Belmont Public Schools
Belmont, MA

BENCHMARKS

ENGLISH LANGUAGE ARTS
MATHEMATICS
MUSIC
PHYSICAL EDUCATION
SCIENCE
SOCIAL STUDIES
TECHNOLOGY
VISUAL ART

GRADES 3 - 4

September, 2007

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이 문서나 기타 학교 인쇄물을 읽는데 도움이 필요하신다면, 건물 책임자에게 부탁하여 번역 도움을 받으십시오.

FROM THE OFFICE OF THE SUPERINTENDENT OF SCHOOLS

September, 2007

Dear Member of the Belmont School Community:

During the 1997-1998 school year, the Curriculum Directors under the leadership of Dr. Patricia Aubin developed learning benchmarks for all students in the elementary schools and the Chenery Middle School. We are pleased to present a third edition of the benchmarks for English language arts, science, health and technology education, mathematics, social studies, and the fine and performing arts. This third edition adds benchmarks for technology tools, skills, and applications.

The Massachusetts Education Reform Act of 1993 mandated the development of State Curriculum Frameworks for all core subject areas. The benchmarks project aligns the Belmont curriculum with the State frameworks and attempts to make clear the learning expectations for all children in grades K-8 for all major curriculum areas.

The goal is to help teachers, parents and students understand more clearly what children need to know, understand, and be able to do in their study of the core curriculum. The benchmarks combine content, skills, and processes important to the mastery of each curriculum area.

This project was designed by Dr. Patricia Aubin, Assistant Superintendent for Curriculum and Instruction and the Curriculum Directors. I am grateful for the contributions of the many teachers who helped to write these learning expectations and to those who reviewed and critiqued this document.

This document is a work in progress. Dr. Aubin and her colleagues have been revising the benchmarks on a regular basis. Please give us your comments and suggestions on these documents.

Sincerely,

Dr. Peter B. Holland
Superintendent of the Belmont Public Schools

BENCHMARKS

In an effort to communicate clear student learning outcomes to teachers, parents, and community members, Curriculum Directors, and teachers present this benchmark document for all major curriculum areas.

Knowing the importance of offering the most challenging curriculum to all students, the authors of these benchmarks have focused on demanding yet reasonable learning expectations for students during their elementary and middle school years.

Curriculum Directors designed the benchmarks to align current curriculum guidelines with the learning standards from the Massachusetts Curriculum Frameworks. The benchmarks provide a consistent approach to curriculum content across grade levels throughout the district.

A benchmark is a statement of expected student performance at a particular point in time. Not every student will master these benchmarks at exactly the same time.

These curriculum benchmarks:

- Tell us what children should know and be able to do at a point in time.
- Are observable and measurable.
- Specify a threshold for proficiency.
- Attempt to omit jargon.
- Reflect the teachers' expectations for all children by the time they finish a grade level.
- Are attained by most students and exceeded by some.

The benchmark documents are open for ongoing review and revision. Please feel free to share observations with the appropriate Curriculum Director. We look forward to providing new and revised documents in the years ahead to ensure that the benchmarks reflect the most current thinking on curriculum for the students of the Belmont Public Schools.

Belmont Public Schools
Belmont, MA

ENGLISH LANGUAGE ARTS

BENCHMARKS

GRADES 3 - 4

Denis Fitzpatrick, Director of English

ENGLISH LANGUAGE ARTS

OVERVIEW

Belmont Public Schools is dedicated to providing all students with a rich, rigorous, well rounded language arts program. An effective program includes instruction in reading, writing, listening, speaking, and thinking. We believe that instruction in these key areas should be integrated with all other areas of the curriculum. Our goal is for all students to develop to their fullest potential the language arts skills so central to success in school and fulfillment in life.

Reading is constructing meaning. It is an active process whereby students build meaning from the interaction between textual information and their prior knowledge. We believe that students make the best progress in the language arts when they associate reading with pleasure as well as with gaining knowledge. Writing also involves constructing meaning. Writers engage in the process of composing meaning so that it can be clearly communicated to the reader. It is important that students feel they have ideas to share and that there is purpose and pleasure in producing meaning that can be understood, used, and enjoyed by others. Since listening and speaking are the foundation for reading and writing, teachers must create a setting in which students can develop information and ideas in a conversation with others.

Teachers understand that students move through developmental stages at varying rates. Therefore, teachers use ongoing authentic assessment throughout the year to determine and plan for students' instructional needs. An effective reading and writing program depends upon specific teaching in the following areas: (a) developing an awareness of the processes of reading and writing; (b) increasing knowledge of the print-sound code and standard writing conventions; (c) understanding the purposes and genres used in text; (d) developing habits of lifelong readers and writers.

Teachers explicitly model effective reading and writing strategies in the classroom, explaining how a strategy can be consciously used to process meaning. Teachers guide students as they master new strategies in different contexts and gradually release responsibility to students as they practice these strategies independently. Instruction takes place throughout the day in a variety of grouping patterns (whole group, small group, individual) and in a variety of situations: a read aloud, shared reading, interactive writing, guided reading and writing, independent reading and writing, and reading and writing across the content areas.

Our language arts program will be successful to the extent that staff and parents are involved in and work together for its success. Collaboration and co-teaching between classroom teachers, language arts specialists, special educators, library/media teachers, and administrators are essential for truly comprehensive academic growth. We are committed to providing ongoing staff development and parent education in the area of literacy instruction in order to incorporate the use of current research and best practices across the system. Together we can help our students develop the positive attitudes and academic skills that will enrich their lives and enable them to become lifelong learners.

ENGLISH LANGUAGE ARTS 3 - 4

LANGUAGE STRAND

SPEAKING AND LISTENING	*Students will be able to:* › use listening skills to **obtain information** › follow **oral directions** › identify the **main idea** of a speaker's message › respond to a speaker by **asking questions** › contribute **knowledge to class discussion** to develop ideas for a class project › carry out assigned roles in **self-run small group discussions, taking turns being reader, scribe, leader** › **read aloud fluently and accurately with comprehension using appropriate timing, change in voice, and expression** › **retell a story** with a **beginning, middle, and end** › **recount** personal experiences, content area material, or story problems clearly and logically u**sing appropriate level of details** › make **informal presentations** that properly **summarize or sequence information** › present **poems orally from memory** › participate in **formal and informal creative dramatic activities using clear diction and voice quality appropriate to the selection** › give organized **informational presentations using eye contact, proper pace, volume, and clear enunciation** › express an **opinion** in an organized way with supporting details › plan and perform **readings** for an audience **using clear diction and voice quality appropriate to the selection** › adapt **language to explain, to persuade, or to seek information** › adapt **language to audience** › use teacher-developed **assessment criteria** to prepare an oral presentation
VOCABULARY DEVELOPMENT	*Students will be able to:* › use **word parts** (syllables, roots, prefixes, and suffixes) to unlock word meaning › understand the literal and non-literal meanings of words (for example, *take steps*) › use **context clues** to comprehend unfamiliar words › use a **dictionary and thesaurus** when necessary to improve word choice › identify and use correctly words related through **prefixes and suffixes** › identify and use correctly content area words related as **antonyms, synonyms, compounds, homophones, and homographs**

LANGUAGE STRAND

VOCABULARY DEVELOPMENT (cont'd)	*Students will be able to:* › determine and interpret words with **multiple meanings** based on context › build and extend vocabulary **using new words** accurately in their speaking and writing › identify the meaning of **common idioms and figurative phrases** › identify playful uses of language **(riddles, tongue twisters, crossword puzzles, puns, jokes, palindromes)** › recognize **dialect in the dialogue of folk tales** › identify the use of **formal and informal language** in texts read, heard, and/or seen › identify **words or word parts from other languages** that have been adopted into English › use a list of **Greek and Latin prefixes and roots** to determine the meaning of unfamiliar words
GRAMMAR AND USAGE	*Students will be able to:* › identify **nouns, regular verbs, adjectives, and adverbs** › check for **subject and verb agreement**
SENTENCE STRUCTURE	*Students will be able to:* › write using **complete sentences** › use **standard English spelling** › identify **four types of sentences (declarative, interrogative, exclamatory, and imperative)** › identify the **subject and predicate** in a sentence › avoid **fragments** in their writing
MECHANICS	*Students will be able to:* › punctuate using **end marks (. ! ?)** › use **capital letters** appropriately for initials and abbreviations, with the first word of a direct quotation, with the first word in the greeting and closing of a letter, in the titles of books and compositions, with proper nouns (names of schools, towns, cities, states, holidays, countries, religions, languages, and races), with forms of address (Mr., Mrs., Ms., Miss, Dr.) › use the **period after initials, numbers, and abbreviations** › use the **comma** after "Yes" and "No" and with items in a series › use the **comma** in letter greeting and closing, in dates and addresses, between cities and states, in direct address, and before a direct quotation

LANGUAGE STRAND

MECHANICS (cont'd)	*Students will be able to:* › use **quotation marks** with direct quotes › spell most commonly used **homophones** correctly in their writing (there, they're, their; two, to, too) › use knowledge of letter sounds, word parts, word segmentation and syllabication to **monitor and correct spelling**

READING/LITERATURE STRAND

READING	*Students will be able to:* › read grade appropriate **imaginative/literary texts and informational/expository texts** accurately and with comprehension › participate in **sustained silent reading** › relate **personal experiences and background knowledge** to reading material › use relevant text features to **make predictions** › **preview text, set purpose, and develop questions before reading** › decode and understand **new words using a knowledge of phonics, syllabication, suffixes; the meanings of prefixes; context clues; or a dictionary** › monitor **level of comprehension** › locate **facts** › follow **sequence**, make i**nferences or generalizations**, and **predict outcomes** › identify an **implied main idea** › determine **cause and effect** › distinguish **fact from opinion or fiction** › identify and use **organizational patterns/structures (cause and effect, and chronological and logical order)** to obtain meaning from informational materials › identify and **summarize main ideas and supporting details**
LITERATURE	*Students will be able to:* › distinguish among **forms of literature such as poetry, prose, fiction (imaginative/literary), nonfiction (informational/expository), and drama** and apply this knowledge as a strategy for reading and writing › identify **character, problem, setting, and resolution/solution** in a story

READING/LITERATURE STRAND

LITERATURE (cont'd)	*Students will be able to:* › identify **themes** as lessons in **stories, poems, folk tales, fables, and myths** › identify **the speaker of a poem or story** › identify and show the relevance of **foreshadowing clues** › identify the elements of **plot, character, and setting** in a story and use these elements in their own personal writing › identify **personality traits** of characters and the **thoughts, words, and actions** that reveal their personalities › identify **similarities and differences** between the **characters or events in a literary work** and the **actual experiences in an author's life** › identify **natural events or phenomena explained in origin myths** › identify the **elements of an adventure story** (leaving, encountering difficulty, and returning home) and **exploits of a character in traditional literature (hero tales, creation myths, and trickster tales)** › identify **sensory details and figurative language (simile, metaphor, personification)** in literature and spoken language › identify **stanza or verse**, **rhyme, rhythm, repetition, similes, and sensory details** in poems › identify and analyze the elements of **plot and character** as presented through dialogue in scripts read, viewed, written, or performed › make **judgments about setting, characters, and events in literature read and support with evidence from the text**

WRITING/COMPOSITION STRAND

HANDWRITING	*Students will be able to:* › write legibly in **cursive**
WRITING PROCESS	*Students will be able to:* › understand and use **the stages in the writing process** (generating ideas, drafting, revising, editing, and publishing) › consider **audience and purpose** when writing, adapting language and form as appropriate › use an awareness of **imaginative/literary and informational/expository forms** as a strategy for writing › use **prewriting activities** (brainstorming, webbing/mapping, note taking, outlining, interviewing, reading, field trips, and collaborating) to generate text and to organize ideas in preparation for writing

WRITING/COMPOSITION STRAND

WRITING PROCESS (cont'd)	*Students will be able to:* › **generate their own questions** when preparing to interview someone or before reading about a topic › convey **a clear message** in their writing › improve **word choice** using dictionaries › use knowledge of **standard English conventions (grammar, mechanics, and spelling) to edit and correct** their writing › revise writing to **improve the level of detail** after determining what could be added or deleted › generate and display their own **standards or judgments of quality**, display them in the classroom, and present them to family members
WRITING PRODUCTS	*Students will be able to:* › write **brief summaries** of information gathered through research › write **a brief interpretation or explanation** of a literary or informational text using evidence from the text as support › write about **personal experiences** in an organized manner with **a clear focus and sufficient supporting details** › write a **descriptive piece** which appeals to the senses › write **short poems** that contain sensory details › write a **comparison/contrast piece** › write **friendly letters, informal notes, thank you letters, diary entries, and personal essays** for different audiences › keep subject area **journals** to respond to teacher-directed or self-directed topics, to record observations and reactions, and to retell or summarize material read › organize their ideas for a **brief written response** to material read › form and explain **personal standards or judgments of quality**, display them in the classroom, and present them to family members

RESEARCH AND STUDY SKILLS STRAND

RESEARCH SKILLS	*Students will be able to:* › choose a topic, define the need for information, and **formulate open-ended research questions** › generate **interview questions** to complete a project › locate **sources of information** including **encyclopedia, CD-ROM, atlas, magazines, books, personal interviews, and the Internet** › obtain information using the **table of contents, index, glossary, maps, globes, pictures, illustrations, diagrams, and bar graphs**

RESEARCH AND STUDY SKILLS STRAND

RESEARCH SKILLS (cont'd)	*Students will be able to:* › record specific information in an efficient and organized way **(summary, paraphrase, outline, graphic organizer)** › evaluate information for **relevancy, accuracy, and interest** › **interpret, use, and communicate research information document sources of information**
STUDY SKILLS	*Students will be able to:* › follow **oral and written directions** › record and complete **homework assignments** › use a **dictionary and thesaurus** › use age-appropriate **graphic organizers** to gather and analyze information › identify and use knowledge of **common textual features (titles, headings, key words, paragraphs, topic sentences, concluding sentences, captions, glossary)** › identify and use knowledge of **common graphic features (charts, maps, diagrams, and illustrations)** › **adjust reading rate to reading purpose and type of material (skim, scan, reread, study carefully)**

RECOMMENDED TYPES OF READINGS

Teachers will consult the state frameworks and the local elementary reading list for specific titles and authors to use with each grade level.

THIRD GRADE	FOURTH GRADE
Biography	Nonfiction
Historical fiction	Non-western fiction
Imaginative fiction	Realistic fiction

MATHEMATICS

BENCHMARKS

GRADES 3 – 4

M. Patricia Soliozy, Director of Mathematics

MATHEMATICS

OVERVIEW

This document is meant to be a curriculum guide for teachers of grade 3 and 4 as they engage in the planning of lessons and assessment of student performance. The major divisions represent the four strands of the Massachusetts Framework for Mathematics.

- Number Sense and Operations
- Patterns, Relations and Algebra
- Geometry and Measurement
- Data Analysis, Statistics and Probability

Students come to school with a surprising amount of mathematical experience and intuition. By linking the teaching of mathematics to students' personal experience, the elementary mathematics program helps students develop and master their basic number facts, problem solving strategies, and ability to communicate mathematically. Content-rich problems in a real-life context reveal to students that mathematics goes beyond numbers and computation to applications in everyday life.

MATHEMATICS

3 - 4

GRADE 3

NUMBER SENSE AND OPERATIONS

NUMERATION	*Student will be able to:* › read, write, and compare numbers to 100,000 › skip count by 2, 5, 10 to four digits › recognize patterns in products of 2, 5, and 10 › write amounts of money with dollars and cents › identify decimal and fraction relationships with visual cues or concrete materials › compare fractions with the same denominator or the same numerator
OPERATIONS & RELATIONS	*Student will be able to:* › identify fractions equivalent to 0, ½ and 1 › know related addition and subtraction facts to 20 › know related multiplication and division facts to 10 x 10 › use a choice of algorithms to add and subtract with regrouping, up to three-digit numbers › use estimation to determine if an answer is reasonable › use the inverse relation between division and multiplication to work with fact families › use 10, 100, and 1000 in multiplication and division › use multiplication and division to compute fact extensions such as 30 + 50
PROBLEM SOLVING	*Student will be able to:* › solve different types of number stories including: parts and totals, comparison, change, and equal groups with sharing › solve number stories that involve: money, time, mileage, and temperature › solve problems using a choice of resources: models, data, arrays, counters, calculators, and graphics › use number models to represent solution strategies › write and solve their own number stories for the four operations

MATHEMATICS

3 - 4

GRADE 3

PATTERNS, RELATIONS & ALGEBRA

RULES, PATTERNS, AND FUNCTIONS

Student will be able to:

- recognize patterns on a multiplication/division table
- name factors of whole number products found on a multiplication/division table
- have an awareness of square numbers
- solve addition and subtraction equations for missing numbers using concrete materials ? + 14 = 20 and 20 - ? = 14
- solve equations using multiplication and division including missing factor problems using concrete materials: ? x 9 = 72 and 72 ÷ ? = 9
- solve Frames and Arrow sequences with two functions including multiplication and division
- develop function rules for basic facts and fact extensions when multiplying and dividing by 10's and 100's

GEOMETRY AND MEASUREMENT

GEOMETRY

Student will be able to:

- identify, name and construct polygons: triangle, square, rhombus, rectangle, parallelogram, trapezoid with concrete materials
- distinguish 2-D shapes from 3-D shapes
- compare similarities and differences of shapes based on faces, bases and vertices
- recognize segments, rays, and lines
- name and label triangles and quadrilaterals
- identify intersecting and parallel lines
- explain the difference between perimeter and area
- recognize degrees as a unit of measure for turns and angles

MEASURES

Student will be able to:

- use appropriate measuring tool and units of measure for measuring a variety of lengths of objects
- use yardstick, meter stick, and rulers to carry out simple conversions like centimeters to meters
- measure to the nearest ¼ inch or 0.5 centimeter
- find area of rectangles and squares and express in square units
- find perimeter
- explore volume and weight in metric and standard systems
- find elapsed time

MATHEMATICS

3 - 4

GRADE 3

GEOMETRY AND MEASUREMENT

REFERENCE FRAMES	*Student will be able to:* › tell time to the minute using both digital and analog clocks › tell time past and before the hour › express temperatures as above or below zero; Celsius or Fahrenheit › express degrees of change between high and low temperatures across zero › order events on a timeline

DATA ANALYSIS, STATISTICS AND PROBABILITY

DATA COLLECTION AND ANALYSIS	*Student will be able to:* › collect and order data › display data using a variety of graphic representations (bar graphs, frequency distributions, line graphs, pie graphs) › evaluate data on a graph › predict trends from graphed data › find the maximum and the minimum of a set of data

MATHEMATICS

3 - 4

GRADE 4

NUMBER SENSE AND OPERATIONS

NUMBERS, NUMERATION & ORDER RELATIONS	*Student will be able to:* › read and write numbers up to and including 1,000,000 › identify relationships between the place values in whole numbers up to 1,000,000 › order whole numbers and decimals › read and write amounts of money using proper notation › recognize and name common fractions as decimals, especially using visual cues (e.g.: ½, .50, 50%) › create equivalent names for numbers using the four operations › use the calculator functions for multiplication, and division
OPERATIONS, NUMBER FACTS AND NUMBER SYSTEMS	*Student will be able to:* › show mastery of addition, subtraction, multiplication, and division, as related facts › estimate sums and products › use a variety of strategies for mental arithmetic › understand the relationships between 10, 100, and 1000 and be able to apply them to operations › round numbers to the nearest 10, 100, and 1000 › recognize and read percents and decimals as a part of everyday life (e.g.: monetary problems, time, speedometer, etc.) › have an awareness of prime and square numbers
ALGORITHMS AND PROCEDURES	*Student will be able to:* › use a variety of algorithms in addition, including Opposite Change and Partial Sum › use a variety of algorithms in subtraction, including Same Change and Partial Difference › use a variety of multiplication algorithms, including Partial Product › understand and use the alternative division algorithm and conventional algorithm
PROBLEM SOLVING AND MATHEMATICAL MODELING	*Student will be able to:* › solve problems involving length, height, weight and speed › solve multiple step problems in addition, subtraction, multiplication and division › create and write math problems to extend, defend and refine mathematical thinking › predict and explain outcomes

MATHEMATICS

3 - 4

GRADE 4

NUMBER SENSE AND OPERATIONS

PROBLEM SOLVING AND MATHEMATICAL MODELING (cont'd)	*Student will be able to:* ‣ solve multiplication and division number stories ‣ use estimation to explain the reasonableness of results ‣ solve problems involving prediction and probability ‣ understand and use a variety of problem solving models ‣ use a variety of computational strategies to solve problems that include rounding, estimation and calculators (where appropriate)

PATTERNS, RELATIONS AND ALGEBRA

FUNCTIONS, PATTERNS, AND SEQUENCES	*Student will be able to:* ‣ find missing whole numbers and common fractional parts on a number line ‣ find and use patterns in multiplication tables ‣ design geometric patterns
ALGEBRA AND USES OF VARIABLES	*Student will be able to:* ‣ recognize and solve missing number problems ‣ determine whether simple number sentences are true or false ‣ use parentheses in number sentences, involving more than one operation ‣ understand the vocabulary of open sentences ‣ solve open sentences with a variety of inspection methods, including variable symbols

GEOMETRY AND MEASUREMENT

GEOMETRY AND SPATIAL SENSE	*Student will be able to:* ‣ understand and use lines, line segments and rays ‣ understand the properties of angles, triangles, quadrilaterals and other polygons ‣ understand the basic properties of 3-dimensional shapes ‣ identify line symmetry and recognize slides, rotations and flips ‣ draw circles with a compass including concentric circles ‣ construct hexagons and equilateral triangles, inscribed in a circle ‣ understand clockwise rotation ‣ use a straight edge/ruler for construction and measurement ‣ identify and understand the uses of a half-circle and 360° protractor, in drawing and measuring ‣ be able to recognize acute, obtuse, right and straight angles

MATHEMATICS

3 - 4

GRADE 4

GEOMETRY AND MEASUREMENT

MEASURES AND MEASUREMENT	*Student will be able to:* › read standard units and metric units › use personal references to estimate measurement › measure and record dimensions of objects using standard and metric units › understand and apply time zones › make scale drawings › solve basic area and perimeter problems
COORDINATE SYSTEMS AND OTHER REFERENCE FRAMES	*Student will be able to:* › use grid coordinates to identify regions, give directions and describe routes on a map › identify ordered pairs on a coordinate grid › use globes and maps to find longitude and latitude of locations

DATA ANALYSIS, STATISTICS AND PROBABILITY

EXPLORING DATA	*Student will be able to:* › collect, organize and display a set of data › display data in a bar graph, line graph or pictograph › construct, tabulate and analyze surveys › read tables and compare data › construct and interpret tables › predict outcomes based on data › use language of probability including outcomes, odds, probability ratio › understand and use the concepts of maximum, minimum, range, median and mode

MUSIC

BENCHMARKS

GRADES 3 - 4

William T. Pappazisis, Director of Fine & Performing Arts

MUSIC

OVERVIEW

The mission of the Belmont Public Schools Department of Fine and Performing Arts is to educate all students in a supportive, nurturing and challenging environment by providing them with the skills, knowledge, and opportunities for expression in art, music, drama and dance that enable them to participate actively as consumers and makers of the arts in a diverse global community.

K-12 Department-Wide Learning Goals

I. Creating: Students will learn to use the symbolic languages, structures, materials and techniques of the four arts disciplines (music, visual art, drama and dance) to create works of art.
II. Performing: Students will apply skills in singing, reading music, playing instruments, acting, directing, dancing and exhibition (visual art) to interpret and share artwork that already exists, including their own.
III. Perceiving and Responding: Students will demonstrate their ability to critically respond with understanding when they describe, analyze, interpret and evaluate their own artwork and the artwork or others.
IV. Connections: Students will demonstrate understanding of their artistic heritage through investigation of the historical and cultural contexts of the arts, will demonstrate knowledge of the arts in their community, and apply knowledge of the arts in the study of other disciplines.

The benchmarks of the music curriculum are consistent with the *National Standards of Music and the Massachusetts Arts Curriculum Framework*. The elementary music curriculum of the Belmont Public Schools has been designed to provide students with learning opportunities that focus on:

- singing and playing instruments
- composing and improving music
- reading and writing music using a variety of symbols including standard music notation
- listening to, describing and analyzing music
- the historical and cultural contexts of music
- the connections between music and other arts and disciplines

String classes are available to all students in Grades 3 and 4 and class instruction on brass, woodwind, and percussion instruments is available to all students in Grade Four. Students in both grades can also participate in the elementary band and orchestral ensemble programs, which meet on Saturday morning for twenty weeks during the school year. Each elementary school provides students with a choral experience. All-Town Elementary Chorus is open to all students in grades 3-5 and meets one afternoon per week for 90 minutes.

MUSIC

3 - 4

PERCEIVING & UNDERSTANDING

LISTENING	*Students will be able to:* › identify the families of instruments and classify instruments according to family › aurally recognize the major band and orchestral instruments › recognize and describe AB, ABA, and Rondo forms › discriminate between melody and ostinati › identify the tonic notes in the keys of C, F, and G *Additional Objectives For Students of Instrumental Music:* › identify and correct obvious errors in intonation on string instruments › identify and correct poor tone production, hand position, posture and articulation in the performance of instrumental music › identify and correct obvious errors in pulse consistency › distinguish between melody and accompaniment in ensemble music
DESCRIBING, ANALYZING & INTERPRETING	*Students will be able to:* › use the terminology so far developed to describe examples of music as they relate to: - form - range, melodic direction and contour - varying degrees of volume - articulation as it affects character - varying degrees of tempo - meter and duple subdivision - timbre as it pertains to instruments of the orchestra

Students will be able to:

CREATING & PERFORMING

SINGING	*Students will be able to:* › sing with good vocal quality, clear diction, and good intonation › sing expressively using dynamic contrast › sing rounds, partner songs, and songs with a melodic ostinati › sing a countermelody while a melody is sung by others › sing songs with accompaniment › sing songs from prescribed repertoire list (found in curriculum guide)

MUSIC

3 - 4

CREATING & PERFORMING

PLAYING INSTRUMENTS

Students will be able to:

- play accompaniments on barred instruments using various harmonic patterns
- demonstrate proper breath control, playing position, and hand position while playing recorder
- play multiple ostinati on barred and non-pitched instruments
- perform proper articulation on recorder
- play songs on recorder using the notes B, A, G and E
- play songs from memory on recorder
- play simple melodies on barred and non-pitched instruments

Additional Objectives For Students of Instrumental Music:

- demonstrate proper breath control, posture, articulation, and hand position while playing a band instrument
- demonstrate proper bow control, posture, and hand position while playing a string instrument
- play simple melodies and accompanying patterns keeping a steady pulse
- demonstrate two distinct dynamic levels, piano & forte

IMPROVISING

Students will be able to:

- improvise rhythmic and melodic ostinati
- improvise simple melodies using the pentatonic scale with awareness of a tonal center (home tone)

READING & NOTATING

Students will be able to:

- identify the letter names of the lines and spaces of the staff in treble and/or bass clefs
- identify measures
- recognize a variety of music signs:
  2/4, 3/4, 4/4 < > Treble clef, flat, natural, sharp
- recognize dynamic markings for loud (f) and soft (p)
- read rhythms using the following signs: whole notes, half notes, quarter notes and rests, pairs of eighth notes, four sixteenth notes, dotted quarter and eighth combinations
- distinguish between treble and bass clefs
- read simple melodies
- follow an octavo score
- read and interpret rhythmic patterns in the following meters using whole, half, quarter and pairs of eighth notes 2/4, 3/4, 4/4

MUSIC

3 - 4

CREATING & PERFORMING

READING & NOTATING (CONT'D)	*Additional Objectives For Students of Instrumental Music:* ‣ read and interpret melodic patterns using the diatonic pitches of concert Bb and Eb major ‣ recognize and utilize rehearsal numbers, measures rest, tempo marking, multiple endings, repeat sign

CONNECTING

HISTORY & CULTURE AND MUSIC & OTHER DISCIPLINES	*Students will be able to:* ‣ recognize and sing songs from colonial times (grade 3) ‣ recognize and sing sea chanteys (grade 3) ‣ perform songs, dances, and chants of other cultures being studied in the regular classroom ‣ identify similarities and differences in the meanings of common terms such as form, line, contrast that are used in the various arts ‣ identify ways in which the principles and subject matter of other disciplines taught in the school are interrelated with those of music

PHYSICAL EDUCATION

BENCHMARKS

GRADES 3 - 4

Jim Davis, Director of Physical Education, Athletics, and Student Activities

PHYSICAL EDUCATION

OVERVIEW

A sound physical education program progresses from simple to more advanced learning experiences related to the interests and abilities of the students. The Belmont Physical Education Program is structured in such a way that the duration, intensity, and frequency of activities not only motivate students but also meet their individual needs. When appropriate, students participate in the selection of activities from all activity areas. Each and every student is given an equal opportunity to participate in a balanced physical education program.

At the elementary level students are exposed to experiences that encourage them to enjoy physical activity. Through effective practices students will learn to value the effects of physical activity and its roll on positive lifelong health and well-being. Students will be encouraged to explore, take risks, exhibit curiosity, work with others cooperatively and achieve a personal health enhancing level of physical fitness. The elementary physical education program is well balanced. Every student is provided with an opportunity to develop decision making and problem solving skills. The program embraces differences in students' interests, potential and cultures.

Finally, the development of personal skills is an essential part of the elementary physical education program. To this end, students will be given opportunities to develop basic social skills, including teamwork, problem solving, leadership and effective communication.

The benchmarks for 3-4 delineate what children are, at the minimum, expected to have accomplished during this stage of their growth & development.

PHYSICAL EDUCATION 3 - 4

FORMS OF MOVEMENT

INDIVIDUAL SKILLS	*Students will be able to:* › demonstrate striking moving and stationary objects › demonstrate mechanically correct patterns of throwing different types of objects › demonstrate mechanically correct patterns of catching different types of objects › demonstrate basic tumbling skills › demonstrate basic competence in modified forms of football, soccer, basketball, volleyball, pillo polo and base running games
RHYTHMS	*Students will be able to:* › perform rhythmic movements to various types music individually and in group

APPLIED MOVEMENT

INDIVIDUAL SKILLS	*Students will be able to:* › demonstrate various offensive and defensive strategies in games played › solve movement problems with the most efficient pattern › solve physical education problems with increased sophistication and success › use movement concepts and principles in the development of motor skills
RHYTHMIC ACTIVITIES	*Students will be able to:* › demonstrate a number of basic dance steps to music
TEAM SKILLS	*Students will be able to:* › participate in age appropriate lead-up activities for flag football, soccer, basketball, pillo polo, volleyball, and base running games › demonstrate basic competence in age appropriate modified forms of flag football, soccer, basketball, pillo polo, volleyball, and base running games › perform group stunts › perform group jump rope activities

PHYSICAL EDUCATION 3 - 4

LIFESTYLE & HEALTH

PHYSICAL FITNESS ACTIVITIES	*Students will be able to:* › participate in circuit training › understand how to improve the cardiovascular endurance › participate in the four aspects of physical fitness (cardiovascular, muscular strength, endurance, flexibility)
HEALTH RELATED	*Students will be able to:* › understand the value of the four aspects of physical fitness › demonstrate exercises for a few of the motor muscle groups › explain the difference between a resting and active pulse and heart rate › demonstrate an understanding of how to monitor and maintain a health-enhancing level of physical fitness

PERSONAL & SOCIAL BEHAVIOR

HEALTH RELATED	*Students will be able to:* › participate in various squad, circuit or group formations for warm-up activities › value the safety of peers and self while performing physical education activities
INDIVIDUAL SKILLS	*Students will be able to:* › explain and practice safety rules for each activity and area used › work individually or in a group to solve the task at hand › understand the social and personal responsibility associated with participation in physical activity
TEAM SKILLS	*Students will be able to:* › begin to value the skill, learning and enjoyment elements of games over the outcome › understand the value of respecting both teammates and opponents › understanding the value for respecting equipment

SCIENCE

BENCHMARKS

GRADES 3 - 4

Excerpted from:
The Massachusetts Framework for Science and Technology
The National Science Education Standards
Benchmarks for Scientific Literacy: Project 2061

Lawrence Weathers, Director of Science, Health, and Technology Education

SCIENCE

OVERVIEW

Students in Grades Three and Four have a rich curriculum that provides learning experiences that allow students to build understanding of science processes and content. Understanding science requires that an individual integrate a complex structure of many types of knowledge, including the ideas of science, relationships between ideas, reasons for these relationships, ways to use the ideas to explain and predict other natural phenomena, and ways to apply them to many events.

In Grades Three and Four students will study unifying concepts and processes in science, science as inquiry, physical science, life science, earth and space science, and science and technology.

Grade 3 science is an integrated program. Students investigate electric current and construct circuits, switches, and fuses in the Circuits and Pathways unit of the Physical Science strand. In the Life Science strand students study behaviors and habitat of the crayfish in Animal Adaptations: Crayfish. Students study the properties of water in all phases in the unit Water in the Earth Science strand. Students may participate in an astronomy program, StarLab.

Grade 4 science is an integrated program. In the Physical Science unit, Sound, students explore pitch and volume, frequency and amplitude of sounds made on instruments they make in the classroom. Students investigate what makes plants grow and do Experiments with Fast Plants in the Life Science strand. Students study Landforms and Earth Materials in the Earth Science strand as they engage in inquiry-based activities to investigate earth materials, rocks and materials, and the processes of erosion and deposition.

SCIENCE & TECHNOLOGY CONTENT CHART

GRADE	PHYSICAL	LIFE	EARTH/SPACE	SKILLS OF INQUIRY
3	Circuits and Pathways	Animal Adaptations: Crayfish	Water	all units
4	Sound	Experiments with Fast Plants	Landforms & Earth Materials	all units

SCIENCE

3 - 4

GRADE 3

SCIENCE AS INQUIRY

ALL UNITS OF STUDY EMPHASIZE SKILLS IN INQUIRY-BASED LEARNING	*Students will be able to:* ‣ ask questions and make predictions that can be tested ‣ select and use appropriate tools and technology (e.g., ruler, meter sticks, thermometers, hand lenses, and balances) to gather data and extend observations ‣ keep accurate records while conducting simple investigations or experiments ‣ conduct multiple trials to test a prediction (compare the result of an investigation or experiment with the prediction) ‣ recognize simple patterns in data and use data to create a reasonable explanation for the results of an investigation or experiment ‣ record data and communicate findings to others using graphs, charts, maps, models, and oral and written reports

PHYSICAL SCIENCE

STATES OF MATTER	*Students will be able to:* ‣ compare and contrast solids, liquids, and gases based on the basic properties of each of these states of matter ‣ describe how water can be changed from one state to another by adding or taking away heat
FORMS OF ENERGY	*Students will be able to:* ‣ identify one of the basic forms of energy (electrical) ‣ recognize that energy is the ability to cause motion or create change ‣ give examples of how energy can be transferred from one form to another (chemical energy of the battery to electrical energy that lights the bulb) ‣ recognize that electricity in circuits requires a complete loop through which an electrical current can pass, and that electricity can produce light, heat, and sound ‣ identify and classify objects and materials that conduct electricity and objects and materials that are insulators of electricity

SCIENCE

3 - 4

GRADE 3

LIFE SCIENCE

CHARACTERISTICS OF PLANTS & ANIMALS	*Students will be able to:* ‣ classify animals according to their physical characteristics ‣ recognize that animals go through predictable life cycles that include birth, growth, development, reproduction, and death
HEREDITY	*Students will be able to:* ‣ introduce that some characteristics of an animal are inherited and some are learned or are a reflection of the environment ‣ discuss that inherited characteristics of an animal may change over long periods of time in response to changes in its environment
ADAPTATIONS OF LIVING THINGS	*Students will be able to:* ‣ give examples of how changes in the environment have caused some plants and animals to die or move to new locations ‣ describe how organisms meet some of their needs in an environment by using behaviors (patterns of activities) in response to information (stimuli) received from the environment ‣ recognize that animals can survive a variety of environments because of adaptive behaviors

EARTH AND SPACE SCIENCE

WATER CYCLE	*Students will be able to:* ‣ describe how water on earth cycles in different forms and in different locations, including underground and in the atmosphere ‣ give examples of how the cycling of water, both in and out of the atmosphere, has an effect on climate

SCIENCE

3 - 4

GRADE 4

SCIENCE AS INQUIRY

ALL UNITS OF STUDY EMPHASIZE SKILLS IN INQUIRY-BASED LEARNING	*Students will be able to:* ‣ ask questions and make predictions that can be tested ‣ select and use appropriate tools and technology (e.g., ruler, meter sticks, thermometers, hand lenses, and balances) to gather data and extend observations ‣ keep accurate records while conducting simple investigations or experiments ‣ conduct multiple trials to test a prediction (compare the result of an investigation or experiment with the prediction) ‣ recognize simple patterns in data and use data to create a reasonable explanation for the results of an investigation or experiment ‣ record data and communicate findings to others using graphs, charts, maps, models, and oral and written reports

PHYSICAL SCIENCE

PROPERTIES OF OBJECTS AND MATERIALS	*Students will be able to:* ‣ differentiate between properties of objects (e.g., size, shape, weight) and properties of materials (e.g., color, texture, hardness)
FORMS OF ENERGY	*Students will be able to:* ‣ identify sound as a basic form of energy which can cause motion or create change
SOUND ENERGY	*Students will be able to:* ‣ recognize that sound is produced by vibrating objects, that the rate of vibration is related to its pitch, and requires a medium through which to travel

LIFE SCIENCE

CHARACTERISTICS OF PLANTS & ANIMALS	*Students will be able to:* ‣ classify plants according to their physical characteristics ‣ recognize that plants go through predictable life cycles that include birth, growth, development, reproduction, and death
PLANTS STRUCTURES & FUNCTIONS	*Students will be able to:* ‣ identify the structures in plants (leaves, roots, flowers, stem, bark, wood) that are responsible for food production, support, water transport, reproduction, growth, and protection

SCIENCE

3 - 4

GRADE 4

LIFE SCIENCE

HEREDITY	*Students will be able to:* ‣ differentiate between observed characteristics of plants that are fully inherited (e.g., color of flower, shape of leaves) and characteristics that are affected by the climate or environment (e.g., browning of leaves due to too much sun)
ADAPTATIONS OF LIVING THINGS	*Students will be able to:* ‣ recognize plant behaviors, such as the way seedlings' stems grow toward light and their roots grow downward in response to gravity (recognize that many plants can survive harsh environments because of seasonal behaviors)
ENERGY & LIVING THINGS	*Students will be able to:* ‣ describe how energy derived from the sun is used by plants to produce sugars (photosynthesis) and is transferred within a food chain from producer to consumer to decomposers

EARTH & SPACE SCIENCE

ROCKS & THEIR PROPERTIES	*Students will be able to:* ‣ give a simple explanation of what a mineral is and some examples, e.g., quartz, mica ‣ identify the physical properties of minerals (hardness, color, luster, cleavage, and streak), and explain how minerals can be tested for these different physical properties ‣ identify the three categories of rocks (metamorphic, igneous, and sedimentary) based on how they are formed, and explain the natural and physical processes that create these rocks
EARTH HISTORY	*Students will be able to:* ‣ give examples of how the surface of the earth changes due to slow processes such as erosion and weathering, and rapid processes such as landslides, volcanic eruptions, and earthquakes

SOCIAL STUDIES

BENCHMARKS

GRADES 3 - 4

Michael McAllister, Director of Social Studies

SOCIAL STUDIES

OVERVIEW

The goal of a history and social science curriculum is to enable students to acquire the knowledge, skill and judgment necessary to continue to learn for themselves; to participate intelligently, justly, and responsibly in civic life; to deliberate about local, national and international issues; and to avail themselves of historical and cultural resources such as historic sites, museums, parks, libraries, and multimedia information sources wherever they may live or travel.

To achieve this goal, the Massachusetts History and Social Science Frameworks focus on a content-based curriculum revolving around the disciplines of History, Geography, Economics, Civics and Government.

The specific content in grades 3 and 4 enables teachers and students to successfully engage in a rich, multi-cultural, and global focus on the world, and to achieve the benchmarks contained in this document.

3	**4**
Plymouth & Boston	North America: Canada, United STATES, AND Mexico
In grade 3, students study the history of Massachusetts beginning with the time of the arrival of the Pilgrims, including their interactions with the Wampanoags. The history of early Boston, including the Puritan settlement of Massachusetts Bay Colony and the growth of towns and cities in Massachusetts, along with important political and economic developments leading to the American Revolution, provides the structure for this course of study. In addition they read biographies of prominent Massachusetts citizens and explore the diversity of the geography of Massachusetts.	In grade 4, students study the geography and people of the United States today. Students learn geography by addressing standards that embed five major concepts: location, place, human interaction with the environment, movement and regions. In addition, they learn about the geography and people of contemporary Mexico and Canada.

SOCIAL STUDIES

3 - 4

GRADE 3

HISTORY & GEOGRAPHY

Students will be able to:

- explain the meaning of time periods of dates in historical narratives (decades, century, 1600s, 1776)
- observe visual sources such as historic paintings, photographs, or illustrations accompanying historical narratives, and notice details such as clothing, setting, or action
- observe and describe local or regional historic artifacts and sites and generate questions about their function, construction, and significance
- use compass directions, map scales, legends, and titles to locate places on contemporary maps of New England and Massachusetts
- compare a contemporary Boston map with ones from the early 17th or 18th, century

CIVICS AND GOVERNMENT

Students will be able to:

- give examples of why it is necessary for communities to have governments (e.g., Governments provide order and protect rights)
- give examples of the different ways people (past and present) can influence their local government by community involvement

ECONOMICS

Students will be able to:

- define what a tax is and the purposes for taxes
- define barter and give examples of bartering (e.g., Pilgrims trading with Wampanoags)

  Barter is the direct exchange of goods and services between people without using money. Trade is the exchange of goods and services between people.

SOCIAL STUDIES

GRADE 4

HISTORY & GEOGRAPHY

Students will be able to:

- use map and globe skills to determine absolute locations (latitude and longitude) of places studied
- identify the locations of the North and South poles, the Equator, Prime Meridian, and the Northern, Southern, Eastern and Western Hemispheres
- interpret a map using information from its title, compass rose, scale, and legend
- describe the significance of national historic sites

CIVICS AND GOVERNMENT

Students will be able to:

- give examples of the major rights that immigrants have acquired as citizens of the United States (e.g., the right to vote, and freedom of religion, speech, assembly, and petition)
- give examples of different ways people can become citizens of the United States

ECONOMICS

Students will be able to:

- define and give examples of natural resources in North America
- give examples of limited and unlimited resources and how people make choices about goods and services
- give examples of how the interaction of buyers and sellers influences the prices of goods and services in markets

TECHNOLOGY

BENCHMARKS

GRADES 3 - 4

Lee McCanne, Ed.D., Director of Technology

TECHNOLOGY

OVERVIEW

Belmont Public Schools is engaged in the ongoing study, development, evaluation, and implementation of a range of technology-based educational programs. The Technology Department has developed Benchmark Standards for Students K-12. These standards address the mandates of the *No Child Left Behind Technology Plan,* the *National Educational Technology Standards,* the *Massachusetts Department of Education Instructional Technology Standards* and the *Belmont Public Schools Strategic Plan*

Belmont Public Schools is committed to using technology to improve teaching and learning. We believe access to technology tools and the skills to leverage them for academic study and personal productivity are essential to the future of our students.

This document outlines the technology literacy curriculum of the Belmont Public Schools at this grade level. Since technology is ever changing, this document will be updated as needed to reflect technology capabilities and changes and our capacity to implement them.

INSTRUCTIONAL TECHNOLOGY 3 - 4

	TECHNOLOGY STANDARDS
BASIC OPERATIONS AND CONCEPTS	*Students will be able to:* ‣ develop basic skills for using hardware and applications (e.g., open/close a file, navigate using scroll bars, arrow keys, special keys and mouse) ‣ explore and develop keyboarding skills in order to become familiar with the keyboard functions ‣ explore basic formatting features of a word processing program ‣ collaborate with classmates to use teacher-selected Web sites ‣ use common input devices (e.g. mouse, keyboard) and output devices (e.g. monitor, printer) including adaptive devices when necessary to successfully operate computers
SOCIAL, ETHICAL, AND HUMAN ISSUES RELATED TO TECHNOLOGY	*Students will be able to:* ‣ demonstrate awareness and discuss uses of technology in their daily life and the advantages and disadvantages those uses provide ‣ exhibit legal and ethical behaviors when using information and technology, and discuss consequences of misuse ‣ work cooperatively and collaboratively with peers, and others when using technology in the classroom; ‣ respect the ownership of another's work, show responsible use of technology and information, and describe personal consequences of inappropriate use
TECHNOLOGY PRODUCTIVITY/ PRESENTATION TOOLS	*Students will be able to:* ‣ work between two documents (copying and pasting graphics and/or text) ‣ use multimedia presentation of their graphic and/or written work with teacher assistance ‣ explore the use of drawing and painting applications for class projects ‣ create developmentally appropriate multimedia projects with support that represent knowledge related to any curriculum area ‣ use a productivity package with support to present information gathered (i.e. graph, database, spreadsheet, timelines, etc

INSTRUCTIONAL TECHNOLOGY 3 - 4

TECHNOLOGY STANDARDS

TECHNOLOGY COMMUNICATION TOOLS	*Students will be able to:* ‣ collaborate with peers, experts, and others using telecommunications and collaborative tools to investigate curriculum-related problems, issues, and information, and develop solutions or products for audiences inside and outside the classroom ‣ utilize technology to electronically communicate either locally (ex. Through a group letter to other students via e-mail within the school/district), and/or globally (ex. Pen-pals), through teacher assistance and supervision ‣ abide by school rules for appropriate use of the Internet
TECHNOLOGY RESEARCH TOOLS	*Students will be able to:* ‣ use basic Internet navigation skills with teacher assistance and supervision (keyword and search methods, backward, forward, search engines) ‣ discuss the basic ethical issues relating to the Internet: importance of safety, privacy, respect for another's work (use or misuse of copyright laws, citing sources) ‣ use telecommunications and online resources to participate in collaborative problem-solving activities for the purpose of developing solutions or products for audiences inside or outside the classroom with teacher assistance and supervision ‣ collaborate with classmates to use teacher-selected Web sites

VISUAL ART

BENCHMARKS

GRADES 3 - 4

William T. Pappazisis, Director of Fine & Performing Arts

VISUAL ART

OVERVIEW

The mission of the Belmont Public Schools Department of Fine and Performing Arts is to educate all students in a supportive, nurturing and challenging environment by providing them with the skills, knowledge, and opportunities for expression in art, music, drama and dance that enable them to participate actively as consumers and makers of the arts in a diverse global community.

K-12 Department-Wide Learning Goals

V. Creating: Students will learn to use the symbolic languages, structures, materials and techniques of the four arts disciplines (music, visual art, drama and dance) to create works of art.

VI. Performing: Students will apply skills in singing, reading music, playing instruments, acting, directing, dancing and exhibition (visual art) to interpret and share artwork that already exists, including their own.

VII. Perceiving and Responding: Students will demonstrate their ability to critically respond with understanding when they describe, analyze, interpret and evaluate their own artwork and the artwork or others.

VIII. Connections: Students will demonstrate understanding of their artistic heritage through investigation of the historical and cultural contexts of the arts, will demonstrate knowledge of the arts in their community, and apply knowledge of the arts in the study of other disciplines.

The benchmarks of the art curriculum are consistent with the *National Standards of Art* and the *Massachusetts Arts Curriculum Framework*. The elementary art curriculum of the Belmont Public Schools has been designed to provide students with learning opportunities that focus on:

- using materials, tools, techniques and processes in a variety of two and three dimensional media to create artwork that expresses understanding of themselves, their feelings, and their world
- developing knowledge of the elements of art (color, line, texture, value, space, form and shape) and the principles of design (balance, variety, unity, emphasis, harmony and rhythm) and applying them in their artwork
- describing, responding to, and evaluating their own artwork and that of others
- the historical and cultural contexts of art
- the connections between visual art and the other arts, and other disciplines

VISUAL ART

3 - 4

PERCEIVING AND UNDERSTANDING

VISUAL ELEMENTS	*Students will be able to:* › identify and describe visual elements in artwork using appropriate vocabulary › describe the environment in terms of lines, shapes, forms, texture, and color › explain how visual elements contribute to the mood or feeling of an artwork › recognize and differentiate among colors of different tints and shades in the environment › see and describe the environment in terms of space and light and dark colors › demonstrate understanding of the dimensions of colors -hue, saturation, and value
DESIGN PRINCIPLES	*Students will be able to:* › identify the quality of unity in artwork › identify rhythm and movement in artwork › explain how an artist achieves variety in artwork › demonstrate understanding of focal point
REFLECTING AND EVALUATING	*Students will be able to:* › identify the type of artwork (drawing, painting, sculpture, print, etc.) › identify the media and processes that were used to create an artwork › classify drawings and paintings as landscapes, portraits, or still life › demonstrate understanding that artwork communicates something (ideas, feelings, moods, etc.) › hypothesize and justify a personal interpretation of the meaning of artwork › recognize the difference between abstract, representational, and nonrepresentational

CREATING

MATERIALS AND TOOLS	*Students will be able to:* › demonstrate increased skill in using the tools and materials used in grades › demonstrate more advanced skills in printmaking including using brayers to produce evenly inked copies › make clay slabs and coils, and use scoring and slipping to assemble

VISUAL ART

3 - 4

CREATING

MATERIALS AND TOOLS (cont'd)	*Students will be able to:* ‣ manipulate paper, wire, wood and cardboard to create freestanding sculptures ‣ demonstrate increased skill in using the tools and materials used in grades 1-2 ‣ make clay slabs and coils using scoring and slipping to assemble ‣ demonstrate understanding of the characteristics of paper mache and develop skill in using paper mache to create simple, smooth forms ‣ use additive construction techniques to create larger forms, demonstrate basic skills in sewing, weaving, and cutwork ‣ demonstrate proper care of tools and materials
VISUAL ELEMENTS	*Students will be able to:* ‣ use a variety of lines in artwork ‣ use art elements to express emotion in artwork and to express mood or feeling ‣ use line and color to create texture in artwork; create collage or montage textures; use color to express mood or feeling; portray the human figure in action and proportion ‣ use positive and negative space in artwork; use art elements to create patterns in 2-D artwork ‣ use elements to create direction and movement, as well as patterns and textures
DESIGN PRINCIPLES	*Students will be able to:* ‣ arrange subject matter to achieve rhythm and movement in artwork ‣ arrange a variety of objects to create unity in artwork; arrange subject matter and visual elements to achieve variety in artwork ‣ create artwork in which the eye flows from one area to another ‣ demonstrate understanding of design as the way elements are organized
OBSERVING & DISCOVERING	*Students will be able to:* ‣ look at objects and record drawings
CREATIVE THINKING	*Students will be able to:* ‣ visualize and draw or paint whole scenes based on a memory of a past experience ‣ use distortion and exaggeration for expressive purpose ‣ use imagination to visualize and draw clear, detailed images of objects, figures, and places

VISUAL ART

3 - 4

CREATING

CREATIVE THINKING (cont'd)	*Students will be able to:* › alter visual images as ideas develop and change in the process of creating artwork › use art elements to intensify feeling and mood in artworks › explore and generate many ideas to fit the parameters of a problem and select content, materials and visual elements to express an idea or feeling › demonstrate increasing inventiveness, flexibility, and originality in artwork

CONNECTING

HISTORY & CULTURE AND ART & OTHER DISCIPLINES	*Students will be able to:* › create art similar to that of other cultures being studied in the regular classroom › identify similarities and differences in the meanings of common terms such as form, line, contrast that are used in the various arts › identify ways in which the principles and subject matter of other disciplines taught in the school are interrelated with those of visual art such as the mathematical basis of color relationships, proportions of color mixing, or the scientific side of light frequency and absorption, etc.