599/And	
Amazing Animals of Australia	599/Wis	
Amazing Animals of N. America	599/Wis	
Animal, Animal where do you live?	599/Mon	
Animal Houses	E/Fis	
Animals in Danger, Asia	599/Gou	
Animals in Danger, Europe	599/Gou	
Animals in Danger, North America	599/Gou	
Are You a Kangaroo?	E/Ree	
Arctic Mammals	599/Hok	
A Bat is a Bat	599/Del	
Bats, the Night Flyers	599/Dea	
Bison	599/Din	
A Book about Pandas	599/Gro	
Camels	599/Clo	
Camels and LLamas	599/Ear	
Creatures with Pockets	599/Har	
Dumbo	E/Dls	*
Elephants	599/Ele	
Elephants in the Wild	599/Moo	
Fox Eyes	E/Bro	
Giant Panda	599/Bri	
Giraffes at Home	599/Coo	
A Gorilla is a Gorilla	599/Del	
Huppert Hippo's World	599/Las	
Jungle Book	E/Dls	*
Kangaroo	599/Tow	
Kippy the Koala	E/Lea	
Koalas Live Here	599/Ebe	
Leopards in the Wild	599/Moo	

English titles (continued)

Lion Cubs	599/Nat
Lions in the Wild	599/Moo
Lions and Tigers	599/Lio
Little Gorilla	E/Bor
The Mammals	599/Car
Mammals and how they live	599/McC
Monkeys and Apes	599/Lum
Mother Goose	398.8/many authors *
Mother Kangaroo	599/Hur
A Platypus is a Platypus	599/Del
Swiss Family Robinson	E/Dls *
Tiger	599/Br1
Tigers	599/Kil
Wait 'til the Moon is Full	E/Bro
What is a Mammal?	599/Day
Wild Animals	599/Wil
Zoo Animals	590.74/Beh

BEARS

Baby Bears and How They Grow	599/Bux
Baby Grizzly	599/Spa
Bear	599/Hof
Bears in the Wild	599/Moo
Bedtime for Francis	E/Hob
Black Bears	599/Gre
Glacier Grizzly	599/May
Goldilocks and the 3 Bears	398.2/many authors *
Grizzly Bears	599/Gre
How to Hide a Polar Bear	599/Har
Now I Know Bears	599/Kuc
Let's Find Out About Bears	599/Nad
Polar Bears	599/Gre
A True Book About Bears	599/Ros

CATS

Baby Cougar	599/Sim
A Cat is a Cat	599/Del
Cascade Cougar	599/May
A First Look at Cats	599/Sel
Lambert the Sheepish Lion	E/Dls
Leopards in the Wild	599/Moo
Lion Cubs	599/Nat
Lion Twins	599/Ste
Lions and Tigers	599/Lio
Lions in the Wild	599/Moo
Lynx	599/Swl
Read about Cats	599/Mor
Wild Cats	599/Hof

FARM

Bremen Town Musicians	398.2/many authors *
Farm Alphabet Book	E/Mil
Fernando	E/Lea *
Henny Penny	398.2/many authors *
In the Barnyard	590/Pea
Old Macdonald's Farm	E/Cau
3 Billy Goats Gruff	398.2/many authors *

FOREST

Baby Raccoon	599/Spa
Baby Wolf	599/Spa
Bambi	E/Dis
A Beaver Is a Beaver	599/Del
Beavers	599/Bri
A Chipmunk lives Here	599/Ebe
Deer	599/Din
Deer at the Park	599/Arn
Fawn in the Woods	599/Ebe
The Hare	599/Har
Nature's Pincushion, the Porcupine	599/Bux
Opossum	599/Din
Porcupine	599/Din
Rabbits	599/But
Raccoons	599/Din
Skunks	599/Din
Squirrels	599/But
Thumbelina	398.2/many authors *
Tale of Peter Rabbit	E/Pot
What's Wrong with Being a Skunk?	599/Sch
Zeke the Raccoon	E/Hol

PETS

Aristocrats	E/Dis
The Hamster	599/Ham
Home for a Bunny	E/Bro
Lady and the Tramp	E/Dis *
My Bunny Feels so Soft	E/Ste
Old Yeller	E/Gib *
101 Dalmations	E/Dis *
Pearl goes to School	E/Has
A Puppy is Born	599/Fis
Schoolroom Bunny	E/Kon
Velveteen Rabbit	E/Wil *

WATER MAMMALS - SEE WATER ANIMAL THEME

SPANISH TITLES

AROUND THE WORLD

ABC Animales	468/Bro	
Animales que Dan Miedo	468/Far	
Animales en la Ciudad	468/DeS	
Aza el Hipopótamo	468/Aza	
?Cómo Viven los Animales en el invierno?	468/DeS	
Dante el elefante	468/Bre	
?De Quién es éste Rabo?	468/Bar	
El Gorila	468/San	
En el Jardín Zoológico	468/Pfl	
En el Zoo	468/Low	
Jorge el Curioso	468/Rey	
Majo, el Rinoceronte	468/Hor	
Los Mamíferos son Animales	468/Hol	
El Mono Chimino	468/Cal	
Mother Goose in Spanish	468/Rei	*
Peel, el Elefante Extraordinario	468/Joy	
El Río de los castores	468/Gil	
Tristan el Hipopótamo	468/Bre	

BEARS

Bingo el Oso	468/LaF	
La Montaña de los Osos	468/Bol	
Osito	468/Min	
El Oso	468/Pfe	
Osos	468/Ste	
Los Osos	468/Bal	
Osos Polares	468/Ste	
Los Tres Osos	468/McK	*
Soy Un Oso	468/Rld	

CATS

La Gatita Margarita	468/Dal	
El Leon	468/San	
Prohibito a los Gatos	468/Lio	
El Tigre	468/San	

FARM

Caballos	468/Ste	
Cerdos	468/Ste	
?Eres Tú mi Mamá?	468/Eas	
Ferdinando el Toro	468/Lea	*
La Granja	468/Vil	
Isa y Bela, las Ratitas Gemelas	468/Dal	
El Lobo y los tres Cerditos	468/Jos	*
La Oveja Negra	468/Cap	
Ovejas	468/Ste	
Los Tres Chivitos	468/McK	*
La Sorpresa de la Ratita Blasa	468/Cla	

FOREST

Bambi	468/Dis	*
10 Ardillitas	468/Lon	
Castores	468/Ste	
Juan Fachas el Lobo	468/LaF	
Lobos	468/Ste	
Mapaches	468/Ste	
Rodentino la Ardilla	468/Bre	
Simón en el Bosque	468/Ort	
Simón en la Montaña	468/Ort	
Simón el pequeño Castor	468/Ort	
Sopa El Ratón	468/Lob	
Soy un Zorro	468/Ris	
Venados	468/Ste	
Zorrillos	468/Ste	

PETS

El Perro Cantor	468/Tri
El Perro Perdido	468/Pun

WATER MAMMALS - SEE WATER ANIMAL THEME

STORY EXTENTIONS

BAMBI - Use the story to discuss animals that live in the forest and how they get food in the winter. Talk about how the animals' coloring protects them. Discuss with students the need for fire safety.

Use with Sound Filmstrip 468/Bam

Video F/Dis

Kit F/Bam

BREMEN TOWN MUSICIANS - Use story to discuss animals that live on a farm and their jobs. Talk about how the animals age, compare to how people age.

Dramatize story.

Use with Sound Filmstrip 468/Cue, 398.2/Chi, F/Plu

Video 398.2/Bre

Kit F/Bre

DUMBO - Use the story to discuss real and pretend. Talk about animals that are trained to perform in a circus. Also use to discuss feelings and self concept.

Use with Sound Filmstrip 468/Dum

Video F/Dis

Kit F/Dum

Story Extensions (continued)

FERNANDO THE BULL - Use story to discuss animals that live on a farm and their jobs. Relate story to personal likes and dislikes, thinking for oneself.
Use with Sound Filmstrip F/Fer

GOLDILOCKS AND THE THREE BEARS - Use story to discuss animals that live in the woods. Relate to real and pretend. Talk about what animals eat, where they live, how they communicate. Also relate to personal safety; don't eat food if you don't know what it is, don't go into a stranger's house, don't get into a stranger's bed.

Use with Sound Filmstrip 398.2/Gol, 498/Buc, 372/Sto
Video 398.2 Gol.
Kit E/Thr

HENNY PENNY - Use story to discuss animals that live on a farm, relate story to real and pretend. Discuss the need to think for our selves.

Dramatize story.
Use with Sound Filmstrip 372/Sto
Video 398.2/Hen

JUNGLE BOOK - Use story to discuss animals that live in the jungle and their food sources. Discuss relationship between real and pretend and how we help one another. Use the atlas, globe, or map to discuss locations of jungles.

Brainstorm other animals that would live in the jungle.
Use with Sound Filmstrip F/Jun
Video F/Dis
Kit F/Jun, F/Mor

LADY AND THE TRAMP - Use story to discuss animal care, feeding, and growth. Talk about how animals can help us and can be our friends. Story begins and ends at Christmas time, could include discussion of gifts we might give or get for Christmas.

Use with Sound Filmstrip 468/Lad, F/Lad
Video F/Dis

MOTHER GOOSE - Use Rhymes which relate to mammals.
Example: Mary had a Little Lamb, Baa, Baa Black Sheep, Three Blind Mice, Owl and the Pussycat, etc.
Dramatize Rhymes, talk about words that rhyme.
See Sound Filmstrips: 398.2/many authors

101 DALMATIANS - Use story to discuss animal care, feeding, and growth. Talk about how animals communicate, real and pretend. Use story in the winter

101 Dalmations (continued)

to discuss animal tracks in the snow and how each animal has its own track. Discuss how animals live in the winter; hibernate, migrate, grow extra fur, etc. Relate to math and the number 100.

Use with Sound Filmstrip F/One

Video F/Dis

Kit F/Dis

OLD YELLER - Use story to discuss animal care, feeding, and growth. Talk about how animals help us and can be our friends. Discuss how animals need vaccinations as part of their care and how vaccinations help animals. Relate the need for medical care and vaccinations to ourselves.

Use with Sound Filmstrip F/Lit

Video F/Dis

SWISS FAMILY ROBINSON - Use story to discuss all types of animals including farm, jungle mammals, reptiles, birds, and water animals. Relate story to reality versus pretend. Use the atlas, globe, and map to discuss places where the story takes place. Discuss thinking for yourself, helping others.

Video F/Dis

Kit F/Swi

THUMBELINA - Use story to discuss mammals that live underground and what animals do in the winter. Discuss with

regard to personal safety: what to do if someone picks you up or tries to take you. Talk about how to think for yourself. Use to discuss the seasonal changes.

Related Books:

E/Dun Deep Down Underground

394.2/Hob Mole's Family Christmas

394.2/Gla What Happened Today, Freddy GroundHog?

Video 398.2/Thu

THREE PIGS - Use story to discuss farm animals, where they live, real versus pretend. Relate to personal safety; don't open the door to strangers. Discuss in relation to the work ethic.

Use with Sound Filmstrip F/Thr, 398.2/Lit

Video 398.2/Thr

Kit F/Thr

THREE BILLY GOATS GRUFF - Use story to discuss farm animals, where they live, real versus pretend. Relate to the seasons, spring growth of new grass. Relate to personal safety, think for yourself, help others.

Three Billy Goats Gruff (continued)
 Use with Sound Filmstrip F/Lit, 468/Fai, 398,2/Chi
 Video 398.2/Lit

VELVETEEN RABBIT - Use story to discuss types of pets,
 care of animals. Discuss real versus pretend. Use the
 story at Christmas time or in the spring to relate to
 the events of the story. Relate story to personal
 health, germs and medical care.
 Video E/W11 (2 versions)

ADDITIONAL MEDIA

Sound Filmstrips (S.F.S.)
 ANIMALS AROUND THE WORLD
 590/Adv Adventures of Animals (6 SFS)
 590/All Alike and Different
 599/Ani Animals: Mammals
 590/Ani Animals Around Us (5 SFS)
 590/Lif Life Cycles (5 SFS)
 599/Zlg Ziggy the Elephant
 590/Fis Ways of Animals
 599/Wil Wild Animal Stories (6 SFS)

BEARS

F/Lit Bear Country
 599/Pol Polar Bears and Seals

CATS

599/Gre Great Tigers of India
 F/Lit Lambert the Sheepish Lion
 599/Lio Lions, Tigers and Other Big Cats
 Sound Filmstrips (continued)

FARM

152.1/Cow Cows Don't Say Moo
 636/Wel Get my Goat
 590/Ani Farm Animals

PET

636/Wel Side Kick (dog)
 636/Pet Pets are Fun
 636/Pet A Pet is a special Friend
 590/Ani Animals Around You birds, Fish, and Other Pets

Kit

599/Wha What is a Mammal?

Videos

ANIMALS AROUND THE WORLD

590/Ani Animals A-Z

372.4/Ani Animal Alphabet

590/Ani Animal Guessing Games

590/Ani Animals in the Night

590/Ani Animals that live in Groups

590/How How Animals get their Food

590/How How Animals Move

599/Mam Mammals (2 different)

599/Mam Mammals and their Young

BEARS

599/Bea Bears

E/Ber The Bears' Christmas

599/Pol Polar Bear

394.2/Pol Polar Bear Express

CATS

599/Lio Lions and Tigers

FARM

636/Far Farm Animals, up close and very personal

FOREST

590/Mou Mountain Animals

PETS

636/Pet Pets and their Wild Relatives

636.8/Wor The World of Pets: Cats

636.8/Wor The World of Pets: Dogs

MAMMALS

Interrelation of Science and other subject areas

All worksheets (dittos) are available in both Spanish and English. Any additional work the teacher assigns may be completed in the student's or teacher's language of choice.

The following list of ideas for subject integration is written in English. The teacher may choose to translate ideas into Spanish for ease of use and the continued Spanish language development of the student.

Writing

1. Cut and arrange in order sequencing paper which is included in the theme. Have students dictate captions for teacher to write under each picture.

Writing (continued)

2. Cut and arrange in order sequencing papers which are included in the theme. Have students dictate captions for teacher to write on the board for students to copy below each picture.
3. Have students dictate sentences for teacher to write on the blackboard. Have students copy the sentences onto lined paper and illustrate.
4. Brainstorm animal adjectives, then use the sentence frame I like mammals, _____mammals, _____mammals, _____mammals, I like mammals! Fill in the blanks with words from the brainstorming. Cut and paste sentences onto individual papers, arrange into a book.
5. Brainstorm types of mammals then complete a fold-a-book with words from our list (included in theme).
6. Use sentence framework: A _____ lives on a farm, A _____ lives on a farm, A _____ lives on a farm. But a _____ doesn't! Substitute the word farm for other animal habitats.

ART

1. Water paint a jungle, forest, or farm animal.
2. Color, cut, and paste together the enclosed kangaroo and joey.
3. Use cotton balls, paste onto a student drawn sheep to make sheep that look woolly.
4. Use large butcher paper to draw and cut a large animal. Cut two sides of the animal, sew or staple together, stuff with newspaper. Add appropriate details (eyes, nose, toenails, etc.) using construction paper.
5. Use a large piece of white butcher paper, place it on the floor, draw lines to section the paper into 2 foot (or larger) areas. Make 1 area for each student. Have students make a mural of a zoo, jungle, or forest. Animals may be cut and pasted or drawn onto butcher paper.
6. Color, cut and paste together (with spacers so it stands) the front and back of a zebra (included in the theme).
7. Use clay or sawdust and glue mixture to mold mammals. Paint with tempera.

Songs

1. I'm Going on a Lion Hunt, I'm not afraid.
2. Three Billy Goat Gruff song
3. Add music to many of the nursery rhymes.
4. Many others suggested by the music teacher.

Cooking

1. Relate the meat we eat at lunch or at home to the animal from which it comes.
2. Make porridge when studying story of Goldilocks and the 3 bears.
3. Make "bulls eyes" when studying Fernando. Use a glass to cut out the center of a piece of bread. Place bread (without center) onto a griddle, crack and egg into the center and fry.
4. Use pita bread to make snacks in the room when learning about animals with pockets.
5. Eat animal crackers, talk about them
6. Make cookies which have been cut with animal cookie cutters or have students shape their own.
7. Make elephant shaped pancakes.

Social Studies

1. Take a walk around the community to list and identify all the types of mammals that live in Wapato.
2. Discuss the kinds of people we know who work with mammals (forest rangers, farmers, zoo keepers, veterinarians, etc.).
3. Use the atlas, globe, and map to discuss where the various animals come from.

Math

1. Complete the enclosed dot to dot papers.
2. Estimate the size of an elephant, giraffe, or other animal. Borrow the custodian's ladder to measure the correct height.
3. Count the number of mammals we know.
4. Sort the mammals into groups according to size, habitat, number of legs, or ??
5. Make a sequence paper using zoo animal or farm animal stamps. Example: elephant, cow, pig, elephant, cow, pig, etc.
6. Have students dictate to teacher math boardwork. Example: Make 6 brown dogs, Make 9 gray whales, etc. Students are to read the sentences, then make and color the number of animals it says.

Science, Language, and Reading

1. Read and color the enclosed color word dittos.
2. Read and color the book of Animals in the Zoo which is included in the theme.
3. Discuss the types of food mammals eat.
4. Discuss the kinds of homes mammals have.
5. Discuss what each of the different mammals does for winter.
6. Have students bring in their pets for a pet show.

Science, Language, and Reading (continued)

7. Visit a local pet store or go to the zoo, farm, or fair.
8. Play "Around the world" using animal pictures.
9. Play "I'm thinking of a..." using descriptions of mammals.

REPTILES

BIBLIOGRAPHY

The following titles are available in the Wapato Primary Library. These books may be read by the teacher or by the student for enjoyment, vocabulary development, and/or used for their pictures when discussing science or science related subjects.

ENGLISH TITLES

Alligators and Crocodiles	598.1/Moo	
Alligator's Toothache	E/DeG	
Anacondas	598.1/Bar	
Boa Constrictors	598.1/Bar	
Cobras	598.1/Bar	
Copperheads	598.1/Bar	
Crocodile	598.1/Cro	
Crocodiles and Alligators	568/Har	
The Jimmy's Boa Ate the Wash	E/Nob	
Dinner at Alberta's	E/Hob	
Izzard	E/And	
Kingsnakes	598.1/Bar	
Lizards Lying in the Sun	E/Fre	
Lizard's Song	E/Sha	
Lyle, Lyle Crocodile	E/Wab	*
Lyle and the House on East 88th	E/Wab	*
Never Kiss an Alligator	598.1/Bar	
Poisonous Snakes	598.1/McC	
Pythons	598.1/Bar	
Snakes	598.1/Gro	
Snakes Alive!	E/Cho	
Snakes and Lizards	598.1/Mor	
There's an Alligator Under My Bed	E/May	
True Book of Reptiles	598.1/Bal	
Turtles	598.1/Dar	
Turtle Pond	598.1/Fre	

SPANISH TITLES

Animales que dan Miedo	468/Far
El Cocodrilo Feliz	468/Jan
?Cómo Viven Los Animales en el Invierno?	468/DeS
Cuento de un Cocodrila	468/Aru
La Lliebre y la Tortuga	468/Val
Los Reptiles son animales	468/Hal
Las Serpientes	468/Bal
Tina la Tortuga y Carlos el Conejo	468/Bis
La Vida Bajo de la Tierra	468/Rui

STORY EXTENTIONS

LYLE, LYLE CROCODILE, HOUSE ON EAST 88TH STREET - Use this story to discuss crocodile and alligator habitats, reality versus pretend. Also use with sound filmstrips:
 F/Lit, Lyle, Lyle Crocodile
 F/Lit, Lyle and the Birthday Party
 See Video F/Wab

ADDITIONAL MEDIA

Sound Filmstrips (S.F.S)
 590/Lif Amphibians and Reptiles
 598.1/Big Big Gator of the Everglades
 590/Tal Boca Grande
 598.1/Fas Fascinating Snakes
 598.1/Wha What is a Reptile?

Kits

F/Pac How to Catch a Crocodile
 598.1/Ica I Can Read about Reptiles
 598.1/Rep Reptiles do the Strangest things

Videos

372.4/Ani Animal Alphabet
 590/Ani Animals A to Z
 598.1/Cro The Crocodile
 598.1/Gia Giant Turtles
 590/How How Animals Get their Food
 590/How How Animals Move
 598.1/Lea Learning About Reptiles
 598.1/Rep Reptiles and Amphibians

REPTILES

Interrelation of Science and other subject areas

All worksheets (ditto) are available in both Spanish and English. Any additional work the teacher assigns may be completed in the student's or teacher's language of choice.

The following list of ideas for subject integration is written in English. The teacher may choose to translate ideas into Spanish for ease of use and the continued Spanish language development of the student.

Writing

1. Have students dictate a sentence about reptiles for teacher to write on the blackboard. Have students copy the sentence on lined paper and illustrate it (Example: Reptiles have scales. An alligator is a reptile.)

Writing (continued)

2. Have students write a caption for each ditto included in theme.
3. Have students draw and label each type of reptile.
4. Have students use reptile brainstorming to complete a sentence pattern book. Example: (patterned after Brown Bear, Brown Bear) Green lizard, green lizard, what do you see? I see an orange snake swimming after me. Orange snake, orange snake, what do you see? I see a crocodile crawling after me etc.

Art

1. Have students draw, paint, and cut out a reptile of their choice for use on a reptile bulletin board.
2. Have students color, cut, and paste the alligator (included in theme).
3. Have students trace, cut, staple (or sew), and stuff large reptiles of butcher paper.
5. Make a Fold-a-reptile book with a reptile on each page.

Songs

1. Sing the LIZARD'S SONG (F/Sha)
2. Snap! Goes the Turtle

Cooking

1. Use chocolate cake batter to make "turtles" by pouring small amounts of prepared batter onto a heated waffle iron. After cooking decorate with frosting and green tinted coconut flakes. If desired make eyes of confetti candy.

Social Studies

1. Use the globe, map, or atlas to discuss where reptiles live.
2. Discuss the kinds of people who work with reptiles (zoo keepers, snake charmers, veterinarians, etc.).

Math

1. Complete dot-dot paper included in theme
2. Count the number of reptiles
3. Do "boardwork". Example: Teacher writes on the blackboard: Make 3 green turtles. Make 7 orange snakes etc.

Students read the sentence, draw, and color the appropriate reptile.

4. Count and sort the number of reptiles we know.
5. Color or cut and paste a reptile pattern. Example: Snake turtle, turtle, lizard, snake, turtle, turtle, lizard etc.

Science, Reading, and Language

1. Read and color word dittos included in theme.
2. Discuss, cut, and sequence dittos included in theme.
3. Discuss actions we should take if we see a reptile in the wild.
4. Borrow a reptile for classroom observations during the time studying this unit.
5. Go to a zoo or pet store to observe reptiles.
6. Place reptile models or pictures out of sight of the class, play "I'm thinking of a..." by having 1 student describe a reptile for the others to guess.
7. Play "Around the world" using reptile pictures.

WATER ANIMALS

BIBLIOGRAPHY

The following titles are available in the Wapato Primary Library. These books may be read by the teacher or by the student for enjoyment, vocabulary development, and/or used for their pictures when discussing science or science related subjects.

ENGLISH TITLES

Aquarium Fish	636/Pal	
Biggest Fish in the Sea	E/IPC	
Blue Whales	599/Pal	
Child's Book of Fish	597/Kay	
Dale the Whale	E/Ree	
Dolphin	599/Mor	
Fish	597/Hor	
Fish Book	597/Ove	
Fish Book	E/Mar	
Fish is Fish	E/Lio	
Fish out of School	E/Sha	
Fish out of Water	E/Pal	
Fishes we Know	597/Fls	
Funny Fish Story	E/Wyl	
How and why Wonder Book of Fish	597/Coe	
Hungry Sharks	597/Wat	
Hunting the Killer Shark	597/Pen	
Little Mermaid	E/Dls	*
Manatees	599/Lep	
Ocean Fish School	E/Ree	
Oola Oyster	E/Ree	
Oscar Otter	599/Ben	
Plenty of Fish	E/Sel	
River Otters	599/Din	
Sea Animals	591.9/Beh	
Sea Lions	599/Bar	
Seals	599/Lab	
Seashore	597/Mor	
Several Tricks of Edgar Dolphin	E/Ben	
Sharks	597/McG	
Sharks in the Wild	597/Moo	
Swimmy	E/Lio	
Twenty Thousand Leagues Under the Sea	E/Ver	*
Under the Ocean	E/Woo	
Under the Sea	E/Lev	
Weird Sea Creatures	E/Lev	
Whales	599/Gen	
Whales and Dolphins	599/Wis	

English Titles (continued)

What is a Fish?	597/Dar
What is a Fish?	597/Eas
What's Under the Ocean	594/Cru
World of Fish	597/Taj

SPANISH TITLES

Angelita la Ballena Pequita	468/Ric
A La Orilla de Mar	468/Fer
Ballenas y Delfines	468/Whe
Los Ballenas y los Delfines	468/And
Buenos Días, Querida Ballena	468/Bro
Delfines	468/Pac
Los Delfines	468/Bal
Gigantes del Mar	468/Gel
Los Habitantes del Mar	468/Gra
Leones Marinos	468/Pac
El Mar	468/Rui
Nutrias De Mar	468/Pac
Los Peces	468/Omm
Los Peces son Animales	468/Hol
El Pez de Oro	468/Val
Simón en la Playa	468/Ort
Simón en el Río	468/Ort
Sonado Mar	468/Del
El Submarino Fantasma	468/Bri
Los Tiburones	468/Bal
Tres Junto al Mar	468/Mar
Una Vez en el medio del Mar	468/Ada
Viaje Submarino	468/Mon
La Vida en el Mar	468/Rui
La Vida de los Peces	468/Fic

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STORY EXTENTIONS

LITTLE MERMAID - Use story to discuss the types of animals that live in the ocean, reality versus pretend. Discuss what the animals eat, those which are friendly, those which are dangerous. Discuss what would happen if the animals were to leave the water for extended periods of time.

TWENTY THOUSAND LEAGUES UNDER THE SEA - Use story to discuss ways of traveling in the water, animals we could see under the water, deep sea diving. Discuss reality versus pretend and the size of various water animals.

ADDITIONAL MEDIA

Sound Filmstrips (S.F.S.)

599/Adv Baleene, the Blue Whale

S.F.S. (continued)

590/Anl Birds, Fish, and Pets
 597/Blu The Blue Shark
 590/Lif Life Cycles - Fish
 597.92/Lif Life in the Open Sea
 597.92/Lif Life near the Seashore
 599/Por The Porpoises and the Sailor
 597/Sha Sharks
 599.2/Wha Whales

Kits

594/Ica I Can Read About Octopus
 594/Ica I Can Read About Whales and Dolphins

Videos

597/Abo About Sharks
 597/Wor Fish
 593/Fis Fish, Shellfish, and other Underwater Life
 590/Fre Fresh Water Animals
 597/Oct Octopus
 599/Sea Sea Otters
 599/Wha Whales

WATER ANIMALS

Interrelation of Science and other subject areas

All worksheets (ditto) are available in both Spanish and English. Any additional work the teacher assigns may be completed in the student's or teacher's language of choice.

The following list of ideas for subject integration is written in English. The teacher may choose to translate ideas into Spanish for ease of use and the continued Spanish language development of the student.

Writing

1. Have students brainstorm types of water animals. Use the brainstorming to write a song. Use the structure of the, "The Bear Went Over the Mountain."
 Example:

A fish swam under the waves, a fish swam under the waves, a fish swam under the waves, and what do you think he saw?

He saw a great big octopus, he saw a great big octopus, he saw a great big octopus, and that is what he saw.

Use examples that students suggest to complete additional versus.

Writing (continued)

2. Use brainstorming to complete a water animal fold-a-book which is included in the theme.
3. Have students write, illustrate, and arrange in order a book. Include papers which state, "A _____ is a water animal. A _____ is a water animal. A _____ is a water animal. But a _____ is NOT a water animal."
4. Have students dictate sentences for teacher to write on the blackboard. Have students copy the sentences on lined paper and illustrate.

Art

1. Color, cut, and paste together the fish ditto (included in theme).
2. Cut 2 large water animals using the same pattern. Have the students sew or staple the animals together leaving an opening large enough to stuff papers into. Then complete sewing or stapling the animal. Decorate with eyes, gills, fins, or other appropriate body parts.
3. Make an aquarium. Have students use large white paper to draw and color various water animals. Then paint with a light blue and starch tempura wash. When paint is dry cut and paste a black boarder around picture.

Songs

1. "Swim," said the Momma Fish to little fishes 3. If song unknown to teacher, ask the music teacher for the words and music. (Tune of Over in the Meadow)
2. Learn songs from video of Little Mermaid
3. Write and sing song listed above, under writing #1, to the tune of A Bear Went Over the Mountain.

Cooking

1. Bring in canned or fresh taste samples of fish, crab, oysters, clams, and shrimp. Compare and relate each sample to its shell and/or picture.
2. Discuss and relate the fish we eat at school or home to the fish we have been studying.
3. Make clam chowder in the classroom.

Social Studies

1. Use atlas, globe, or map to discuss where types of water animals live.
2. Talk about kinds of people who work with water animals (Forest Rangers, zoo keepers, pet store owners, etc.)
3. Talk about kinds of people who fish for a living and/or to earn money. Relate to the Yakima Indian Tribe.

Math

1. Complete dot to dot dittos which are included in the theme.
2. Estimate, then use a yard stick to measure the length of a whale.
3. Count and sort the number of fish/water animals we know.
4. Draw and color a sequence paper using water animals. example: Fish, fish, crab, fish, fish, crab etc.
5. Have students suggest water animals for "boardwork". Example: Make 3 orange starfish.
Make 7 brown fish.
Make 9 black whales.

Have students read the words and complete the work on their own large white paper.

Science, Language, and Reading

1. Read and color book "In the Blue Sea", included in theme.
2. Read and color word dittos, included in theme.
3. Read and compare to actual objects the ditto of the treasures of the sea (in theme).
4. Discuss and emphasize the difference between fish and other water animals.
5. Go on a field trip to a pet store.
6. Set up an aquarium in the room.
7. Play "Around the World" using pictures of water animals.
8. Play "I'm thinking of a" using descriptions of water animals for students to guess.

FIVE SENSES

BIBLIOGRAPHY

The following titles are available in the Wapato Primary Library. These books may be read by the teacher or by the student for enjoyment, vocabulary development, and/or used for their pictures when discussing science or science related subjects.

ENGLISH TITLES

All Sizes of Noses	E/Kus	
Bambi	E/Dis	*
Don't Touch	E/Kll	
Eye Book	E/Les	
Ear Book	E/Per	
Emperor's New Clothes	398.2/many Authors	*
Five Senses	612/Fre	
Follow your Nose	612.8/Sho	
Glant Sandwich	E/Ge1	
Gingerbread Boy	398.2/many authors	*
Goldilocks and 3 bears	398.2/many authors	*
Hand, Fingers, Thumb	E/Per	
Hearing	E/Plu and 612/Plu	
Hearing	612/Tro	
Jack and the Beanstalk	398.2/many authors	*
Listen to a Shape	778.9/Bro	
Look Again	612/Hob	
Look at Your Eyes	612/Sho	
Mother Goose Rhymes	398.8 many authors	*
Nose Book	F/Per	
Princess and the Pea	398.2/many authors	*
Seeing	E/Plu and 612/Plu	
Seeing	612/Tro	
Smelling	E/Plu and 612/Plu	
Smelling	612/Tro	
Tasting	612/Tro	
Touch will Tell	778.9/Bro	
Touching	612/Tro	
What is your Favorite thing to see?	E/Gib	
What is your Favorite thing to smell?	E/Gib	

SPANISH TITLES

Así somos Nosotros	468/Atr	
Bambi	468/Dis	*
Bucles de Oro y los 3 Osos	468/many authors	*
La Cocina de Barbamama	468/Tls	
El Gusto	468/Rul	
Las Habichulas Mágicas	468/many authors	*

Spanish Titles (continued)		
El Hombre de Pan de Jengibre	468/many authors	*
Mother Goose in Spanish	468/Rel	
El Oido	468/Rui	
El Olfacto	468/Rui	
La Princesa y el Chlcharo	468/many authors	*
El Sandwich Más Gigante	468/Gel	
Sonidos y Ritmos	468/Dub	
El Tacto	468/Rui	
El Traje del Emperador	468/McK	*
La Vista	468/Rui	

* STORY EXTENTIONS *

BAMBI - Use Bambi when discussing questions he asked his mother regarding the weather and how cold he felt, their need to look for food, and the smell of man and fire.

Also use with sound filmstrips:

612/Bam, Bambi Discovers the 5 Senses (5 SFS)

F/Dis

See Video F/Dis

EMPEROR'S NEW CLOTHES - Use to discuss the appearance and feel of different materials. Also use to discuss how we each see things differently and the need to think for one's self. Cut and paste from material scrapes clothes the Emperor might wear.

See sound filmstrip (3) 398.2/Spo, 398.2/Thr, 398.2/And

See video F/Duv

GINGERBREAD MEN - Use to culminate sense unit. Make gingerbread men, have students see, smell, and taste the different ingredients. Have students roll out dough onto wax paper. How does it feel? Cut out and decorate, how do they look? Cook men in ovens or micro, how do they feel now? Taste? Look? Taste?

Recipe for Gingerbread Men (for a class of 25 students)

Mix together and set aside:

1 1/2 cups margarine

1 1/2 cups brown sugar

1 1/2 cups molasses

3 eggs

mix together:

9 cups flour (maybe a little more, add by the tablespoon)

Recipe (continued)

1 1/2 teaspoons salt
 1 1/2 teaspoons baking soda
 1 tablespoon cinnamon
 2 tablespoons ginger
 dash of nutmeg

Mix together both sets of ingredients, at this point add more flour if necessary.

Give students 2 pieces of wax paper, have them pat out the dough between the papers
 cut cookies

decorate cookies (use raisins, M&Ms, nuts, or ??)

Microwave 6-7 minutes, or Bake 10-14 min. at 350.

Have students dramatize the story using animals pupils suggest.

Also see filmstrips, several available: 398.2 for English or 498 for Spanish.

See Video 398.2/Gol

GOLDILOCKS AND THE THREE BEARS - Use to discuss how the porridge tastes, how the chairs and beds feel.

Have students role play the story.

Make Oatmeal Porridge (use recipe on the box), how does it taste? Would we like it hot? Cold?

Also relate to personal safety. Never eat something if you don't know what it is, never enter a stranger's house, and never get into a stranger's bed.

See sound filmstrip 398.2/several available in English or see 468/Buc in Spanish

See Video, Several available 398.2, all in English

JACK AND THE BEANSTALK - Use story to emphasize the sense of smell. Compare ourselves to the Giant. Could we smell someone in our house? What other animals could smell as well as the giant? Discuss and compare a variety of animals' abilities to smell.

See sound filmstrip 398.2/several available in English or see 468/Cue in Spanish

see video - several available in English

MOTHER GOOSE - Choose rhymes which relate to the 5 senses. Examples: Three Blind Mice (sight), Pease Porridge Hot (taste), Little Miss Muffet (sight and taste), Baa, Baa Black Sheep (feel), etc.

Dramatize the rhymes, talk about the words which rhyme. See sound filmstrips or videos 398.8, several available in English.

Story Extentions (continued)

PRINCESS AND THE PEA - Use to emphasize that we feel with our entire body, not just our hands. Have students lay on the tables, grass, rug, tiled area, compare how each area felt the same and different. Dramatize the story.

See sound filmstrip 398.2/Pr1

Video 398.2/Duv

ADDITIONAL MEDIA:

Sound Filmstrips (S.F.S.)

612/You You and your senses (2 S.F.S.)

612/You You and your five senses

371.4/Noi Noisy Nancy Norris

Kits

534/Wha What can you see and hear?

534/Sou Sounds at home/sounds at school

Videos

The Fabulous Five: Our Senses 612/Fab

Identifying Sounds 534/SES

THE FIVE SENSES

Interrelation of Science and other subject areas

All worksheets (ditto) are available in both Spanish and English. Any additional work the teacher assigns may be completed in the student's or teacher's language of choice.

The following list of ideas for subject integration is written in English. The teacher may choose to translate ideas into Spanish for ease of use and the continued Spanish language development of the student.

Writing

1. Complete the book: MY FIVE SENSES (included in theme), have students complete each page, fill in words, add captions, and draw or cut and paste appropriate pictures.
2. Have students dictate a sentence for teacher to write on the blackboard. Have students copy the sentence on lined paper and illustrate it (example: We have 5 senses).
3. Brainstorm things we do or don't like to see, smell, touch, taste, or hear. Use the brainstorming to make a

Writing (continued)

pattern book. Example: I like to smell_____. I like to smell_____. I like to smell_____. But I don't like to smell_____.

Art

1. Have students "toe paint" to emphasize that we feel with all parts of our bodies.
2. Make a sense collage (cut pictures from magazines).
3. Make a sense mobile.
4. Fingerpaint with pudding, lick fingers clean.
5. Make a Fold-a-sense book using 1 sense on each page.
6. Use a stamp pad to make fingerprint animals. After making fingerprints have students add eyes, ears, tails, etc.

Songs

1. Make song books or illustrated sentence strips for any of the nursery rhymes listed above or the song below.

Eyes were made for seeing (tune of I'm a little teapot)

Eyes were made for seeing

Eyes were made to sleep

Eyes were made for hiding and taking a little peek.

Ears were made for hearing

Ears were made to scrub

Ears were made for earmuffs

Ears were made to rub.

Mouths were made for smiling

Mouths were made to sing

Mouths were made for eating many scrumptious things.

Tongues were made for talking

Tongues were made to taste

Tongues were made for licking candy off your face.

Feet were made for dancing

Feet were made to run

Feet were made to tickle

Feet were made for fun.

Hands were made for waving

Hands were made to clap

Hands were made for folding quietly in your lap.

Cooking

1. Have students taste a variety of spices and "look alike" products from the kitchen (salt/sugar, flour/powdered sugar, water/vinegar, etc.)
2. Make gingerbread men (see recipe above).

Cooking (continued)

3. Make porridge (oatmeal). Use recipe on the box, add milk, sugar, brown sugar, cinnamon and sugar, or ??
4. Use kitchen products to make "smell bottles", classify them: good and bad, or those we know and those new to us. Use the same type of products as you used for taste samples in #1 above.

Math

1. Count the number of senses we have
2. Count and write the number of fingerprints we have
3. Estimate the number of senses we would use during any given period (example: watching T.V., eating, during recess, etc.)
4. Graph the likes or dislikes of things such as: the taste of kinds of apples, the smell of kinds of spices, the sounds of kinds of bells, etc.
5. Complete the matching ditto which is included in the theme.

Science, Language, and Reading

1. Walk around the school/park - look for something bumpy, something smooth, hot, cold, etc.
2. Make sets of listening bottles, match the bottles that sound the same
3. Feely Bag - Place several objects in a bag (toy car, plastic fruit, scissors, hat, etc.), have a student describe what is in a bag, have others guess what it is. Variation; place 1 common object in a bag with a draw string. Have 1 student use the sense of touch to feel the object and identify it.
4. Use blindfolds (earmuffs) have students experience the importance of sight (sound) when asked to cut, write, make puzzles, etc.
5. Use blindfolds and have students go on a walk with a partner to show how much we depend on our sight.
6. Play "around the world", use picture cards, have the students tell the primary sense used. example: radio-hear, food-taste, hot sun-feel etc.
7. Discuss and relate senses to life situations; example: telephone ringing, pillow are soft, ice is cold, can you tell what is for lunch when you're still in the hall?
8. Select 2-5 students, have them stand behind a divider. Have one of the hidden students say something, the remaining students must listen and tell who is talking.
9. Collect 5-10 objects that make noise (example: scissors, stapler, clock, bell, etc.) Place object out

Science, Language, and Reading (continued)
of sight. Have 1 student use the objects make a sound
or sequence of sounds for the other students to
Identify.

10. Show and talk about the sounds various bells,
glasses of water or xylophones make.

11. Brainstorm kinds of sounds, smells, tastes,
touches; have students categorize good and bad.
Emphasize that student lists do NOT have to be the
same, we all have different likes and dislikes.

SEASONS

BIBLIOGRAPHY

The following titles are available in the Wapato Primary Library. These books may be read by the teacher or by the student for enjoyment, vocabulary development, and/or used for their pictures when discussing science or science related subjects.

ALL THROUGH THE YEAR

Bambi	E/Dis	*
Changing Seasons	E/Gre	
Merry Mouse Book of Months	529/Mer	
Mother Goose	398.2/many authors	*
Seasons	E/Far	
Seasons	525/Pod	
Seasons	525/Sau	
Seasons of Arnold's Apple Tree	E/Gib	
Thumbelina	398.2/many authors	*
A Time of Wonder	E/McC	
Weather Experiments	551.59/Pos	

AUTUMN

Apples	E/Hog	
Autumn	525.1/Ven	
I'm Going to School	E/Mon	
In Fall	E/Mon	
Let's Find Out about Fall	525/Sch	
Mousekin's Golden House	E/Mil	
Pumpkin, Pumpkin	E/Tit	
What Happens in Autumn?	E/Ven	
Word Bird's Fall Words	E/Mon	

WINTER

Frosty the Snowman	E/many authors	*
Fun in the Snow	E/Dam	
January Brings the Snow	E/Col	
Katie and the Big Snow	E/Bur	
Missing Mitten	E/Kel	
The Mitten	E/many authors	*
101 Dalmatians	E/Dis	*
Sadie and the Snowman	E/Mor	
Snow	525/Eas	
Snow Baby	E/Hil	
The Snowman	E/Bri	*
Snowy Day	E/Kea	
White Snow, Bright Snow	E/Tre	
Winter	525.1/Ven	
Winter Bear	E/Cra	

English Books (continued)

SPRING

All About Seeds	582/Kuc
Pussy Willow	E/Bro
Rain	E/Kal
The Reason for a Flower	582/Hel
Spring	525.1/Ven
Springtime Tree Seeds	526.16/Rus
The Tiny Seed	E/Car
Three Billy Goats Gruff	398.8/Many authors *
What Happens in the Spring	574/Bee
What is a Fruit?	581/Day
What is a Flower?	581/Day

SUMMER

It Looked Like Spilt Milk	E/Sha
Rose in My Garden	E/Lob
Summer	525.1/Ven
Summer Lightening	E/Ric

SPANISH TITLES

ALL THROUGH THE YEAR

El Año con Gato Galano	468/Cha
Bambi	468/Dis *
Una Mirada a los Árboles	468/Fer
Mí Mundo y el Mundo	468/Del
El Secreto de la Arboleda	468/Lal
Soy un Árbol	468/San
Tiempo	468/Hoo
A Veces las Cosas Cambían	468/Eas

AUTUMN

Historía de una Manzana Roja	468/Loo
Hoy fue mi primer día de la Escuela	468/Fra
El Otoño	468/Wen
El Otoño	468/Ven
Yo También quiero ir a la Escuela	468/Lin

WINTER

Un Día de Nieve	468/Kea
?Como viven los Animales en el invierno?	468/DeS
El Invierno	468/Ven
Simón en la Nieve	468/Ort

SPRING

Y la Lluvia Caía	468/Dad
La Primavera	468/Bal
La Primavera	468/VEn
Soy Una Gota	468/Pac

Spanish books (continued)

Los Tres Chivitos	468/McK	*
El Viento	468/Flo	

SUMMER

Simon en la Playa	468/Ort
La Sombras y Yo	468/Gra
Soy el Sol	468/Gra
Soy el Sol	468/Pac
El Verano	468/Ven

Story Extentions

BAMBI - After reading story discuss ways that we keep warm in the winter, how we find food. Talk about how it feels to go "out in the meadow" and play when the weather is warm.

Use with Sound filmstrip 468/Bam
Video E/Dis
Kit F/Dis

FROSTY THE SNOWMAN and THE SNOWMAN - After reading stories have students compare and sequence the necessary items used to complete Frosty and the Snowman. Have students make snowmen of various media. Examples: Tempa paint, construction paper, styrofoam balls, clay. Discuss what happens to the snowmen as the weather warms.

Use with Videos F/Fro and F/Bri

THE MITTEN - Use this story to related to animals and how they stay warm in the winter. Also talk about size and space ratio with regard to the animals and the mitten. Use with the enclosed mitten and animal patterns. Have students sequence the events of the story.

MOTHER GOOSE - Find, read and discuss nursery rhymes which relate to the seasons. Examples: Rain, Rain, Go Away, and Mary, Mary Quite Contrary.

Use with Sound Filmstrips 398.2/Mot, many available
Videos 398.2/many authors

101 DALMATIONS - Read and discuss the story as it relates to animal tracks in the snow. What kinds of things can the children make in the snow? If weather permits, go outside and make tracks, snow angels, and ??

Use with the Sound Filmstrip F/One
Video F/Dis

Story Extensions (continued)

THREE BILLY GOATS GRUFF - Use the story to discuss types of food animals eat and where they obtain food in the winter. When grass starts to grow in the spring discuss its color and how the goats wanted the greener grass up in the hill.

Relate to personal safety, think for yourself, help others.

Use with Sound Filmstrip F/Lit, 468/Fai, 398,2/Chi
Video 398.2/Lit

THUMBELINA - Read and discuss book as it relates to the seasons. How would it feel to us a leaf for a coat? Compare story to the types of clothing we wear in the winter. Discuss what the animals do under various weather conditions. Use with video 398.2/Thu

ADDITIONAL MEDIA

Sound Filmstrips (S.F.S.)

ALL THROUGH THE YEAR

525/Gra Grassroots Science (4 SFS)

525/Sea National Geographic Seasons (5 SFS)

525/Fou Troll Seasons (4 SFS)

525/Win Winnie the Pooh Discovers the Seasons (5 SFS)

AUTUMN

525/Ani Animals in Fall, Winter Preparation

525/Sea When Autumn Comes

525/Gra Autumn

WINTER

591.5/Don Do not Disturb

525/Sea Getting Ready for Winter

468/Cue El Hombre de Nieve

F/Lit Snowy Day

525/Gra Who's Around, What's Around?

SPRING

525/Cha The Birds Know its Spring

F/Lew In a Spring Garden

525/Win Pooh Catches Spring Fever

525/Sea Spring, Story of a Bee

525/Sea A Walk in the Rain

SUMMER

See Above, multiple SFS sets

Videos

529/Aut Autumn

529/Spr Spring

Videos (continued)
 525/Sum Summer
 170/Ton Tonia the Tree
 525/Win Winter

Kit
 F/M11 A Day of Winter

SEASONS

Interrelation of Science and other subject areas

All worksheets (ditto) are available in both Spanish and English. Any additional work the teacher assigns may be completed in the student's or teacher's language of choice.

The following list of ideas for subject integration is written in English. The teacher may choose to translate ideas into Spanish for ease of use and the continued Spanish language development of the student.

Writing

1. Cut and arrange in order sequencing papers which are included in the theme. Have students dictate captions for teacher to write under each picture.
2. Cut and arrange in order sequencing papers which are included in the theme. Have students dictate captions for the teacher to write on the board for students to copy below each picture.
3. Have students dictate sentences for teacher to write on the blackboard. Have students copy the sentences onto lined paper and illustrate.
4. Brainstorm with teacher things we see, hear, or know about fall (or winter, spring, summer). Then have students write a pattern book using the story pattern from BROWN BEAR, BROWN BEAR. Example: Orange leaf, orange leaf what do you see, I see a brown squirrel under the tree. Brown squirrel, brown squirrel what do you see? I see a gray goose flying after me. etc.
5. Have students write and illustrate a book about the months of the year using the following text.

The Months of the Year

January bring the snow; makes our feet and fingers glow.

February brings the rain; thaws the frozen lake again.

March brings breezes loud and shrill; stirs the dancing daffodil.

April brings the primrose sweet; scatters daisies at our feet.

Writing - Poem (continued)

May brings flocks of pretty lambs; skipping by their
fleecy dams.

In June the sun shines on the roses; fills the
children's hands with posies.

Hot July brings cooling showers, apricots and
gillyflowers.

August brings the sheaves of corn; then the harvest
home is borne.

Warm September brings the fruit; sportsmen then begin
to shoot.

Fresh October brings the pheasant; then to gather nuts
is pleasant.

Dull November brings the blast; then the leaves are
whirling fast.

Chill December brings the sleet; blazing fire and
Christmas treat.

Los Meses del Año

En enero se enfría; y todo con el hielo brilla.

En febrero va a llover; el hielo no podemos ver.

Entonces marzo fresquecito; trae flores y el
vientecito.

En abril las mariposas vuelan. ¡Qué bonitas las flores
huelen!

Mayo trae nuevos corderitos, y en los nidos -
pajaritos.

Junio nos trae calor, y bodas brindan el amor.

En Julio cohetes el día cuatro, y la cosecha del
chabacano.

En agosto paseamos en la playa, y maíz se madura en la
raya.

En septiembre piscan la manzana, y se oye la chilla de
la rana.

En octubre vamos a cazar, y el 31 a disfrazar.

Luego noviembre con su brisa, las hojas secas caen de
prisa.

Al fin diciembre con el ganizo, fiestas navideñas y
hielo liso.

Art

1. Have students color or paint a tree trunk and grass
on a large white or blue paper. Then drip tempera paint
of fall colors onto the tree branches, lay wax paper
over the paint, press to mix paint. Remove wax paper
when dry.

2. Have students color or paint a tree trunk and grass
on large white or blue paper. Then have students glue
popcorn or small pieces of rolled spring colored tissue
paper onto branches to look like spring blossoms.

Art (continued)

3. Use white, blue, black, or gray paper. Have students paint a winter tree of brown tempera paint onto paper. Add white snow, snowman, and/or winter animals of white paper or tempera.
4. Use construction paper or old wall paper samples to make a vase. Glue vase onto large piece of construction paper. Add daffodils made from yellow egg carton cups and green construction paper. Variation: Paint pussy willow branches onto paper as if coming from the vase, paste real pussy willow buds onto branches.
5. Collect fall leaves. Staple onto paper, add heads, arms, feet, to make a leaf family.
6. Complete the enclosed squirrel ditto. Color squirrel brown (or color), cut out squirrel and tail, paste parts together or adhere with a brad. Have students draw, cut, and paste a nut for squirrel to hold in hand.
7. Collect fall plants, pinecones, and seeds. Use old butter containers, fill 1/2 with plaster of paris, set in the fall plants and seeds. Use as a centerpiece at Thanksgiving.
8. On dark paper have students make chalk drawing of winter of a winter scene.
9. Fold paper squares, randomly cut to make snowflakes.
10. Make kites to fly on windy spring day.

Songs

1. Add music to any appropriate nursery rhymes.
2. To the tune of THIS IS THE WAY WE WASH OUR CLOTHES sing new words.
This is the way the snow comes down, the snow comes down, the snow comes down. This is the way the snow comes down, on a wintery day.
This is the way we shovel the snow, shovel the snow, shovel the snow. This is the way we shovel the snow, all on a wintery day.
This is the way we roll the snow, roll the snow, roll the snow. This is the way we roll the snow, all on a wintery day.
This is the way we THROW the snow, THROW the snow, THROW the snow. This the way we THROW the snow, all on a wintery day.

Use the same tune as above, substitute LEAVES and AUTUMN for the words snow and wintery. Also substitute "rake the leaves," "roll in the leaves."

3. Sing Rain Drop song from Bambl. If words and music are unknown to teacher, talk to music teacher.
4. De Colores

Cooking

1. Use bananas rolled in coconut to make snowmen. Decorate with peanuts, raisins, and candy.
2. Make shaved ice snowcones.
3. Taste various kinds of nuts. Show the nut in the shell, predict how the nut meat will look and taste.

Social Studies

1. Use the atlas, globe, and map to discuss the various kinds of weather in other parts of the world.
2. Take seasonal walks to the park and around the community to compare and talk about changes.
3. Talk about the kinds of jobs appropriate for each of the seasons (apple picking, snow grating, pruning, etc.).

Math

1. Count the number of months in each season.
2. Keep track of the kind of weather for each day while doing the calendar. Predict what each day will be like. Total the number of rainy, sunny, snowy, etc. days at the end of each month.
3. Make sequence papers of various kinds of things used during each season. Example: boots, boots, mittens, hats, boots, boots, mittens, hats etc.
4. Complete the dot to dot papers included in the theme.
5. Draw apples on the apple tree (included in the theme).
6. When making a seasonal drawing have students include a certain number of items. Example: make 6 buttons on the snowman, make 5 flowers with 2 leaves each, etc.
7. Use a thermometer to graph the daily temperatures.
8. Collect leaves on a fall walk. Upon returning to the classroom sort the leaves according to size, shape, and color.

Science, Language, and Reading

1. Complete color word dittos which are included in the theme.
2. Discuss types of attire for each season. Complete ditto which is included in the theme.
3. Complete dittos of things you use or see during the various seasons. (included in the theme).
4. Make pinecone and peanut butter bird feeders for birds who do not migrate in the winter.
5. Plant seeds and watch them grow. Discuss what conditions plants need for growth.
6. Have students draw a mural for each of the seasons. Include appropriate activities for animals, plants, weather, and clothing for people.

Science, Language, Reading (continued)

7. Play "Around the World" using seasonal pictures and activities.
8. Play "I'm thinking of..." using months and seasons for students to guess.
9. Bring cups of snow into the classroom. Set snow in different locations (window, next to door, center of room etc.) Predict what will happen and how long it will take.
10. Use magnifying glasses outside to look at ice and snow.
11. Read and color the books which are included in the theme (One for each season and an additional book about leaves for fall.)
12. During the harvest of apples ask local orchardist to share culls with the class for the purpose of pressing cider.
13. Write the story of Five Little Snowmen onto a fold-a-book or larger. Have students read and illustrate each page.

Five Little Snowmen

5 little snowmen sitting by the door.
 Out came the sun and then there were 4.
 4 little snowmen sitting by a tree.
 Out came the sun and then there were 3.
 3 little snowmen sitting by the zoo.
 Out came the sun and there were 2.
 2 little snowmen sitting just for fun.
 Out came the sun and then there was 1.
 1 little snowman wishing he could run.
 Out came the sun and then there were none!

Cinco Monos de Nieve

5 Monos de nieve en la puerta se sentaron.
 Salió el sol caliente y solo 4 quedaron.
 4 monos de nieve bajo un árbol se sentaron.
 Salió el sol caliente y solo 3 quedaron.
 3 monos de nieve en el parque se sentaron.
 Salió el sol caliente y solo 2 quedaron.
 2 monos de nieve jugando ya que el otro derretió.
 Salió el sol caliente y uno solo quedó.
 Un mono de nieve solo y triste se sentó.
 Salió el sol caliente y ya ni uno se quedó.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary of Background of Study, Procedures Used, Sources, Results

The Wapato School District's 12 kindergarten teachers have been instrumental in determining the design of this project.

Student population growth has allowed many teachers to transfer into or become employed in the kindergarten since our last science program adoption (1983). The intervening years lead to an absence of both teacher training and science program materials in the newly created classrooms. This lack of training and materials had produced an inconsistency in the teaching and mastery of the Wapato Science Student Learning Objectives. This, along with the district policy of program updating supported the need to research program options available for adoption.

Teachers demanded a program which focused on the student objectives yet also allowed for each person's teaching and/or learning style. The concern regarding the adoption of a program which individuals could use comfortably was magnified by the size of our staff and student population at this level.

Last year (1991-1992) the kindergarten staff worked together to write whole language social studies themes. Through the previous adoption of whole language arts it was known that theme teaching allowed for the diverse styles of instruction and learning present within the grade level.

Upon completion of the social studies theme units it was decided the kindergarten would pursue this same method of instruction for science. One difference with the development of this program and the other theme units which are in use is that now, through the research in Chapter II, the kindergarten staff have documentation that whole language isn't something that just works for us. It helps students around the world, regardless of the language of use.

Another difference between this program and the previously written programs is that the kindergarten staff have been consultants. Knowing that bilingual science themes was the topic for this project has allowed each teacher of kindergarten to share their ideas. However, they have allowed me to complete the work.

Conclusions

The constant assistance of staff members has resulted in the compilation of materials necessary to teach thematic science in the Wapato kindergarten. Their input has been invaluable toward the completion of this project and will be instrumental in its success and usefulness.

The theme approach to science, as suggested in this work, will allow teachers to design lessons around the diverse materials which will incorporate many areas of student learning. Students will be able to gain knowledge in science objectives while practicing skills from other subject areas. This integration of subject areas by the student will result in the authentic use of language skills and knowledge.

Recommendations

The materials as written and compiled are ready to be used in the kindergarten program. It is recommended that the implementation of these bilingual science themes begin with the 1992-1993 Wapato School District calendar year. Teachers are experienced and knowledgeable in the use of the thematic approach in other areas of curriculum. This familiarity will ease and assist in the whole science implementation.

This curriculum has been designed and produced to meet the diverse and growing needs of the Wapato Primary Kindergarten students. This thematic approach to teaching science will enrich the student learning process through its variety of materials and suggested uses. Each lesson may be presented in a multitude of ways to meet the individual learning styles of all the children.

It is important that teachers learn to draw science from the environment rather than expecting it to come out of this neatly packaged program. The children themselves, the school environment, and the surrounding community all present teachers with raw materials for science lessons. It is important that local resources are used. Students will learn and retain far more from life experiences than they will from this program.

New and innovative materials and ideas are constantly being developed. Teachers who are using these themes are encouraged to implement and share fresh ideas which relate to these units with other staff members. New ideas will further expand the world of knowledge and capabilities of our students.

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APPENDIX

Survey for Thematic Science Units

Below is a summarized list of the Wapato School District student learning objectives (SLOs) for the kindergarten science program.

Through the course of an oral interview with the Master's candidate, the 12 kindergarten teachers of the Wapato Primary will indicate which science objectives they would like to have developed into themes.

1. Animals: birds, fish, insects, reptiles, and mammals
2. Solids, liquids, and gases
3. Four seasons
4. Five senses
5. Magnets
6. Sink and float

Recommendations for District Purchase

A budget for the purchase of science related media, materials, and field trips has been recommended to the district. This list of expenditures are subject to the approval of the kindergarten teachers and school district administration.

The following is a list of the recommended expenditures and a suggested catalog from which to purchase. Unless otherwise noted, each room should receive their own set of the requested materials.

Materials:

EARLY LEARNING MATERIALS - ABC

Ant Farm

Aquarium Set

Bug House

Glass lift-top Terrarium

Microscope

KAPLAN

Big Eye/Little Eye

Binoculars (12 sets per room)

Butterfly Garden

Exploring Seeds and Plants

Giant Magnifier Stand

Playmobil Zoo

Safari Animal Models

Thermometer

Two-Way Microscope

Weather Station

Weather Chart

What's in the Sea? (songs about marine life and ocean ecology)

Worldwide Animal Models

Zoo Animal Models

NASCO

Animal Specimen Embedments

Authentic Animal sets - Jungle, Ocean

Incubator

Leaf and Flower Press

Life of the Sea Replicas

Plant Science Kit

Pocket Slides (animals)

Prisms

Media - Videos, Purchase One Set For Rooms to Share

AMERICAN SCHOOL PUBLISHERS

Henry and Mudge Under the Yellow Moon - Fall

Henry and Mudge In Sparkle Days - Winter

Media - Videos (continued)

AMERICAN SCHOOL PUBLISHERS

Henry and Mudge in Puddle Trouble - Spring

Henry and Mudge in Green Time - Summer

CHARLES CLARK COMPANY

Big Birds

The Big Red Barn

Salamanders and Lizards

Wonder of the Dolphins

EDUCATIONAL RESOURCE GUIDE

Animal ABC's

Beyond Bars

Magical Mother Nature: The Four Seasons

What's Buzzin'?

NATIONAL GEOGRAPHIC

Learning about Reptiles

Look at Zoos

Watching Animals

Zoos of the World

SVE - SOCIETY FOR VISUAL EDUCATION

Baby Animal Fun

Farm Animals

Five Senses

WHOLE VIDEO CATALOG

Arthur's Pet Business

Can You Guess the Season?

Drip, Drop

Down on the Farm: Yesterday and Today

A Firefly named Torchy

Gift of a Whale

Meet Your Animal Friends

Nature all Around Me

Winter Fun

Books

The use of books by the teacher and/or student is essential for whole science integration with reading. Many books are available which the individual teachers may choose to select to supplement existing room libraries. The author is unable to list specific titles without regard for the language of choice and what is presently available in each of the 12 kindergarten classrooms. Upon reviewing the literature titles which are available for purchase this author would recommend using the following catalogs when selecting books:

BOUND TO STAY BOUND (few bilingual)

DLM (few bilingual)

HAMPTON-BROWN BOOKS (many bilingual)

MODERN CURRICULUM PRESS (Spanish and English sets)

PERMA BOUND (many bilingual)

Books (continued)

WRIGHT GROUP (few bilingual, many big Books)

Teachers, with knowledge of their room libraries, may request individual titles that the author would recommend for use with each bilingual theme.

Field Trips

It is felt by the 12 kindergarten staff members that our students have a critical need for the life experiences which are inherent in field trips. A suggested list of field trips which relate to our areas of thematic development include:

Arboretum

Bakery and/or Restaurant

Central Washington State Fair

Fish Hatchery

Naches Elk Feeding Station

Pet Store

Pettingill's Farm

Walking field trips to the High School Greenhouse, Park, or Wapato businesses

WORKSHEETS

THEME WORKSHEETS
TABLE OF CONTENTS

Birds
Insects and spiders
Mammals
Reptiles
Water Animals
Five Senses
Seasons

It is important that teachers learn to draw science from the environment rather than expecting it to come out of this program. The children themselves, the school environment, and the surrounding community all present teachers with raw materials for science lessons. It is important that local resources are used. Students will learn and retain far more from life experiences than they will from this program. Please use discretion when selecting worksheets.

BIRDS

Secuencia

Petirroja

La petirroja hace un nido de ramitas y sacate. Ella pone huevos de azul-verde en el nido.

La mamá petirrojo se sienta en los
huevos para que se quedan
calientitos. Del cascarón azul-verde
salen los bebes.

Dónde Viven?

Pon una línea para juntar los pájaros

con a su hogar.

¿Qué les gustan comer?

Pon un "X" en las cosas que los pájaros si les gustan comer.

Un Pájaro Carpintero

El Penguino

Busca los flores que tienen 5 pétalos.

El Nañdú

El Loro

Colorea por el número

1 verde

2 rojo

3 amarillo

4 anaranado

5 café

El Águila

Haga un Pájaro

Colorea los dos lados y corta para hacer un pájaro que le gusta volar.

Haga un pájaro que le gusta sentar
en su dedo. Pega un centavo adentro
y abajo en su colita para que puede
sentar bien.

Un Patito
Lo corta y pone en su huevo

Sequencing

Robin

A robin makes a nest of twigs and grass.
She lays blue-green eggs in the nest.

Eggs Hatch

Mother Robin sits on her eggs to keep them warm.
Baby robins hatch from the blue-green eggs.

Where do they live?

Put a line to match the birds with their home.

What do they like to Eat?

Put an "X" on the things the birds like to eat.

Woodpecker

Penguin

Find the flowers that have 5 petals.

Ostlich

Parrot

Color by number

1 green

2 red

3 yellow

4 orange

5 brown

Eagle

MAKE a BIRD

Color both sides and cut these out to make a bird that likes to fly.

Make a bird that likes to sit on your
finger. Glue a penny inside at the
bottom of his tail so he sits well.



Duckling

cut him out and put him in the egg

INSECTS

LAS MARIPOSAS



Éste es el libro de _____

nombre _____

Las Mariposas

Haga una línea para juntar las mariposas que son iguales.

Nombre _____

La vida de una Mariposa

Corta y pega en orden

Nombre _____ Corta y pega.
Junta los números.

La Oruga

①

//////

○

○

Nombre

Arregla en orden la vida de la mariposa.

La Mariposa

Esta oruga se cubre con una
crisálida. Se cambia para ser una
mariposa.

Nombre

Lee las palabras, colorea el dibujo.

¿Qué será?
Punto a punto

El Chapulín

Los bebés del chapulín salen de huevos. Salen de la piel durante el crecimiento de los chapulínes.

El Chapulín

1 verde

3 café

3 negro

Nombre _____

El escarabajo

1 negro

2 verde

3 café

4 azul

Nombre _____

Las Abejas

Lee las palabra y colorea el dibujo.

- 1 negro
- 2 amarillo
- 3 verde
- 4 café
- 5 anaranjado
- 6 rojo
- 7 azul

Ayuda el abeja. Quiere ir a su casa.

Nombre

SVE

Use with the filmstrip: **SPRING: THE STORY OF A BEE 20320-03**
SVE/Society For Visual Education, Inc. 1345 Diversey Parkway, Chicago, Illinois 60614. A Business Corporation
© 1967 SVE/Society For Visual Education. All Rights Reserved. Printed In U.S.A.

Ayuda a la abeja.
Busca y colorea los 6 flores
que están escondidos.

Butterflies

Pupa

Mourning Cloak

This book belongs to _____

Name _____

Draw a line to match
the butterflies. Color.

Name _____ Cut and paste in order.

Name _____

Cut and paste the labels.
Match the numbers.

Butterfly Body

The Caterpillar

The Caterpillar has 12 body parts.

Write a number for each part.

Sequence the life of the butterfly.

Butterfly

This caterpillar covers itself with a chrysalis.
It will change into a butterfly.

Name

Read the words, color the picture.

What will it be?
dot to dot

Grasshopper

Tiny grasshoppers hatch from eggs.
They shed their skin as they grow.

Grasshopper

1 green

brown

3 black

Name _____

Beetle
1 black
2 green
3 brown
4 blue

Name _____

Bees

Read the words and color the picture.

Help the bee find his way home.

Name _____

SVE

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SVE/Society For Visual Education, Inc. 1345 Diversey Parkway, Chicago, Illinois 60614. A Business Corporation
© MCMLXXXIV Brooke M. Beebe. All Rights Reserved. Printed In U.S.A.

Help the bee.
Find and color the 6 flowers
that are hidden

Name _____

MAMMALS

**ANIMALES DEL
JARDÍN
ZOOLOGICO**

© Copyright 1990, Warren Publishing House, Inc.

**Camella, camella del jardín
zoológico.**

© Copyright 1990, Warren Publishing House, Inc.

¿Quién es éste que vive del lado de ti?

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La mamá elefante vive del lado

© Copyright 1990, Warren Publishing House, Inc.

con su familia de cuatro hijos.

Elefanate, elefante del jardín
zoológico.

¿Quién es éste que vive del lado de ti?

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La mamá jirafa vive del lado

© Copyright 1990, Warren Publishing House, Inc.

con su familia de cuatro hijos.

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Jirafa, jirafa del jardín zoológico.

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¿Quién es éste que vive del lado de ti?

© Copyright 1990, Warren Publishing House, Inc.

La mona vive del lado

© Copyright 1990, Warren Publishing House, Inc.

con su familia de cuatro hijos.

© Copyright 1990, Warren Publishing House, Inc.

Mona, mona del jardín zoológico,

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¿Quién es éste que vive del lado de ti?

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La mamá canguro vive del lado

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con su familia de cuatro hijos.

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Canguro, canguro del jardín zoológico.

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¿Quién es éste que vive del lado de ti?

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La mamá hipopótamo vive del lado

© Copyright 1990, Warren Publishing House, Inc.

con su familia de cuatro hijos.

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Hipopótamo, hipopótamo del jardín
zoológico,

© Copyright 1990, Warren Publishing House, Inc.

¿Quién es éste que vive del lado de ti?

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La mamá canguro vive del lado

© Copyright 1990, Warren Publishing House, Inc.

con su familia de cuatro hijos.

El Castor

El Castor tiene dientes
afilados. Los usan para
cortar ramas y árbolitos.

¿Qué será?
Punto a punto

¿Qué será?
Punto a punto

COLOREA POR NUMERO

Es tiempo para divertirse con el
🎈gre. Colorea los numeros 4,3,2,1!

La Familia Leon

Los Rinocerontes

La Mama Canguro y el Canguro Joven

mamífero. es

mamífero. es

mamífero. es

mamífero. es

mamífero. es

mamífero. es

Animals in the Zoo

© Copyright 1990, Warren Publishing House, Inc.

Camel, camel in the zoo,

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who's that living next to you?

© Copyright 1990, Warren Publishing House, Inc.

Mother monkey lives next door

© Copyright 1990, Warren Publishing House, Inc.

with her family of four.

© Copyright 1990, Warren Publishing House, Inc.

Monkey, monkey in the zoo,

© Copyright 1990, Warren Publishing House, Inc.

who's that living next to you?

© Copyright 1990, Warren Publishing House, Inc.

Mother giraffe lives next door

© Copyright 1990, Warren Publishing House, Inc.

with her family of four.

Giraffe, giraffe in the zoo,

who's that living next to you?

© Copyright 1990, Warren Publishing House, Inc.

Mother elephant lives next door

© Copyright 1990, Warren Publishing House, Inc.

with her family of four.

© Copyright 1990, Warren Publishing House, Inc.

Elephant, elephant in the zoo,

© Copyright 1990, Warren Publishing House, Inc.

who's that living next to you?

© Copyright 1990, Warren Publishing House, Inc.

Mother hippopotamus lives next door

© Copyright 1990, Warren Publishing House, Inc.

with her family of four.

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Hippopotamus, hippopotamus in the zoo,

© Copyright 1990, Warren Publishing House, Inc.

who's that living next to you?

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Mother kangaroo lives next door

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with her family of four.

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Kangaroo, kangaroo in the zoo,

© Copyright 1990, Warren Publishing House, Inc.

who's that living next to you?

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Mother camel lives next door

© Copyright 1990, Warren Publishing House, Inc.

with her family of four.

Beavers

Beavers have sharp front teeth.

• They cut down branches and small trees.

What will it be?
dot to dot

What will it be?
dot to dot

Color by Number

Time to have some tiger fun.
Color by number 4, 3, 2, 1!

Color all the 1's orange.

Color all the 2's green.

Color all the 3's black.

Color all the 4's yellow.

Lion Family

Rhinoceros



KANGAROO AND JOEY

_____ is a
mammal.

_____ is a
mammal.

_____ is a
mammal.

_____ is a
mammal.

REPTILES

El Caimán

- El nido del caimán calienta los huevos. Los bebés del caimán salen de los huevos.

Un Piel Nuevo

La víbora separa del piel
viejo. Un piel nuevo está
abajo del piel viejo.

El Lagarto

La Víbora

la víbora - café, amarillo, negro
la tierra - café

¿Qué será?
Punto a punto

El Caiman Resbaloso

Alligator

An alligator's nest keeps the eggs warm.
Little alligators hatch from the eggs.

A New Skin

The snake rubs off its old tight skin.

A new skin is under the old skin.

blue

Lizard

C

Share

D

What will it be?
dot to dot

SLITHERING ALLIGATOR

WATER ANIMALS

**EN EL
MAR AZUL**

© Copyright 1990, Warren Publishing House, Inc.

Pescadito, pescadito, en el mar azul.

© Copyright 1990, Warren Publishing House, Inc.

¿Cuándo estás nadando, qué ves tú?

© Copyright 1990, Warren Publishing House, Inc.

Ballenita, ballenita, en el mar azul.

© Copyright 1990, Warren Publishing House, Inc.

¿Cuándo estás nadando, qué ves tú?

© Copyright 1990, Warren Publishing House, Inc.

Veo un pescado en el mar azul.

© Copyright 1990, Warren Publishing House, Inc.

Veo un pescado nadando cerca de mí.

© Copyright 1990, Warren Publishing House, Inc.

Ve o una ballena en el mar azul.

© Copyright 1990, Warren Publishing House, Inc.

Ve o una ballena nadando cerca de mí.

Veo un tiburón en el mar azul.

Veo un tiburón nadando cerca de mí.

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Tiburón chiquito, tiburón chiquito,
en el mar azul.

© Copyright 1990, Warren Publishing House, Inc.

¿Cuándo estás nadando, qué ves tú?

© Copyright 1990, Warren Publishing House, Inc.

Veo un pulpo en el mar azul.

© Copyright 1990, Warren Publishing House, Inc.

Veo un pulpo nadando cerca de mí.

Pulpo chiquito, pulpo chiquito,
en el mar azul.

¿Cuándo estás nadando, qué ves tú?

Éste es
un _____

Éste es
un _____

Éste es
un _____

Éste es
un _____

Los Pescados

Los Caballos de Mar
caballos de mar - café
la sacate - verde
el agua - azul

LAS FOCAS

¿Qué será?
Punto a punto

¿Ves los tesoros abajo del mar?



Un Pescado

In the Blue Sea

I see a whale in the blue sea.

I see a whale swimming by me.

© Copyright 1990, Warren Publishing House, Inc.

Little whale, little whale, in the blue sea.

© Copyright 1990, Warren Publishing House, Inc.

When you're out swimming, what do you see?

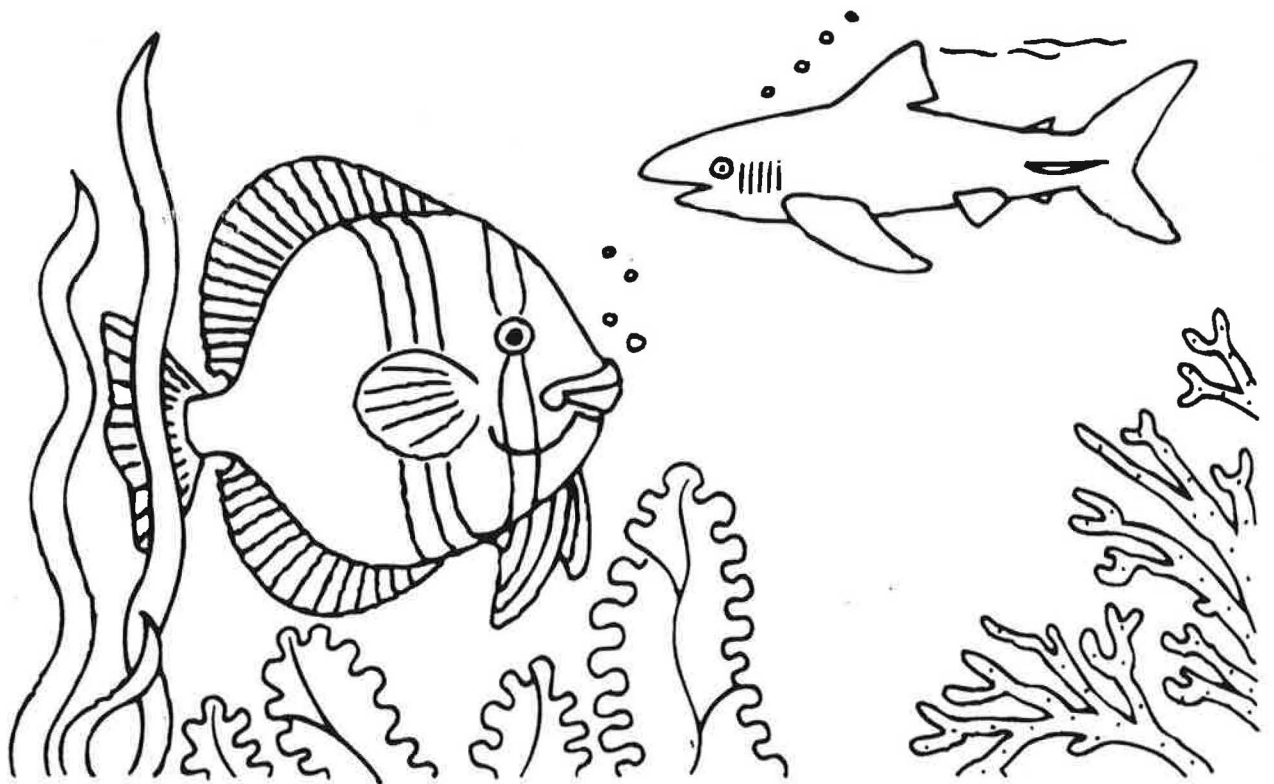
© Copyright 1990, Warren Publishing House, Inc.

Little fish, little fish, in the blue sea.

© Copyright 1990, Warren Publishing House, Inc.

When you're out swimming, what do you see?

I see a shark in the blue sea.



I see a shark swimming by me.

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Little shark, little shark, in the blue sea.

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When you're out swimming, what do you see?

I see an octopus in the blue sea.

I see an octopus swimming by me.

I see a fish in the blue sea.

I see a fish swimming by me.

Little octopus, little octopus, in the blue sea.

When you're out swimming, what do you see?

This is
a _____

This is
a _____

This is
a _____

This is
a _____

Sea Horses

sea horses - brown

grass - green

water - blue

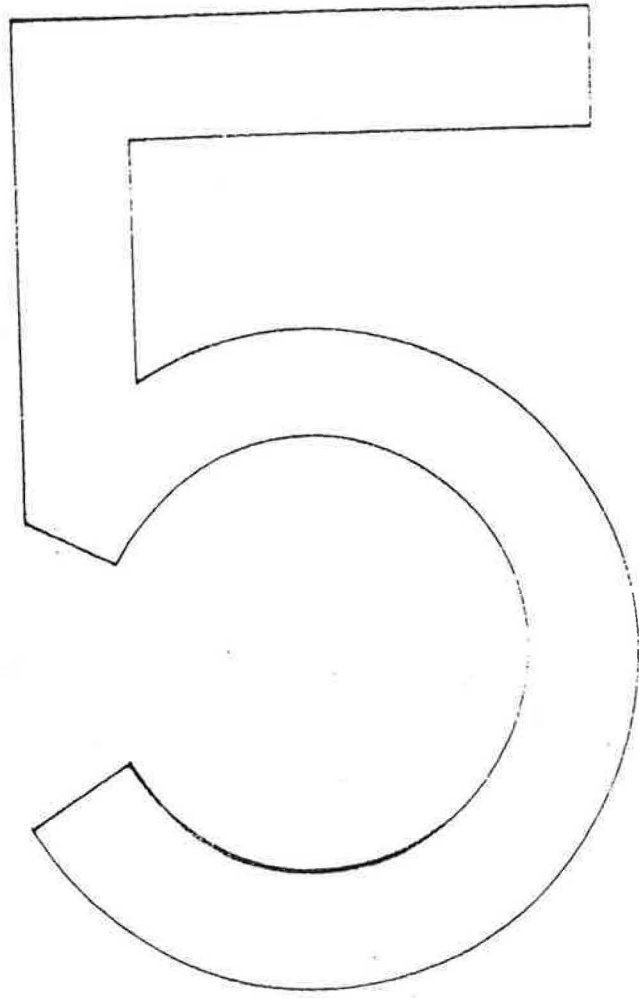
SEALS

What will it be?
dot to dot

SWIMMING FISH

THE FIVE SENSES

Los



Sentidos

Un libro para cortar y pegar.

Nombre _____

YO _____

CON LA

**Las manos sienten
muchas cosas.**

Tocar

Nombre _____

Pon un X en las cosas que te pueden lastimar.

YO _____

CON LOS

**Los ojos vean
muchas cosas.**

Nombre _____

Busca las cosas de abajo que están escondidos en el cuadro. Pon un círculo alrededor de cada uno.

YO

CON LA

**Las orejas oyen
muchas cosas.**

Oír

Nombre _____

Con un X en las cosas que no puedes oír.

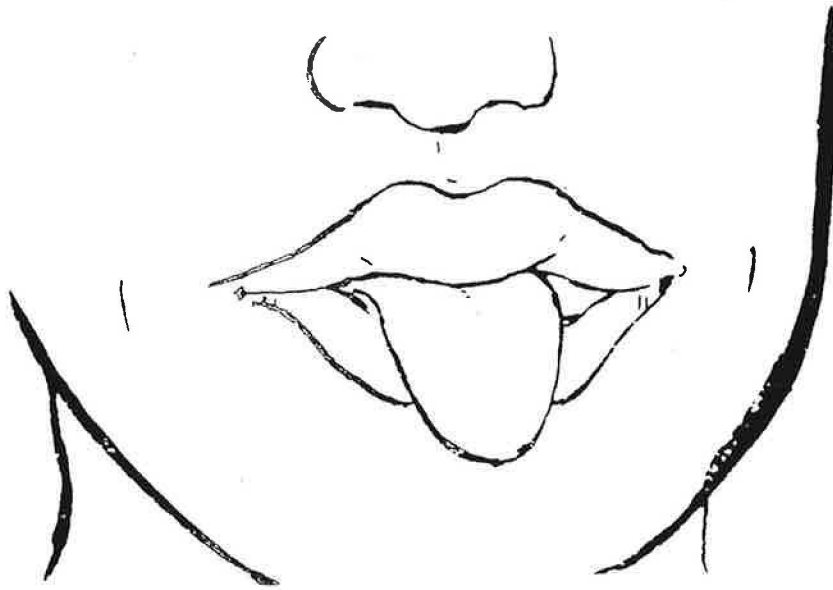
YO

CON LA

**La nariz huele
muchas cosas.**

YO

CON LA



**La lengua prueba
muchas cosas.**

Oler y Probar

Nombre _____

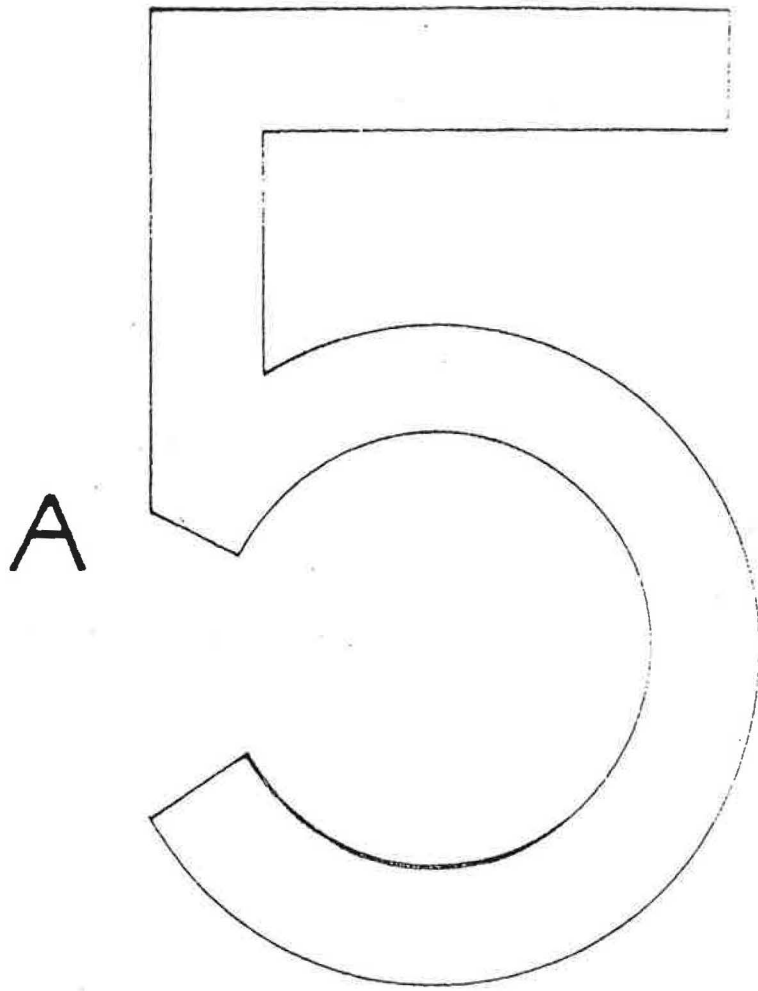
● Pon un X en las cosas que no debes oler.

5 SENTIDOS

Haga una línea entre las cosas que deben estar juntados.

Nombre _____

Corta cada dibujo de abajo. En cada línea pega el sentido que usa.
Colorea.



A

Senses

Cut & Paste Book

Name _____

I _____

WITH MY

Hands feel many things.

Touch

name _____



Directions: Put an X on the things that might hurt you if you touch them.

I

WITH MY

Eyes see many things.

Sight

Name _____



Directions: Find the hidden objects that are pictured at the bottom of this sheet. Put a ring around each one in the picture.

I _____

WITH MY

Ears hear many things.

Hearing

Name _____



Directions: Put an X on the things the child cannot hear

I _____

WITH MY

A nose smells many things.

I _____

WITH MY

○ A tongue tastes many things.

Smell and Taste

Name _____



Directions: Put an X on the things that might hurt you if you smelled them too much.

5 Senses

Draw a line to match the things that go together.

Name _____

Cut out the pictures below.

On each row, paste the sense used.

Color.

THE SEASONS

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EL OTOÑO

© 1989 Warren Publishing House, Inc.

Hojas de otoño

© 1989 Warren Publishing House, Inc.

Manzanas de otoño

© 1989 Warren Publishing House, Inc.

Nueces de otoño

D

© 1989 Warren Publishing House, Inc.

Calabazas de otoño

1

© 1989 Warren Publishing House, Inc.

Arañas de otoño

C

D

© 1989 Warren Publishing House, Inc.

Otoño, otoño,
debajo del árbol.

O

© 1989 Warren Publishing House, Inc.

U

¿Cuántas cosas de otoño
puedo ver?

Hojas del Otoño

Estas hojas están cambiando de colores. Se caen de los árboles en el otoño.

Colorea, corta, y pega la conita.

El Otoño

Dibuja 5 manzanas en este árbol.

El Otoño

Marca las cosas que usas en el otoño.

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Hojas sobre la calabaza.
1

© Copyright 1990, Warren Publishing House, Inc.

Hojas sobre el árbol.
2

D
© Copyright 1990, Warren Publishing House, Inc.

Hojas sobre la casa.
3

© Copyright 1990, Warren Publishing House, Inc.

C
Hojas sobre mí.
4

Hojas sobre la tierra.
5

Hojas sobre la calle.
6

Hojas sobre el carro.

7

Hojas sobre los pies.

8

HoJas sobre el carretón.
9

C
HoJas sobre el oso.
10

D

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Hojas sobre el perro.

11

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Hojas por todas partes!

12

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EL INVIERNO

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Campanillas de invierno

Mitónes de invierno

Botas de invierno

Trineos de invierno

Gorras de invierno

Invierno, invierno debajo del
árbol.

¿Cuántas cosas de invierno
puedo ver?

Hombre de Nieve
El sol del día hace calor.
Se derrite la nieve.

f

c





c

Directions: Children color the mitten and then cut it out on the dashed line. Children then use their mitten to retell the story "The Mitten".

¿Qué será?

Punto a punto

El Invierno

serrucho 
vibora 
calcetín 
patín de hielo 

cisne 
foca 
caracol 

estrella 
bobina 
barco de vela 

Un árbol de invierno

LA PRIMAVERA

Flores de primavera

Pájaros de primavera

Papalotes de primavera

Lluvia de primavera

Arco iris de primavera

Primavera, Primavera debajo
del árbol.

¿Cuántas cosas de primavera
puedo ver?

Florecimiento

Mire el botón de la flor abrir.
Vea la flor bonita.

Winnie Pooh

Vestir para el tiempo



Marcan las cosas que vean en el paseo

Pon un círculo alrededor de las cosas
vivos.

SVE

Use with the filmstrip: **SPRING: THE STORY OF A BEE 20320-03**
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EL VERANO

El sol de verano

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Barcos de verano

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Juguetes de verano

© 1989 Warren Publishing House, Inc.

Mariposas de verano

© 1989 Warren Publishing House, Inc.

Zapatos de verano

Verano, verano debajo del árbol.

¿Cuántas cosas de verano puedo ver?

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© 1989 Warren Publishing House, Inc.

Fall

Fall leaves

© 1989 Warren Publishing House, Inc.

Fall apples

© 1989 Warren Publishing House, Inc.

Fall nuts

Fall pumpkins

Fall spiders

Fall, fall, under the tree.

How many fall things can I see?

Fall Leaves

These leaves are changing color.
They drop off the tree in the fall.

Color, cut, and paste the tail.

Draw 5 apples in the tree.

Autumn

Mark the things you use in the autumn :



Leaves on the pumpkin.

1.

Leaves on the tree.

2.

D
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Leaves on the house.

3.

C
© Copyright 1990, Warren Publishing House, Inc.

Leaves on me.

4.

Leaves on the ground.
5.

Leaves on the street.
6.

Leaves on the car.
7.

Leaves on the feet.
8.

Leaves on the wagon.

9.

Leaves on the bear.

10.

Leaves on the dog.
11.

Leaves everywhere!
12.

Winter

Winter snowflakes

D

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Winter mittens

O

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Winter boots

C

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Winter sleds

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Winter hats

Winter, winter, under the tree.

How many winter things can I see?

A Bear Sleeps in Winter

The Snowman
Sunshine is hot.
It makes the snow melt.

Name _____

Picture sequence, Feelings

More Snow On the Way

Cut and paste in order.

Snowman

Cut and arrange in order

Directions: Children color the mitten and then cut it out on the dashed line. Children then use their mitten to retell the story "The Mitten".

What will it be?
dot to dot

A

B

C




Snowman

Winter

Name _____

Mark the things you use in winter.

saw 
iceskate 
seal 
snail 

swan 
snake 
spool 

star 
sock 
sailboat 

Winter tree

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Spring

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Spring flowers

Spring birds

Spring kites

Spring rain

Spring rainbow

Spring, spring, under the tree.

How many spring things can I see?

Flowers Bloom.
Watch the flower bud open.
See the pretty blossom.

Winnie the Pooh Discovers the Seasons

Pooh Catches Spring Fever

TEACHER: Some answers may vary depending on where you live.

Name _____

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Summer

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Summer sun

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Summer butterflies

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Summer shoes