

Go Forth Unafraid

THE DALTON SCHOOL



Middle School Curriculum Guide

Dalton Middle School

Curriculum Guide

Dalton's Middle School Program addresses the specific learning needs of young students at a significant stage in their development. Our curriculum is carefully planned, sequential in structure, integrated in discipline, enriched by its variety and depth, and grounded in the knowledge that students have individual learning styles and come from diverse backgrounds. Our program provides a balance between attention to basic concepts, necessary skills, and body of knowledge with a need for students to explore a wide variety of interests and experiences. We want our students to be excited about their learning and take increasing responsibility for it. In such an intellectually vibrant environment, our teachers help their students achieve a mastery of skills and develop critical thinking capacities that will successfully lead not only to higher-level thinking but also to an understanding of themselves and the world in which they live. Dalton Middle School students are thus nurtured to become both independent and life-long learners. We welcome you to the Middle School and invite you to read through this curriculum guide. We hope that it proves useful to you as your child progresses through the year.



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LANGUAGE ARTS/ENGLISH

Fourth Grade Language Arts

We believe that developing our students' love for reading and writing is essential. We use a process approach to literacy education and to writing instruction; these are integrated into every fourth-grade classroom.

Each fourth-grade teacher may structure his or her classroom differently, but each provides a wealth of opportunities to ensure that students are reading consistently and from a variety of sources. Individual book choice is balanced with group literature studies, and we stress the blending of reading, writing, talking, and listening as integral to the development of literacy and comprehension.

Reading, of course, is an active process, and we encourage our students to respond to their reading in a multitude of ways including literary responses, oral presentations, art and illustration, and creative writing. In class, our students use journals to note their ideas and thoughts, and they participate in teacher-guided group read-alouds and in a variety of process writing activities. Our fourth graders are expected to read for a half hour every evening at home. In the past, class studies have included: an author study of E.B. White, a thematic study of *Cinderella*, *Beauty and the Beast*, and a in-depth study of a book of fiction. Teaching options include such books as: *The Great Gilly Hopkins*, *Maniac Magee*, and *Alice's Adventures in Wonderland*. Students explore various genres including historical fiction, poetry, biography, memoirs, and short stories.

Our writing instruction program is as active and interdisciplinary as the reading program. The writing workshops give our students the necessary and valuable opportunity to write, revise, and confer. In such a system, our students are encouraged and directly instructed in how to rethink, rearrange, and polish their words. In so doing, students learn strategies for clear, cogent writing. The students may have the option of publishing their work. Much of the published work is an outgrowth of interdisciplinary units. Sample fourth-grade publications in the past have included Pilgrim historical fiction, Cinderella stories, essays, illustrated oral histories, and grade newspapers.

Skills such as spelling and grammar are primarily taught in context through editing conferences, labs, and mini lessons. A more formal program, where spelling, grammar, keyboarding, and other writing skills are taught directly, supports this approach. Cursive handwriting is reviewed and reinforced as necessary.

Fifth Grade Language Arts

The fifth-grade language arts program is based on the continuous development and integration of writing and reading skills. Class books and independent selections are chosen from a variety of reading levels and genres such as children's classics, fantasy, and historical fiction. This approach of guided and independent reading fosters a love of literature and also emphasizes

comprehension and interpretative skills. Strategies and skills are taught and practiced to develop a higher level of literacy and to promote critical thinking.

An introduction to the elements of literature strengthens the students' reading comprehension, intensifies their love for the material, and helps them become more proficient, organized writers. There is a focus on understanding plot development, setting, characterizations, conflict, and theme as elements of literature.

Comprehension, of course, is key to developing more sophisticated literacy. Fifth-grade teachers work with their students to strengthen their reading strategies and reasoning skills – both of which will impact literary analysis and independent thinking. Some reading strategies that are stressed include: building comprehension skills in connection with tasks, identifying the main idea of the reading with supporting details, making inferences and drawing conclusions, using words precisely, and recalling facts. The reasoning skills include: distinguishing fact from opinion, identifying relevant information, evaluating opinions, sequencing ideas, and determining cause and effect. These skills help to develop a capacity for critical thinking.

Fifth graders make real leaps in their writing skills and abilities. Expanding paragraphs into an essay form is the focus of the fifth-grade academic writing program. Our students concentrate on the basic paragraph structure that ultimately leads them to a three-paragraph essay. In addition, an introduction to research methods reinforces the importance of each step of the process.

The writing process continues to be key to the curriculum. The elements of drafting, student conferencing, revising, and editing into final presentations are stressed. Creative assignments are part of the fifth-grade writing curriculum as well, including poetry, personal reflections, narratives, and stories. Students begin to offer their own literary analysis and voice their opinions about what they and others have written — a necessary step in the journey to having an individual perspective, developing literary taste, and fostering an independent point of view.

Grammar, spelling, and vocabulary continue to be taught during skill lessons and are integrated into the reading and writing assignments.

Sixth Grade English

The sixth-grade program expands on the fourth and fifth-grade integrated reading and writing curriculum. It continues to develop and deepen these skills and abilities and adds a vital new component: literary analysis through both personal and more formal writing. The sixth-grade program is literature-based, and writing and reading skills are coordinated with specific texts. Students read and discuss literature and are expected to respond to the material through creative and analytical writing. Each student assignment and response to the reading involves class discussion, a number of short responses, and a culminating longer piece. Incorporated into the writing curriculum is a review of paragraph structure with emphasis on learning how to use quotations effectively for supporting textual evidence. Students then become familiar with the longer form of a five-

paragraph essay to respond to questions about their reading. This process helps the student to analyze and synthesize the material and maximize understanding.

The units of the course center on particular literary forms and some of the themes they incorporate. These forms include novels, tales, poetry, mythology, and plays. Students discuss the use and meaning of poetic devices and incorporate them into their own poems. Samples of the literature within these forms that sixth-grade students have studied in the past include: *Roll of Thunder, Hear my Cry*; *Tom Sawyer*; *Haroun and the Sea of Stories*; poetry; selected Greek Myths; *The Children's Homer*; a children's version of *The Orestia*, read in conjunction with its production for the Greek Festival; and plays such as *Inherit the Wind*.

In addition to literature, there is a comprehensive skills program that focuses on strengthening the students' vocabulary, grammar, and spelling. The skills program is integrated into the students' study of the literature and helps to solidify understanding and comprehension. Students are expected to be reading a steady selection of books outside of the classroom.

Seventh Grade English

The seventh-grade program integrates a thematic literature curriculum with a writing program that gives the students steady exposure to and experience in both critical and creative writing. Our literature program is divided into thematic units of subject matter that are of interest and concern to seventh graders: coming of age, alienation from society, the individual vs. society, and the individual's ability to make a difference in the world. In exploring these themes, students read from a variety of genres including short stories, novels, drama, memoir, biography, and poetry. Our teachers choose a rich sampling of literature within each genre for the students to read. Past choices have included: *To Kill A Mockingbird*, *The Outsiders*, *Lord of the Flies*, *The Chosen*, *Romeo and Juliet*, *Raisin in the Sun*, and *Flowers for Algernon*. Our short story units include selections by London, Poe, de Maupassant, O. Henry, and Hawthorne; and our poetry unit covers a range from Yeats to Pablo Neruda, Frost to Dylan Thomas. As a complement to the reading done in class, we encourage our students to continue with their outside reading as well. Our students are encouraged to participate actively in discussions of the literature, either in groups or individual presentations.

Understanding that in form there is meaning, we work with the students on a close reading of the texts with focus on character, plot, setting, theme, point of view, symbolism, irony, figurative language, and vocabulary. To reinforce their understanding of the reading, students learn to respond to inferential questions by supporting their answers with citing textual evidence and by learning how to formulate their own questions to the reading. A major emphasis of the literature program is the critical essay. Making major strides in the development of the five-paragraph essay, seventh-grade students learn how to craft an original, focused thesis statement and proceed to develop the balance of the essay. Conferencing with teachers and peers is an essential element of the drafting process during which grammar and

vocabulary are stressed. In addition to honing their critical writing skills, students also develop creative writing skills by writing their own poetry, short stories, and plays.

Grammar continues to be taught both formally and informally through both class lessons and editing conferences with teachers and peers where the needs of the individual writers can be addressed.

Eighth Grade English

The goal of the eighth-grade English program is to have the students strengthen their textural analysis of literature and apply that analytic ability to essays and other writings. At this grade level, our students are expected to write clear prose with accurate grammatical structure and to form articulate thesis statements. Attainment of these expectations by our students is possible because of the sequential work done in grades five through seven in reading, writing, and literary analysis.

Our eighth graders further learn to utilize textual evidence to support their more general assertions. They work on making the leap from summary to literary analysis and they develop and execute original projects that illuminate the texts studied in class. The writing program concentrates on a text-based analysis of literature. Students are encouraged to ask and form questions about their reading. These questions, in turn, form the basis for paper topics and ideas. All papers are done in at least two drafts: student editors, as well as the teacher, read and comment on the essays. As a result of the editing process, students choose stronger topics for their papers, learn to define a thesis, gain a clear willingness to edit and revise, and learn to criticize each other's work productively.

Grammar is taught both individually through writing conferences and through direct class instruction on specific topics. Vocabulary is generated from the literature. The students learn to master the skills of working in groups, to negotiate and set deadlines, and to discuss the literature in preparation for full-class discussions. Students will also work on independent projects focusing on outside reading. There continues to be an expectation that students will sustain their outside reading on a steady basis.

In our effort to integrate the various disciplines throughout our curriculum, the eighth-grade English program runs parallel to the social studies curriculum. Where applicable, the literature read in English class informs and enriches the students' understanding of the American history they are studying. Students read from a variety of genres including fiction, non-fiction, poetry, short story, and drama, and past studies have included: *The Crucible*, *Of Mice and Men*, *Catcher in the Rye* as well as works by Poe, O. Henry, Steinbeck, Hemingway and Hughes. In addition to the American literature, Eighth Graders read Shakespeare's *A Midsummer Night's Dream*.

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MATHEMATICS

Fourth Grade Mathematics

Knowing that it is vital for our students to develop the fundamentals of number and symbol sense, emphasis is placed in the fourth grade on their ability to understand number properties, estimation, problem solving, and patterns. Skills with all four operations for whole numbers continue to be developed. It is expected that multiplication facts will become automatic in fourth grade and that each student will solidify the algorithms for multiplication and division. Other topics covered include: decimals (place value, addition, and subtraction), fractions (comparison, equivalence, simplest form, addition, and subtraction), measurement, geometry, and organizing and interpreting data.

Encouraging the students' creativity, enjoyment, and confidence are integral elements of this program. The use of manipulatives, individual and whole group activities, and discussions adds to the active and collaborative nature of the learning. Proficiency using algorithms is reinforced through worksheets and homework assignments.

Throughout the year, teachers facilitate their students' mastery of the material by encouraging them to make predictions and develop strategies. They guide the students to collaborate and share their theories with one another.

Fifth Grade Mathematics

Understanding that in the study of mathematics one skill builds upon another and that being able to reason mathematically is a cumulative process, our fifth-grade program focuses as much on conceptual knowledge and understanding the process of problem solving as on arithmetic competence. Therefore, we place emphasis on the following areas: deductive and inductive reasoning, formulating the appropriate rule (algorithm) for a specific problem, and searching for patterns in problems.

Because fifth grade is the final year of basic arithmetic, computational skills are strengthened. Units of study include: equivalence in fractions as well as proficiency in all four operations with fractions; place value in whole numbers and decimals; and geometry, including areas and perimeters of polygons and their formulas and circumference of the circle and its formula.

Most importantly, we help our students learn to defend their reasoning and answers with logical, sequential explanations. They are encouraged to question, probe, and challenge existing criteria. In short, they work at becoming independent thinkers and learners.

Sixth Grade Mathematics

The sixth-grade curriculum marks a transition between the concrete arithmetical work that absorbed our students in the fifth grade and the more abstract conceptual work presented in the seventh and eighth grades. This pre-algebra course utilizes a cur-

riculum that recognizes the necessary arithmetic skills and the importance of abstract analytical training, both of which are essential for a solid foundation in mathematics.

The basic arithmetic skills that are emphasized this year include: order of operations with integers, fractions, exponents, decimals, ratios, percents, and proportions. An introduction to the more conceptual and abstract language of mathematics and problem-solving includes work in the following subjects: variables, equations vs. inequalities, solving equations with inverse operations, integers and rational numbers, number theory, graphing, and geometry.

Throughout the year, students are given the opportunity to apply their knowledge of mathematical properties and their mathematical reasoning to multidisciplinary projects, thus strengthening the learned concepts. They incorporate technology into their work by combining the Excel graphing program into their study of data collection and display. Concurrent with the social studies unit of the Greek world, students in math class research and build Greek temples to scale. In addition, the students utilize mathematical concepts and reasoning in real life situations including the simulation of buying and selling stocks and using the Internet to research jobs, locate places to live, and establish a budget.

Seventh Grade Mathematics

In order to maintain continuity and consistency in mathematics from grade six through grade eight, the seventh-grade math curriculum builds on the pre-algebra curriculum of the sixth grade. This is in preparation for a student's formal study of Algebra I in the eighth grade. During the first two months of school, our seventh-grade students review several elementary algebra skills and concepts before they begin to extend their knowledge base during the subsequent months. Although we group our conceptual students together, all students use the same textbook. Our students are given the opportunity to complete each level of the mathematics assignments and have the option to work on the advanced extension material. Meeting grade level expectations is defined as demonstrating basic competency with these advanced pre-algebra skills and concepts. The seventh-grade curriculum also includes a detailed study of solid and mensural geometry.

Eighth Grade Mathematics

Our eighth-grade algebra program represents an extension of and a carefully constructed sequential step in the work the students explored in the seventh grade. The curriculum is a standard Algebra I course in both scope and sequence. Our students learn the material by analyzing and studying statements, illustrations, and examples. The textbook is kept at home and used as a homework supplement. It is the active engagement in the material that helps to secure the students' understanding of the concepts.

The scope and sequence of the first semester's coursework includes: a review of pre-algebra concepts, solving first degree and literal equations, operations with polynomials, and factorization. Second semester topics are sequentially structured and include: analytic geometry, inequalities, simultaneous equations, functions, and a study of rational and irrational expressions.

In addition, the topics covered in eighth-grade mathematics support and are integrated into the subjects studied in the eighth-grade science classes.

SOCIAL STUDIES

Fourth Grade Social Studies

The experience of moving from the First Program to the Middle School provides the engaging metaphor of “migration” for the social studies curriculum in the fourth grade: Immigration to the United States. We view Little Dalton as the Old Country and Big Dalton as the New Country. We emphasize the themes of continuity and change and the responsibilities of citizenship in the new land, issues that are central to the fourth graders’ experience. We use how a fourth-grade citizen participates in class, grade, and school as the springboard for learning how a citizen functions in his or her country.

The fourth graders investigate their new school building and division closely. At the same time, they reach out to learn about immigration through the experiences of their family and friends. They learn about immigration in New York City through reading, trips, and current events.

Our students become historians and learn about history through research and investigation of primary sources. They reflect on what history is, who tells it, and how to decide what is significant. Central to the program is the students’ continual consideration of how to understand the past through the great variety of historical evidence available such as oral histories, artifacts, sites, documents, and primary and secondary sources. Our young historians become competent presenters of history in writing, art, and performance.

Finally, the students move back in time to consider the Pilgrims, a group of early immigrants to this country. Once again, utilizing their knowledge of more recent immigration, our children work to create pictures of these immigrants from over three hundred years ago. This unit culminates in an overnight trip to Plimoth Plantation, a living history museum of the Pilgrims in Massachusetts.

The year ends with an overview of the geography of the United States.

Fifth Grade Social Studies

The goal of the fifth-grade social studies curriculum is twofold: having children reconstruct the past by examining primary sources and providing students with a solid foundation for the ongoing study of history. Students focus on the overarching concepts of geography, kingship, religion, and trade. We accomplish these goals through a year-long study of two ancient civilizations: Bronze Age Sumer and Ancient Egypt.

Before investigating these ancient cultures, we delve into an overview of geography. The students read maps, identify and understand landforms, and familiarize themselves with the physical world at large. Although this is a brief introductory unit, it provides students with a foundation for the ensuing examination of specific regions.

The curriculum then turns to Southern Mesopotamia where primary sources introduce the students to the ancient world. Each child becomes an historian as the teacher, acting as facilitator, helps him or her extract meaning from each reading and piece of art. Weaving together geographical knowledge, mythology, art, and archaeology, the children discuss, analyze, debate, and finally form some understanding of an ancient civilization.

When the students begin their study of Egypt, they are familiar with many of the concepts and vocabulary central to an understanding of the ancient world. Thus, they are able to apply them to a second and very different ancient civilization.

In addition to the use of primary sources, the fifth graders begin to read secondary sources and write a short research report on a topic of their choice. Throughout the year, the curriculum is enriched with activities, projects, and creative writing designed to complement the readings and class discussions. Hands-on assignments, museum trips, and presentations by experts build a richer experience for all the students.

Sixth Grade Social Studies

Our sixth-grade social studies curriculum could easily be called “The Student as Historian” because it revolves around teaching the student the nature of historical inquiry and enabling her or him to take on the role of historian.

Early in the year our study focuses on the minor kingdoms of the Levant during the Iron Age. These include the Hebrews, the Philistines, their archenemies, and the Phoenicians, authors of our own alphabet. The young historian, turned archaeologist, then begins a simulated excavation of a provincial Assyrian site. There, materials from the petty kingdoms of the Levant will be found brought as tribute and booty en route to the heartland of an ever-expanding Assyrian Empire.

The Greek world opens to the student with tales from Homer and Hesiod followed by an excursion into the land of philosophy with a study of the Ionian natural scientists. Classical Greece follows with a second simulated excavation exhibiting sculpture, architecture, painting, armor, and fragments of the speeches of great philosophers and statesmen.

The year concludes with an exploration of “Rome, the Model Empire.” Students construct ancient monuments to better understand how Rome unified and made the cultures of those peoples living in the areas from the Persian Gulf to the south of Scotland “Roman”. The year ends with the adoption of Roman structures by the early Christians.

Seventh Grade Social Studies

Seventh grade continues the themes and skills begun in fifth and sixth grades. Notions of kingship, cultural assimilation, religious beliefs, and trade direct the student to a deeper understanding of the continuing interconnectedness of the human endeavor during the Middle Ages in the West, the Middle East, and North Africa.

Students begin to observe the process of assimilation and kingship in the Scandinavian epic "Beowulf." They then examine the remains of an Anglo-Saxon gravesite in Sutton Hoo, England in order to glean information about trade and expansion in the sixth and seventh centuries C.E. After studying the early impact of the Germanic tribes on the British Isles, students observe the new Christian vocabulary in the manuscripts of Lindisfarne, the earliest of western monastic communities. This vocabulary, developed in the late Roman Empire, is found once again not only in the Romanesque churches of France but also in Charlemagne's huge efforts to re-create a united empire and call it Holy and Roman. Exploration continues through Moslem Spain, North Africa, and the Holy Land. Here we observe the merchant, religious, military and intellectual exchanges among Christians, Germanic tribes, Muslims, and Byzantines that contribute to the formation of Western Europe.

Feudalism and the crusades, Viking and Saxon invasions, chivalry and romantic epics, bishops, the church, cathedrals and mosques, castles, and universities enliven the students' visual and intellectual voyage. We conclude the year with the Black Death and the impact it had upon the Mediterranean basin.

Eighth Grade Social Studies

Eighth-grade social studies is a survey course in American History. The class explores American History chronologically, though not necessarily linearly. The course focuses on themes such as technological change, American culture and values, American democracy, conflict and unity, economics, diversity, the environment, and the relationship of the US to the world, themes that weave themselves through the development of our nation. Considerable attention is also paid to the acquisition and refinement of the tools that one needs to become a social scientist. Note taking, research skills, presentation, and writing are stressed throughout the year.

The class uses a secondary text; however, each assignment includes a supplemental packet that, along with worksheets and activities, includes a variety of primary source material. The main topics covered in the course of the year are: "A More Perfect Union: Shaping American Government" (1600s-1800s); "Division and Uneasy Reunion" (1848-1877); and "Expansion, Change and a World War" (1860-1920). A research paper (topics from World War I to World War II) and "The Decades Project" (Post World War II America) complete the year. In addition, each assignment includes optional (extra credit) activities that highlight the connection between history and literature and encourage students to explore alternative presentations of American history in film and plays.

SCIENCE

Fourth Grade Science

The theme of fourth-grade science is an "Investigation Into Forces That Act upon Earth and its Inhabitants." The curriculum includes the study of weather, astronomy, matter, structures, energy, geology, and environmental issues.

Cooperative learning and a hands-on approach are key to sparking the children's curiosity in our topics of study. We continue to practice the scientific method in our investigations, strengthening skills essential to all scientists. Discussions, various reading material, and films support the students' learning process.

To further foster our students' interest in the physical environment, each student designs supplementary projects on related topics of his or her choice. These projects are completed at home, and they might include a field trip, a research paper, experiment, a model, or an informational poster. The science teachers provide support, resource materials, and guidance to the students throughout the process.

In October and May, the fourth graders take two trips to Black Rock Forest, an environmental study area near West Point, New York. The fall trip introduces the children to a forest environment, while the spring trip focuses on the powers that act on the surface of earth. Students apply concepts learned in the classroom to a variety of fieldwork activities. Both trips help to develop the children's respect and sensitivity towards nature.

Fifth Grade Science

Our themes for the year are ecology and biodiversity. The curriculum includes the following topics: interactions among living organisms and their environment, the five kingdoms, natural selection, forest and wetland ecosystems, and reproductive biology. A cooperative learning, hands-on approach to learning helps to strengthen the students' interest in and understanding of the material. As the year progresses, the students will have many opportunities to design and report on various investigations using the scientific method. Each student, utilizing the report writing process introduced to them in the language arts program, will write a formal research paper on an arthropod.

For each assignment that the student completes, there is a supplementary project that is worked on at home. These projects are intended to offer students a chance to broaden and deepen their interest in a given topic. Previous projects include field trips, research papers, experiments, model making, information posters, and videos. The science teachers provide support and guidance to the students throughout the process.

The fifth graders will also make two trips to Black Rock Forest, one in the fall and one in the spring. The fall trip focuses on forest ecology, while the spring trip emphasizes the use of aquatic life as indicators of water quality. Revisiting the forest in the fifth grade continues to foster the children's respect for and sensitivity towards nature's intricacies.

Sixth Grade Science

Students in sixth-grade science advance their study of the scientific method and the principles of scientific methodology that they began in the fourth and fifth grades. The sixth-grade program is founded on the Investigation-Colloquium Method. Students research carefully chosen materials and processes and arrive at an understanding of fundamental scientific phenomena through experiment and discussion.

In this paradigm, the teacher acts primarily as a guide and advisor, continuing to train his or her students in the use of the scientific method and in the necessary skills for success. Students are encouraged to take on increasing responsibility for their learning. They engage in trial and error and observation and raise questions requiring answers that can be found through their experiments and discussions.

In a typical investigation, students first carry out an activity, recording what they observe. They then discuss their observations and formulate hypotheses and propose how these hypotheses might be tested. The students often use simple abstract models, such as Kinetic Theory, to construct their hypotheses. Further experiments, followed by more analysis and discussion, allow the students to develop cogent explanations for what they have observed. Through this process, their excitement for learning is maximized, and they continue to approximate the thinking of a scientist.

The topics covered include heat and pressure, electricity and magnetism, and geology and paleontology with the use of a computer program, Ecotype. In addition to regular homework assignments and reports on experiments, each student carries out an extended research project during the Ecotype assignment and designs and builds a practical project during the electricity assignment.

Seventh Grade Science

Our seventh graders focus on a comprehensive study of human biology. Students cover a wide range of topics including all systems of the body (circulatory, skeletal, muscular, respiratory, excretory, nervous, endocrine, reproductive, immune, and digestive), as well as nutrition, behavior, diseases, sexually transmitted infections, AIDS, and substance abuse (including smoking and alcohol abuse).

The concept of homeostasis, so important for understanding human physiology, is our starting point for studying interactions between humans and the environment. Rather than relying solely on one teaching model, our students are given myriad approaches to explore the material including readings, discussions, videos, and experimental work.

Experiments are done in class and at home. At school, our students carry out experiments related to bone composition, depth perception, and a study of osmosis. At home, they experiment with the concept of daily height change and develop a specific learning experiment that is individually chosen. In addition, each student completes a thorough analysis of his or her diet during the nutrition assignment.

Students complete three supplementary projects during the year. These projects offer them the opportunity to explore, in more detail, topics studied in class or to investigate related topics. Our students are encouraged to think for themselves and to pursue their individual questions to resolution. The projects are worked on at home and presented in class.

Eighth Grade Science

Eighth-grade science expands the students' conception of environment and focuses on developing the students' understanding of the Earth. The main emphasis is placed upon investigating fundamental physical processes and on developing the use of mathematics and graphing as descriptive and analytical tools. The interrelationship of math and science is highlighted to our students.

The course includes numerous activities, experiments, computer simulations, and demonstrations that engage the student in the learning process. All of these activities, and the discussions they engender, help advance the student from making intuitive observations to formulating formal scientific descriptions and explanations.

Our students are continuously trained in the practice of the scientific method and the skills needed to support that practice. They write lab reports, carry out independent investigations, and complete regular homework as a part of each assignment.

Topics studied during the year include density, mass, motion, force (particularly gravitational), energy (especially heat), and basic atomic theory. The progressive gains in understanding the breadth of this material allows students to develop fuller comprehension of earthquakes, volcanoes, weather, erosion, the formation of the Earth, and the Plate Tectonic Theory – the central theory for understanding our planet. The year's curriculum is designed as a series of integrated units, so that one set of investigations reinforces another.

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Foreign Languages

The Middle School foreign language curriculum exemplifies the heart of our educational philosophy: to balance attention to the fundamentals and the development of basic skills with the exploration of a wide variety of experiences. Middle School students, beginning in fifth grade, have four possible languages from which to choose: they can pursue the study of French, Spanish, Latin, or Ancient Greek.

FRENCH

Introductory French

Our students' first encounter with French is designed to be an exciting time for them; we use a full range of language techniques to foster the students' interest and the development of skills. Students are introduced to French orally in order to become familiar with the sounds of the language. The use of

English is avoided as much as possible to encourage students to make the connection between words and ideas in the new language instead of the English equivalent. We believe that this is the natural way to learn a foreign language.

Within a few weeks, students are able to carry on small conversations with one another. At that time, we introduce textbooks to supplement this beginning learning. Our emphasis is on developing strong study habits. Daily homework provides students with vital practice of the material that has been covered in class.

An assignment or “*plan de travail*” is regularly distributed to students. It contains grammar review, vocabulary, daily homework, and special projects. It also serves as reference and/or resource for our students.

French I (MS)

The goals of the second year of French are to build on material learned in Introductory French and to provide students with a strong grammatical and lexical foundation upon which future progress is based. The students are introduced to rich and authentic dimensions of Francophone culture from West Africa, France, Canada, and the Caribbean. Well beyond their exposure to a variety of accents, students gain insight into the family, school, and social life of adolescents from around the Francophone world. Our approach continues to strive to generate excitement for learning. In addition, we give more systematic attention to grammar rules, vocabulary acquisition, and consistent application both in class and via nightly homework. The students are also expected to develop productive study habits. As in Introductory French, we avoid the use of English and use a functional and interactive approach of teaching a foreign language. Since collaborative learning is central to the class dynamic, students are expected to listen to one another, to keep their attention focused, and to learn how to work efficiently in pairs and in small groups. By the end of the year, students are able to express their thoughts in the present, past, and near future tenses of both regular and irregular verbs. We also introduce students to a variety of idiomatic expressions, the imperative mood, affirmative, negative, and interrogative sentence structures, and subject and object pronouns.

French II (MS)

During the third year in French, the study of grammar and vocabulary becomes more rigorous. The basics that our students were provided in Introductory and French I help to ensure their readiness for this immersion. By the end of the year, they are able to narrate events and aspects of their life in detail, in past, present, and future tenses.

In French II, the main thrust of the curriculum is communication. Both oral and written production is emphasized. The students improve their communication skills through our exploration of the Francophone world. For example, we delve into the history, geography, and contemporary life of the peoples of Martinique. We discuss the history of the castles of the Loire Valley, and we study the traditional and modern dynamics of life in Abidjan. Our students are given many opportunities to hone their speaking skills in small groups where the spontaneity of

their expression is encouraged. Furthermore, the students produce an increasing amount of work in writing through journal work and other short compositions.

French III (MS)

For placement in appropriate levels in high school French courses, students must leave Middle School French III able to narrate accurately, independently, and at length. The use of verb tenses, the memorization of conjugations, and the exploration of related grammar topics (object pronouns, negations, question formation, verbal structures involving prepositions and infinitives, etc.) are required. Assignments supplement text and workbook exercises, providing nightly homework as well as composition outlines to review, with the goal of building a permanent vocabulary for active communication. Mastery of past, present, and future tenses is necessary for passage into more advanced courses, where it is assumed that the students can speak and write spontaneously and idiomatically. Students read and summarize two narratives, a first step in reading independently and writing in French for literary purposes. In addition, students explore cultural aspects of French speakers in Belgium, Switzerland, Senegal, Morocco, Tunisia, Guadeloupe, and Canada via textbook, readings, and films,

SPANISH

Introductory Spanish

Our students’ first encounter with Spanish is designed to be an exciting time for them; we use a full range of language techniques to foster students’ interest and the development of skills. Students are introduced to Spanish orally in order to become familiar with the sounds of the language. The use of English is avoided as much as possible so as to encourage students to make the connection between words and ideas within the target language. We believe that this is the natural way to learn a foreign language. Thus, class participation is key, whether in conversation, drills, dialogues or skits. Within a few weeks, students are able to carry on simple exchanges with one another. At that time, we introduce textbooks to supplement this active start to learning the language. Audio and videotapes are used to reinforce the oral and aural skills.

We also emphasize developing strong study habits. Daily homework, which can range from memorizing vocabulary, writing exercises in the assignments, to preparing skits, provides students with vital practice of the material that has been covered in class. We begin to explore the varied cultural aspects of Spanish-speaking communities within the United States and in Mexico. Students learn about family, school, and social life of adolescents in those communities.

An assignment (*plan de trabajo*) is regularly distributed to students. It contains grammar review, vocabulary, daily homework, and special cultural projects. It also serves as reference and/or resource for our students.

Spanish I (MS)

The goals of the second year in Spanish are to build on material learned in Introductory Spanish and to provide students with a strong structural foundation upon which future progress is based. Our approach continues to strive to generate excitement for learning. Students think critically about the Hispanic culture as well as their own. They gain knowledge of daily life in Puerto Rico and Mexico through themes like sports, bargaining in a market, and ordering food in a restaurant. In addition, we give more systematic attention to grammar rules, vocabulary acquisition, and consistent application. By the end of the year, students are able to express their thoughts using regular and irregular verbs in the present.

Collaborative learning is central to the class dynamic. Group work is emphasized. Students are expected to listen, to keep their attention focused, and to learn how to work efficiently in pairs and in small groups. Students develop productive study habits to foster independence.

The assignment (*plan de Trabajo*), a vital resource for our students, is designed in such a way that grammar topics, vocabulary, and homework are interrelated. Audio and videotapes are used in class to reinforce the oral and aural skills.

Spanish II (MS)

In the third year of Spanish, we present vocabulary and grammatical concepts through a steady progression that supports the students' learning to ensure confidence and success as they move from recognition to both oral and written production. By the end of the year, students are able to narrate events and discuss aspects of their life in the past, present, and immediate future. Students broaden their worldview through the understanding of their own culture and that of others in experiences such as an imaginary tour of Mexico City, the discussion of Latino art in Chicago, and the analysis of the social value of "beisbol" in Puerto Rico.

Spanish III (MS)

The Spanish III curriculum revolves around the refinement of language skills based on the communicative and cooperative approaches. Spanish III marks an important sequential transition from the introductory work to more advanced courses in composition and conversation. Our course provides students with a solid foundation in grammar. We analyze and practice extensively the use of the present, the past, and the future of regular, irregular, and reflexive verbs and the present of the subjunctive mood and its application.

In class students engage in dialogues, conversations, presentations, and group activities that emphasize oral communication. In addition, students continue to gain insight into authentic cultural responses as they analyze and discuss historical, geographical, and contemporary issues and perspectives.

LATIN

Introductory Latin

In the first year of Latin, we balance the mastery of grammatical constructions with opportunities for translation. Our goal is for students to develop basic translation skills and gain knowledge of the world of the Romans. In tracing the etymologies of Latin words to their English derivatives, the students are asked to draw connections between the roots of an Ancient culture and our own world.

Throughout the course of the year, the students learn basic Latin forms, vocabulary, and syntax. They practice translating from Latin into English and from English into Latin. Through readings, discussion and videos, they begin to develop an understanding of Roman culture and history.

Latin I (MS)

This course is a continuation of work begun in Introductory Latin. Second year students continue to acquire vocabulary and grammatical forms and to develop their translation skills. In Latin I, the study of etymology serves as a reminder of the similarities between the way we spell in English and Latin. Through the narration and playing out of ancient mythology and legend, students sharpen their understanding of analogies between an earlier culture and our own. Within an "everything is relevant" classroom, the presentation and discussion of language, of history, and of culture are bundled and understood as integral to each other.

Latin II (MS)

Students in the third year of Latin continue their study of grammar and syntax. During this year, translation becomes a major focus. As the sentence structures become increasingly complex involving a variety of subordinate clause types, students further their own recognition of such grammatical patterns and acquire a larger feel for the possibilities of language and grammar. The practice of reading and translating adapted Latin prepares the students for translating original authors in later grades. The tantalizing details of history presented in these readings and in the ongoing narratives of Latin history give evidence to the richness of Roman culture.

Latin III (MS)

After a review of grammar and forms from previous years, we add the forms and uses of the subjunctive mood to complete our study of Latin grammar. We finish the year translating selections from Livy.

GREEK

Introductory Greek

Throughout the year we guide our students in learning the fundamentals of both grammar and forms. Students learn the origin of the Greek alphabet and how to pronounce ancient Greek. They develop the skill to read and to write Greek with comfort and assurance. We expose the students to the basic structures of Greek grammar and syntax such as conjugation, inflection, tense,

mood, and agreement. Our students learn to identify the parts of speech and to analyze sentences. At the same time, the students are studying these fundamentals, they are building Greek vocabulary and developing skills in memorization and translation.

Greek I (MS)

At this level students learn additional grammar, continue to build vocabulary, and strengthen their translation skills. Students learn numbers, further inflection patterns, participles, and the concept of voice in verb structure. Students read myths in Greek and learn basic history of Athens. The influence of Greek vocabulary on English begins to be emphasized. Students learn about Greek culture and history in greater detail.

Greek II (MS)

Students continue to add to their Greek vocabulary and learn the principal parts of verbs. They learn the future and other tenses and important irregular verbs. The class discusses adverbs and pronouns. Our students delve deeper into Athenian history and the events that led to the Peloponnesian War. They continue to develop translation skills and add to our arsenal of vocabulary.

Greek III (MS)

Greek III students learn how to compare adjective and adverbs. In addition, they learn demonstrative adjectives and continue to learn more irregular verbs that appear frequently in Greek. Our readings, adaptations from Herodotus and Thucydides, are more challenging and complex. Students are now reading complicated Greek and have the foundation necessary to learn the more advanced grammar found in Book 2.

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ART

The stimulating workshop environment of the Middle School Art program encourages each child's personal expression through creative exploration of art materials and methods. Through a series of assignments, students are introduced to the basic visual elements of art: line, shape, color, texture, pattern and composition. Although the assignments are structured, they are also open-ended to allow for a variety of imaginative responses. Students engage in art experiences that develop artistic skills, broaden visual awareness, explore art materials and processes, and encourage divergent thinking. Assignments provide a vehicle for self-expression. The art assignments are often inspired by the work of a particular artist, introducing art history to students in a hands-on way. Students also use the computer as an additional visual tool.

Our light-filled art studios are inviting and informal. Students have a genuine studio experience with an art teacher who is also a working artist. Each child is given the skills and knowledge to succeed in art class and achieve a sense of personal accomplishment and self-confidence. We evaluate each student's performance based on his or her personal effort, involvement, and achievement in the studio.

Fourth Grade Art

In art class, fourth-grade students work on specific assignments that introduce the basic vocabulary of two-dimensional design: line, shape, and color. The qualities of different media are demonstrated and discussed.

Art assignments in the fourth grade include: collage (based on the work of Henri Matisse, Kurt Schwitters, and Romare Bearden), exploratory drawing where students use the suggestion of a dropped string to develop an image, portraiture, paintings of imaginary creatures, puppetry, soft sculpture (inspired by the work of Claes Oldenburg), and watercolor painting (based on the work of Paul Klee). Studio experiences may include an introduction to the potter's wheel, the creation of a found object circus based on the work of Alexander Calder, woodworking, papermaking, sewing, or bookmaking. At times, students have a choice of activities. Rather than working on a specific assignment, students explore materials and processes to express their personal imagery. We encourage the students' sense of invention.

Through all of these assignments, we foster students' imaginative thinking, develop students' artistic skills, and challenge students to deal with compositional, spatial, and pictorial issues.

Fifth Grade Art

Fifth-grade art assignments include an exploration of texture and relief through a collage or box construction (inspired by the work of Joseph Cornell and Louise Nevelson), rubbings, mask making (after looking at masks from a variety of cultures), collage printmaking, and puppetry. Opportunities exist for teachers to teach areas of their own expertise such as woodworking, book arts (papermaking and bookbinding), ceramics, and textile designs. At times, students have a choice of activities. Rather than working on a specific assignment, students explore materials and processes to express their personal imagery. Students often choose to use the computer as an added visual tool. We encourage the students' sense of invention.

Through these assignments, we foster students' inventive and imaginative thinking, develop artistic skills, and challenge students to deal with compositional, spatial, and pictorial issues.

Sixth Grade Art

Students work on a sequence of assignments that include: cutout collages exploring positive and negative design (inspired by the cutouts of Henri Matisse), motif and pattern design (in a painting, rubber stamped bookbinding, or game board design), perspective drawing (an exploration of the ways in which artists create an illusion of depth on a flat surface), landscape studies and abstractions, Greek Festival clay relief tiles, observational drawing using the contour method, and linocut printmaking.

Through these assignments we foster students' imaginative thinking, develop artistic skills, train the eye and hand, and challenge students to deal with compositional, spatial, and pictorial issues. These experiences allow students to gain satisfaction in the making of things by hand and encourage their sense of invention.

Seventh Grade Art

The seventh-grade visual arts curriculum includes classes in two-dimensional *Drawing and Design* and three-dimensional *Dimensional Design*. In *Drawing and Design*, we teach specific art skills and encourage imaginative responses. Students learn how to draw realistically and imaginatively. They also learn about abstraction. Through assignments involving drawing from observation, each child learns how to compose a picture using a viewfinder and to enlarge a composition using a grid. Other assignments include designing and creating a book and a poster, linocut cityscapes, and collage. Students explore concepts of art and design such as line, form and shape, value, texture, space, balance, color, and composition. *Dimensional Design* teaches the basic elements of three-dimensional design through a variety of sculpture materials such as clay and cardboard. Students sketch and then model a figure in clay. They can use their imagination to create their figure, paint it, and then make a found object environment for it. They also create an unusual sculptural container with cardboard and paint. Finally, they learn how to achieve the illusion of depth in a perspective drawing.

Eighth Grade Art

As the Middle School art program proceeds through the upper Middle School grades, specific foundation courses are offered. The eighth-grade art courses develop greater facility in various media and a broad foundation in fundamental art concepts. Students take *Painting and Composition* and *Ceramics/New Media*. These courses teach extensive art concepts, skills, and vocabulary while preparing students for the many varied high school art course offerings.

In *Painting and Composition*, students learn to create volume, space, texture, and atmosphere with line, shape, and color. Students work from direct observation and from their imagination. Although the Assignments are structured and sequential, they are open-ended to encourage the students' sense of invention. Students learn to create the illusion of three-dimensions on a flat surface. In the first assignment, students learn how to draw a cylinder. They accentuate the volume of the cylindrical form by mixing and painting a gradation of color values and transforming the cylinder into an interesting object. Other Assignments include a painting of an interaction between two animals, a cityscape, and a pastel drawing of natural forms.

Ceramics/New Media familiarizes Middle School students with three-dimensional design elements through their experience with clay. Students use basic handbuilding and wheelthrown techniques to create sculptural, functional, and abstract pieces. Glazing techniques are introduced as well. Assignments include building a form with modular units, slab construction, and throwing forms on the wheel.

New Media introduces students to technological tools within an art and design context. Students use new media, specifically computers, as an expressive tool to explore art concepts. Students are introduced to the basic techniques of working in Adobe Photoshop.

MUSIC

The mix of instrumental and vocal instruction and music appreciation introduces our Middle School students to the strength and variety of Dalton's exceptional music program and to the joy to be found in the making of and the appreciation of music. Our program is designed to ensure that every student experience success and accomplishment.

Fourth Grade Music

Fourth graders explore the full range of Dalton's music curriculum. Students who have been members of the Dalton First Program Chorus or who have been singing regularly elsewhere will be permitted to study and perform choral music for the full year. Likewise, students who have been taking private lessons on string instruments will be allowed to join a yearlong string class to further develop their ensemble skills. Other students will be given the opportunity to explore other areas of music through an introduction to woodwind, string, brass, and percussion instruments. In addition, interactive computer programs and other modern approaches will be used to develop interest in the vast world of music and will allow students to develop a life-long appreciation for this art form. All students will receive training in singing, listening, and rhythm to nurture and foster confidence in the one instrument they will always carry with them – their voice.

Fifth Grade Music

Course offerings in the fifth grade include chorus, entry level and intermediate classes in all instruments, and a developing curriculum for those students who have been identified as being better served by an active but less performance-oriented course of study.

Woodwind, brass, and percussion students use the "Standard of Excellence Band Method" as well as a variety of materials provided by the individual teacher. Choral students learn the fundamentals of vocal production and develop their intonation, range, and sight-reading with the use of solfege and unison and two-part literature drawn from many sources and composers. Beginning Strings is the first full year of formal instruction on the violin, viola and cello. A traditional text, which emphasizes the rudiments of music and note reading, serves as the outline of the course. The basic techniques of playing each instrument are taught and each new technique is incorporated into a short etude or song. Instrumentalists have the opportunity to perform for their parents in the spring, and choral students perform for their classmates in December and on the Middle School Musical Evening in June.

Sixth Grade Music

The vocal and instrumental courses in sixth grade are at intermediate or advanced level and are designed to prepare students for more advanced performance opportunities. They allow the students to pursue a course of study that can best meet their interests and abilities. There is a choral program and a rigorous instrumental program that includes: intermediate strings, woodwinds and brass, and beginning and intermediate percussion. Classes are small, confined to a specific family of instruments, and are taught by specialists in those areas.

We also offer a non-performance program, known as World Music. Its purpose is to relate music to its historical and cultural context and events, with exploration into what music means to each student. This course runs from sixth through eighth grade and is based on the ethnomusicology model developed at Wesleyan University. The material studied alternates between a survey of music cultures of the world and an American jazz component designed as an interactive computer course in collaboration with the Jazz Department.

Our students' achievements are celebrated with performances for their peers in the winter and for the parents in the spring. Vocal students and some instrumentalists participate in the Greek Festival, which is part of the sixth-grade academic curriculum.

Seventh and Eighth Grade Music

Seventh and eighth-grade students are combined to form a wide variety of performing ensembles that include: beginning percussion, intermediate strings, woodwinds, brass and percussion, the 7/8 chorus, string orchestra, concert band, jazz ensemble, wind ensemble, string ensemble, and percussion ensemble. World Music continues to be offered as well.

The music literature that is chosen for performance represents a broad spectrum of periods and styles and is designed to both challenge and satisfy the student musicians' abilities. Some advanced string players are assigned to the High School Orchestra — schedules permitting. Students continue to work together to develop respect, cooperation, and subordination of self-need to the greater needs of the class or ensemble. Performance opportunities exist and include concerts for peers in the winter and for parents in the spring. The Seventh/Eighth Grade Chorus also performs in various venues throughout the city, including nursing homes and department stores during holiday time and inter-school music festivals throughout the year.

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DANCE

The Dance Department fosters self-expression, independence, and creativity through the art of dance. Our objective is to motivate our students and inspire self-discipline, initiative, cooperation, and positive social values. We focus on developing kinesthetic awareness, group problem-solving ability, and imaginative thought in our students. By delving deeply into the movement

experience, students enhance their sense of self and enrich their creative and critical thinking. We aim to engage the physical, intellectual, emotional, and intuitive aspects of each individual through a comprehensive dance program. In addition to our core modern dance curriculum, we draw upon dance from diverse traditional and contemporary cultures including jazz, African, hip-hop, break dance, stepping, swing, yoga, capoeira, Greek, and Native American Dance.

Fourth Grade Dance

The goal of the fourth-grade dance program is to enable students to grow in body, mind, and spirit through an exploration of the art of dance. This course introduces students to modern dance fundamentals and to the basic elements of movement: space, time, force, flow and weight. It allows students the freedom of expression to explore new aspects of themselves and build strong bodies through new movement experiences. Emphasis is placed on creativity, learning to work together, and discovering the joy of movement. Fourth graders often participate in interdisciplinary projects that integrate with the academic curriculum and other art disciplines. Past projects have culminated in performances inspired by immigration, mapping, pilgrims, creation myths, painting, poetry, and literature.

Fifth Grade Dance

Fifth-grade dance builds on the movement fundamentals established in fourth grade through themes and assignments that inspire the mind, body, and imagination. Students learn more complex set movement phrases. Classes are high energy and action packed with time for learning new movement skills, full-bodied physical expression, and working together creatively.

Sixth Grade Dance

Dance for sixth grade encourages full-bodied physical expression, creativity, and cooperation in a non-competitive environment. The awareness and skills developed in fifth grade are further developed in sixth grade through work with rhythm, coordination, phrasing, and group relationships. Our curriculum exposes students to a wide range of movement forms, and encourages them to interpret these forms through improvisational games and dance making. A choreographed dance sequence or set of skills is learned and used as a basis for the student's own short dance study.

It is a Dalton tradition for sixth-grade dance to integrate with the grade-wide study of Ancient Greece. Students explore the role of dance in Ancient Greece, learn authentic Greek dances, and create original dance works based on Greek themes. This unit culminates with the Greek Festival performance. Sixth grade also features guest artists, a class trip to a professional dance performance, and participation in discussions with professional choreographers.

Seventh and Eighth Grade Dance

Our seventh and eighth-grade curriculum uses a wide variety of dance techniques and improvisational exercises to develop individual movement potentials. It is designed for students interested

in building both technical and creative movement skills. Technical development includes alignment, strength, flexibility, coordination, and rhythmic skill. Creative exploration integrates improvisation, phrasing, and choreographing dances. Individual expression takes on a deeper meaning as students begin to grapple with issues of self, identity, and relationships, issues often reflected in their dance making. A wide range of dance styles is introduced throughout the year, with an emphasis on increasing student's movement vocabulary. Our curriculum provides opportunities for students from diverse backgrounds to share movement vocabulary from their own culture. Students develop their individual dance interests and strengths in a safe environment of risk taking and mutual respect. This course features a site-specific video dance assignment. Students work collaboratively to create an original dance video set in various locations. Guest artists and class trips to professional dance performances are an integral part of the curriculum. This course provides an excellent foundation for future participation in the High School dance program.

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THEATRE

Grade five through eight students will engage in theatre arts in all its complexity, encountering a broad range of skills and techniques essential to "living truthfully under imaginary circumstances." The fundamentals of acting skills - listening, reacting, and responding - are the bases of the actor's toolbox. We study techniques of vocal and physical expression to hone skills as elementary as diction, projection, and articulation. Theatre is where work and play unite and where those interested in the art learn to study acting and themselves in a safe and supportive environment

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PHYSICAL EDUCATION

Our Physical Education Department works to develop each student's physical fitness, to improve his and her skills in each sport, and to teach the rules and strategies of athletic games while emphasizing sportsmanship and cooperation. Our program strives to create a safe environment that is relaxed and enjoyable, one that builds self-esteem and allows each student to feel comfortable in trying new activities while advancing his or her level of proficiency.

Fourth Grade Physical Education

Fourth graders participate in coeducational classes at Dalton's Physical Education Center. The program is designed to not only improve fitness and develop skills but also to build self-confidence.

All activities are taught in units of three to four weeks, a schedule that allows the students to develop an appreciation of the activity as well as having time to learn the skills of that particular sport or game. The varieties of sports taught are: soccer, hockey, volleyball, tumbling, sidewalk games, speedball/handball, lacrosse, basketball, badminton, wrestling, kickball, track and field, and wiffleball.

Fifth Grade Physical Education

Fifth graders also participate in physical education classes at the Physical Education Center. The program emphasizes fun, safety, fitness, skill development, sportsmanship, and social skills. Classes are coeducational and units include: soccer, football, hockey, volleyball, tumbling, sidewalk games, speedball/handball, lacrosse, basketball, badminton, wrestling, kickball, track and field, and wiffleball.

Sixth Grade Physical Education

The sixth grade meets in single sex classes for the entire year. During the fall and spring, the boys and girls are transported to Randall's Island for units in soccer, football, track and field, and softball. Throughout the winter months, classes are held in the Dalton Physical Education Center and utilize the two gymnasiums and the wrestling room for volleyball, tumbling, hockey, basketball, aerobics, lacrosse, speedball, badminton, and wrestling.

Skill development, safety, sportsmanship, physical fitness, and fun are emphasized throughout the program. In sixth grade, intramural competition begins, and teams compete in soccer, volleyball, basketball, softball, baseball, and track.

Seventh and Eighth Grade Physical Education

Making choices is a significant part of the combined seventh and eighth-grade physical education program. Throughout the fall, winter and spring, students are given the choice of selecting their favorite activity from a wide variety of electives and/or focusing on an athletic activity in which they want to improve their proficiency.

During the fall and spring, the seventh and eighth graders are transported to Randall's Island for their respective activities. Throughout the winter months, classes are held in Dalton's Physical Education Center and The Murphy Center at Asphalt Green.

For students participating in interscholastic competition, teams compete against other middle schools in football, soccer, volleyball, wrestling, swimming, basketball, track and field, softball, and baseball.

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PRECEPTORIAL

Goals and Instruction

The level of support changes as students enter the Middle School. In the lower Middle School (grades four and five) an inclusion model is used to support the majority of the students. Preceptors (learning specialists) are assigned to each house and work in the classroom during language arts, writers' workshop, or lab times. However, based on need, a small group of students meets several times a cycle with a preceptor for the development of and immersion in compensatory skills. Depending on need, a student will be supported in reading, writing, spelling, math, organizational skills, or time monitoring. In addition, the preceptors will be available to work with fifth-grade students during their daily lab period.

Students in grades six through eight receive a different model of intervention. The school offers English Workshop (EW) classes in sixth grade for children who need to strengthen their writing

skills. The EW classes meet eleven times a cycle and are designed to teach higher level critical thinking skills, organizational skills, pre-writing and writing strategies while covering the standard sixth-grade language arts curriculum. Other students in sixth grade and all students in seventh and eighth grades who are recommended for additional academic support meet regularly with a preceptor either individually or in clusters of two or three. All programs are designed to promote independent learning and self-advocacy and to address individual learning styles.

Math Support Services

While the primary resource for students needing additional instruction remains the math teachers who are available to meet with their students during lab, math preceptors are also available in the Middle School to assist students who may need specialized guidance. These students are seen individually or in small clusters during labs. Additionally, math preceptors work closely with the teachers and assist in the classroom when possible.

Dalton Middle School Skills Curriculum



READING SKILLS

4TH GRADE

5TH GRADE

RATE

Reads thirty minutes/night
Varies pace according to material (I)

Reads thirty minutes/night
Varies pace according to material (R)

GENRE

Fiction
Poetry
Folk Lore
Historical Fiction
Non-fiction (Social Studies)

Fiction
Poetry
Historical Fiction
Non-fiction (Social Studies)

COMPREHENSION

Comprehends literal information (R)
Recognizes main idea (R)
Selects essential detail (I)
Draws inferences from text (I)
Supports opinion from text (I)
Appreciation for literature and language (R)
Follows written directions (R)

Comprehends literal information (M)
Recognizes main idea (R)
Selects essential detail (R)
Draws inferences from text (R)
Supports opinion from text (R)
Appreciation for literature and language (R)
Follows written directions (R)

VOCABULARY

Learns vocabulary from reading (R)
Infers meaning from context (R)
Selects appropriate definition
from context (I)

Learns vocabulary from reading (R)
Infers meaning from context (R)
Selects appropriate definition
from context (R)

ANALYSIS

Retells information accurately (M)
Summarizes information (R)
Recognizes:
plot (R)
setting (R)
characters (R)
point of view (I)
theme (I)
historical context (I)

Summarizes information (R)
Recognizes:
plot (R)
setting (R)
characters (R)
point of view (R)
theme (R)
historical context (R)

KEY TO SYMBOLS

(I) Material is introduced
(R) Material is reviewed
(M) Material is mastered

6TH GRADE

Reads 10 pages/night
Varies pace according to material (R)

Short stories
Drama
Myths
Novels
Narrative Poetry

Reads independently w/comprehension
and fluency (R)
Recognizes main idea (R)
Selects essential details (R)
Draws inferences from text (R)
Supports opinion w/information from text (R)
Appreciation for literature and language (R)
Follows written directions (R)

Learns vocabulary from reading (R)
Infers meaning from context (R)
Selects appropriate definition
from context (R)

Summarizes information (M)

Recognizes:
plot (M)
setting (M)
characters (M)
point of view (R)
theme (R)
cross referencing
(correlation and association) (I)
historical context (R)

7TH GRADE

Reads 15-20 pages/night
Varies pace according to material (R)

Short stories
Drama
Poetry
Novels
Essays

Reads independently more challenging
material (R)
Recognizes main idea (M)
Selects essential details (M)
Draws inferences from text (R)
Supports opinion with quotations from text (R)
Appreciation for literature and language (R)
Follows written directions (R)

Learns vocabulary from reading (R)
Infers meaning from context (R)
Selects appropriate definition
from context (R)

Recognizes:
point of view (M)
theme (R)
cross referencing
(correlation and association) (R)
historical context (R)
allusion (I)
tone (I)
symbol (I)
imagery (I)

8TH GRADE

Reads 20 pages/night
Varies pace according to material (R)

Short stories
Drama
Poetry
Novels
Essays

Reads independently more challenging
material (R)
Draws inferences from text (R)
Supports opinions with quotations from text (R)
Infers author's purpose (I)
Appreciation for literature and language (R)
Follows written directions (R)

Learns vocabulary from reading (R)
Infers meaning from context (R)
Selects appropriate definition
from context (R)

Recognizes:
theme (M)
cross referencing
(correlation and association) (R)
historical context (R)
allusion (R)
tone (R)
symbol (R)
imagery (R)

WRITING SKILLS

4TH GRADE

5TH GRADE

COMPOSITION & WRITING

Organizes and expresses ideas in clear, complete sentences (R)
Uses complete paragraph structure (I)
Organizes paragraphs logically (I)
Supports with evidence from text (I)
Uses familiar genre including:
 stories (R)
 responses (R)
 poems (R)
 letters (R)
 reports (R)

Organizes and expresses ideas in clear, complete sentences (R)
Varies sentence structure (I)
Uses complete paragraph structure (R)
Organizes paragraphs logically (R)
Introduces essay form (I)
Supports with evidence from text (R)
Uses familiar genre including:
 stories (R)
 responses (R)
 poems (R)
 letters (R)
 reports (R)
 persuasive (I)
 essays (I)

RHETORICAL MODES

Process analysis/illustration (I)

Process analysis/illustration (R)

WRITING STRATEGIES & EDITING

Uses prewriting strategies:
 brainstorming (I)
Revises:
 for clarity/content (I)
 with multiple drafts (I)
Edits:
 proofreading (R)
 capitalization (R)
 spelling (R)
 punctuation (R)
Types 20 words/minute (I)

Uses prewriting strategies:
 brainstorming (R)
 outlining (I)
Revises:
 for content (R)
 with multiple drafts (R)
Edits:
 proofreading (R)
 capitalization (R)
 spelling (R)
 punctuation (R)
Applies basic keyboarding skills (R)

6TH GRADE

Organizes and expresses ideas in clear, complete sentences (R)
Varies sentence structure (R)
Uses complete paragraph structure (R)
Organizes paragraphs logically (R)
Writes three paragraph essay (R and M)
Writes five paragraph essay (I)
Supports with evidence from text (R)
Uses familiar genre including:
 essays (R)
 reports (R)
 persuasive (R)
 stories (R)
 responses (R)
 poems (R)
 letters (R)

Process analysis/illustration (M)
Comparing/contrasting (I)
Cause and effect (stressed in social studies) (I)
Writes 2-4 pages of critical text (I/R)

Uses prewriting strategies:
 brainstorming (M)
 outlining (R)
Revises:
 for content (R)
 with multiple drafts (R)
Edits for mechanics (R)
Writes with consistency in tense, voice, point of view (I)

7TH GRADE

Organizes and expresses ideas in clear, complete sentences (R)
Varies sentence structure (R)
Uses complete paragraph structure (R and M)
Organizes paragraphs logically (M)
Writes three paragraph essay (M)
Writes five paragraph essay (R and M)
Writes five paragraph essay in timed situation (I)
Supports with evidence from text (R)
Extrapolates topic from text (I)
Develops a personal voice in writing (I)
Anticipates essay questions on tests (I)
Uses familiar genre including:
 essays (R)
 reports (R)
 persuasive (R)
 stories (R)
 responses (R)
 poems (R)

Comparing/contrasting (R)
Cause and effect (stressed in social studies) (R)
Definition (I)
Writes 2-4 pages of critical text (M)
Writes 3-5 pages of critical text (I/R)

Uses prewriting strategies:
 outlining (R/M)
Revises:
 for content (R)
 with multiple drafts (R)
Edits for mechanics (R)
Writes with consistency in tense, voice, point of view (R)

8TH GRADE

Organizes and expresses ideas in clear, complete sentences (R/M)
Varies sentence structure (R)
Uses complete paragraph structure (M)
Writes five paragraph essay (M)
Writes five paragraph essay in timed situation (R)
Supports with evidence from text (M)
Extrapolates topic from text (R)
Develops a personal voice in writing (R)
Anticipates essay questions on tests (R)
Uses familiar genre including:
 essays (R)
 reports (R)
 persuasive (R)
 stories (R)
 responses (R)
 poems (R)
 letters (R)

Comparing/contrasting (R)
Cause and effect (stressed in social studies) (R)
Definition (R)
Agumentation/persuasion (I)
Writes 3-5 pages of critical text (M)
Writes 4-8 pages of critical text (I/R)

Uses prewriting strategies:
 outlining (M)
Anticipates essay questions on tests (I)
Revises:
 for content (R)
 with multiple drafts (R)
Edits for mechanics (R)
Writes with consistency in tense, voice, point of view (R)

WRITING SKILLS (CONT.)

LANGUAGE CONVENTIONS

GRAMMAR

4TH GRADE

Uses correctly:
periods (R)
question marks (R)
exclamation points (R)
commas (I)
apostrophes (I)
quotation marks for dialogue (I)
capitals (R)
possessives (R)

Uses basic sentence structures (I):
interrogative
declarative
exclamatory
Recognizes:
nouns (R)
verbs (R)
adjective (R)

5TH GRADE

Uses correctly:
commas (R)
apostrophes (R)
quotation marks for dialogue (R)
capitals (R)
possesives (R)

Uses basic sentence structures (R):
interrogative
declarative
exclamatory
imperative
Recognizes:
nouns (R)
verbs (R)
adjective (R)
prepositions (I)
adverbs (I)
pronouns (I)
conjunctions (I)
Subject/Verb agreement (I)
Subject/Predicate (I)
Verb tenses (I)

6TH GRADE

Uses correctly:

- commas (R)
- apostrophes (R)
- quotation marks for dialogue (R)
- capitals (R)
- possessives (R)

Uses basic sentence structures (R):

- interrogative
- declarative
- exclamatory
- imperative

Recognizes:

- verbs (R)
- adjectives (R)
- adverbs (R)
- prepositions (R)
- pronouns (R)
- conjunctions (R)

Subject/Verb agreement (R)

Subject/Predicate (R)

Verb tenses (R)

Direct/Indirect objects (I)

Predicate Adjective/Noun (I)

Person/Number (I)

7TH GRADE

Uses correctly:

- commas (R)
- apostrophes (R)
- quotation marks for dialogue (R/M)
- semi-colon/colon (I)
- quotations (I)

Uses basic sentence structures (M):

- interrogative
- declarative
- exclamatory
- imperative

Recognizes:

- nouns (M)
- verbs (M)
- adjectives (M)
- prepositions (M)
- adverbs (M)
- conjunctions (M)
- articles (M)

Subject/Verb agreement (R/M)

Subject/Predicate (M)

Verb tenses (R)

Direct/Indirect objects (R)

Predicate Adjective/Noun (R)

Person/Number (R)

Active/Passive Voice (I)

8TH GRADE

Uses correctly:

- periods (M)
- question marks (M)
- exclamation points (M)
- commas (R)
- apostrophes (M)
- quotation marks for dialogue (M)
- capitals (M)
- possessives (M)
- semi-colon/colon (R)
- quotations (R)

Subject/Verb agreement (M)

Verb tenses (M)

Direct/Indirect objects (M)

Predicate Adjective/Noun (M)

Person/Number (M)

Active/Passive Voice (R)

SOCIAL STUDIES

4TH GRADE

5TH GRADE

SOCIAL STUDIES SKILLS

Selects/organizes information (R)
Creates meaning from extracted information using critical thinking skills (R)
Applies knowledge to task at hand (R)
Interprets information from objects, documents, and visual evidence (I)
Supports opinion with information from text (R)
Understands a simple chronology (I)

Selects/organizes information (R)
Recalls factual information (I)
Creates meaning from extracted information using critical thinking skills (R)
Recognizes key concepts (I)
Understands/interprets information for tech projects (I)
Interprets information from textual and visual evidence (I/R)
Supports opinion with information from text (M)
Understands a simple chronology (M)
Recognizes bias in sources (I)

RESEARCH SKILLS

Gathers appropriate material (R)
Differentiates between primary and secondary sources (I)

Gathers appropriate material (R)
Locates sources using the internet/library with support (I)
Differentiates between primary and secondary sources (R)
Analyzes artifacts with support (I)

WRITING

Gathers information (note taking):
paraphrasing (I)
summarizing (I)
Organizes information:
listing/sorting into different categories (R)
Writes Reports (I)

Gathers information (note taking):
paraphrasing (R)
summarizing (R)
highlighting (I)
Organizes information:
listing/sorting into different categories (R)
outlining with support (I)
Writes research reports (I)
Lists bibliography/sources using proper forms (I)

6TH GRADE

Selects/recalls/recognizes significant factual information (R)
Analyzes evidence and evaluates data from variety of sources (I)
Recognizes cause and effect (I)
Recognizes key concept (R)
Interprets information from textual and visual evidence (R)
Awareness of differing interpretations to support or refute discussion (I)
Recognizes bias in sources (R)
Listens effectively in discussion and lecture (R)
Understands a relative chronology (I)

Gathers appropriate material (R)
Locates sources using the internet/library with support (R)
Differentiates between primary and secondary sources (R)
Assesses authority of sources (I)
Synthesizes information from variety of sources with support (I)
Museums: Develops skill and comfort in exploring appropriate collections for research and study (I)
Analyzes and take notes on artifacts with support (R)

Gathers information (note taking):
paraphrasing (R)
summarizing (R)
highlighting (R)
secondary source (I)
primary text and artifacts (I)
Organizes information:
categorization of information (R)
hypothesis formation (I)
outline/diagram logical sequence of evidence (R)

Writes five paragraph essay (I)
introduction
thesis w/support
topic sentences
transitions
evidence
conclusion
Writes research reports (R)
Lists bibliography/sources using proper forms (R)

7TH GRADE

Selects/recalls/recognizes significant factual information (R)
Analyzes evidence and evaluate data from variety of sources (R)
Recognizes cause and effect (R)
Interprets information from textual and visual evidence (R)
Awareness of differing interpretations to support or refute discussion (R)
Recognizes bias in sources (R)
Listens effectively in discussion and lecture (R)
Follows a complex chronology (I)

Gathers appropriate material (R)
Locates sources using the internet/library with support (R) and independently (I)
Differentiates between primary and secondary sources (R)
Asseses authority (R) and validity of sources (I)
Synthesizes information from variety of sources with support (R)
Museums: Develops skill and comfort in exploring appropriate collections for research and study (R)
Analyzes and take notes on artifacts (R)

Gathers information (note taking):
paraphrasing (R)
summarizing (R)
highlighting (R)
secondary source (R)
primary text (R)
Organizes information:
categorization of information (R)
develop a thesis with support (R)
support/defend given thesis (R)
outline/diagram logical sequence of evidence (R)

Writes five paragraph essay (R):
introduction
thesis w/support
topic sentences
transitions
evidence
conclusion
Writes research reports (R)
Lists bibliography/sources using proper forms (R)

8TH GRADE

Selects/recalls/recognizes significant factual informaiton (R)
Analyzes evidence and evaluate data from variety of sources (R)
Recognizes opposing viewpoints and bias (I)
Interprets information from textual and visual evidence (R)
Awareness of differing interpretations to support or refute discussion (I)
Recognizes bias in sources (R)
Listens effectively in discussion and lecture (R)
Understands a relative chronology and follows a complex chronology (R)

Gathers appropriate material (R)
Locates sources using the internet/library independently (I)
Differentiates between primary and secondary sources (M)
Assesses authority and validity of sources (R)
Synthesizes information from variety of sources independently (I)
Researches information to defend a given thesis based on primary question (I)

Gathers information (note taking):
paraphrasing (M)
summarizing (M)
highlighting (M)
secondary source (R)
primary text (R)
Organizes information:
categorization of information (M)
develop a thesis (R)
support/defend given thesis (R)
outline/diagram logical sequence of evidence (R)

Writes five paragraph essay (M):
introduction
thesis
topic sentences
transitions
evidence
conclusion
Writes research reports (M)
Lists bibliography/sources using proper forms (M)

SOCIAL STUDIES (CONT.)

4TH GRADE

5TH GRADE

READING

Comprehends literal information (I)
Recognizes key concepts (I/R)
Infers meaning from the text with support (I)
Draws conclusions (I)
Reads secondary sources and some primary sources with support (I)

Comprehends literal information (R)
Recognizes key concepts (I/R)
Makes inferences (R)
Draws conclusions (R)
Recognizes cause/effect (I)
Reads secondary sources and some primary sources with support (I/R)

GEOGRAPHY

Understands geographic concepts, terms and themes (I)
Uses maps and reads map keys:
political
physical
longitude
latitude
symbols
map coordinates
directions
distances
legends
measuring (I)

Understands geographic concepts, terms and themes (R)
Uses maps and reads map keys:
political
physical
longitude
latitude
symbols
map coordinates
directions
distances
legends
measuring (I/R)

6TH GRADE

Comprehends literal information (R)
Recognizes key concepts (R)
Makes inferences (R)
Draws conclusions (R)
Recognizes cause/effect (R)
Reads secondary sources and most primary sources with support (R)
Annotates primary sources (I)

Understands geographic concepts, terms and themes (R/M)
Uses maps and reads map keys (R)
Locates information in an atlas and for a specific geographic area (R)
Locates places on a map (R)
Interprets Maps (R)
Develops hypotheses from information on a map, about a culture, or, to determine the effects of geography on a culture (I)
Makes maps and illustrates based on primary sources (M)

7TH GRADE

Comprehends literal information (R/M)
Recognizes key concepts (R/M)
Makes inferences (R)
Draws conclusions (R)
Recognizes cause/effect (R/M)
Reads secondary sources and most primary sources with support (R)
Annotates primary sources (R)

Understands geographic concepts, terms and themes (M)
Uses maps and reads map keys (R)
Locates information in an atlas and for a specific geographic area (R)
Locates places on a map (R/M)
Interprets Maps (R)
Develops hypotheses from information on a map, about a culture, or, to determine the effects of geography on a culture (R)

8TH GRADE

Comprehends literal information (M)
Recognizes key concepts (M)
Makes inferences (R)
Draws conclusions (R)
Recognizes cause/effect (M)
Reads secondary sources and most primary sources with support (R)
Annotates primary sources (R)

Uses maps and reads map keys (R)
Locates information in an atlas and for a specific geographic area (M)
Locates places on a map (M)
Interprets Maps (R)
Develops hypotheses from information on a map, about a culture, or, to determine the effects of geography on a culture (R)

MATHEMATICS

4TH GRADE

Arithmetic

Numbers/Numeration
Place Value (R)
Comparing/ordering (M)
Properties
Commutative (R)
Associative (R)
Zero (I)
Distributive (I)
Factorization (I)
GCF
LCM

Operations with whole numbers
Multiplication (R)
Division (R)

Decimals
Place value (I)
Comparing (I)
Addition/subtraction (I)

Fractions
Comparing/ordering (R)
Equivalent (R)
Addition/subtraction (I)
Improper/mixed number (I)
Simplest form (I)

Geometry
Plane closed figure (R)
Area (I)
Perimeter (R)
Angles (I)
Compare/classify (R)

Measurement
Metric (R)
Time (R)
U.S. customary (R)

5TH GRADE

Arithmetic

Numbers/Numeration
Rounding/estimation (R)
Properties (R)
Factorization (R)
GFC
LCM
Powers/exponents (I)

Operations with whole numbers
Multiplication/division (M)

Decimals
Place value (R)
Compare/order (R)
Addition/subtraction (R)
Multiplication/division (I)
Rounding/estimation (R)

Fractions
Compare/order (M)
Equivalent (M)
Addition/subtraction (R)
Multiplication/division (I)
Simplest form (R)
Improper/mixed numbers (R)

Proportion, Percent & Probability (I)
Ratio
Percent
Conversion, fraction/decimal/percent
Proportion

Measurement
Metric (R)
Time (M)
U.S. customary (M)

Plane & Solid Geometry
Classify (R)
Angles
Shapes
Measure
Angles (I)
Perimeter (R)
Area (R)
Volume (I)

6TH GRADE

Pre-Algebra

Whole Numbers/Numeration

- Order of operations (I)
- Properties (M)
- Powers/exponents (R)

Operations with Integers

- Addition/subtraction (I)
- Multiplication/division (I)

Fractions/Decimals

- Addition/subtraction (M)
- Multiplication/division (M)
- Simplifying (M)
- Improper/mixed numbers (M)

Number Theory

- GFC (M)
- Simplification (M)
- LCM (M)
- Powers/exponents (R)

Proportion and Percent

- Ratio (R)
- Rates (I)
- Proportions (R)
- Percents (R)
- Conversion: fraction/decimal/percent (R)

Geometry

- Area (R)
- Perimeter (R)

Equations/Inequalities

- One step (I)
- Two step (I)

Data/Graphing/Central Tendency (I)

7TH GRADE

Geometry/Pre-Algebra

Euclidean Geometry

- Closed plane figures (M)
- Angles/Perimeter (M)
- Triangles
 - Pythagorean Theorem (R)
 - Proportion (R)
- Solids
 - classification (R)
 - volume (I)
 - surface area (R)

Cartesian Geometry (I)

- Coordinate plane
 - graph lines
 - solve systems of equations graphically
- Parallel lines
- Slope/y-intercepts of lines
- Equation of lines
- Systems of equations

Percents and Proportions

- Ratio (M)
- Proportion (M)
- Percents (M)
- Percentage increase and decrease (M)

Equations and Inequalities

- One step (M)
- Multiple step (R)
- Properties (M)
- Order of operations (R)
- Binary operations of integers/rationals (I)
- Simultaneous equations
 - methods of solving systems (I)
 - word problems (I)

Exponents and Polynomials

- Rules of exponents (I)
- Binary operations of polynomials (I)
- Factoring (I)
 - common factors
 - special trinomials

Rational Expressions/Algebraic Fractions (I)

- Binary operations of complex fractions
- Binary operations of rational/irrational expressions

Extension Topics (I)

- Transformational Geometry
 - elementary operations on matrices
 - dilations/reflections/translations/rotations
 - composite transformations
- Islamic Art and Mathematics
- Matrices
 - addition
 - product

8TH GRADE

Algebra 1

Equations

- Multi-step equations (R)

Polynomials

- Binary operations
- Word problems

Factoring

- Binary operations
- Quadratics

Graphing/Functions/Relations/Variations

- Equation of a line
- Type of variation
- Concepts of functions and relations

Simultaneous Equations

- Methods of solving equations
- Word problems

Inequalities

- Inequalities
- Disjunctions
- Conjunctions
- Absolute value

Algebraic Rational Expressions

- Binary operations on rational polynomials
- Related word problems

Numerical Rational/Irrational Numbers

- Discussion of radicals
- Related word problems

SCIENCE

SCIENCE SKILLS

WRITING/RESEARCH SKILL

4TH GRADE

Earth & Physical Science

Designs Investigations supported by written/oral instruction (I)

Conducts Investigations using:
group observation (I)
group data collection (I)
group conclusions (I)

Uses Computer Programs:
Harvester (weather)
Voyager (astronomy)

Graphs using:
bar graphs (R)

Conducts research using:
topic specific science texts
selected internet sites

Writes:
posters
models
oral presentation
field notebooks (I)

5TH GRADE

Introduction to Life Science

Designs Investigations supported by written/oral instruction using:
controlled experiments (I)
hypothesis construction and testing (I)

Conducts Investigations using:
observation (R)
data collection (R)
drawing conclusions (R)

Uses Computer Programs:
Bugs

Graphs using:
line graphs (I)

Conducts research using:
topic specific science texts
selected internet sites

Writes:
museum reports
research paper (I)
lab report (I)
field notebooks (R)

6TH GRADE

Physical & Earth Science

Designs Investigations supported by written/oral instruction using:
controlled experiments (R)
hypothesis construction and testing (R)

Conducts Investigations using:
experimentation (R)
observation (R)
data collection (R)
hypothesis construction (R)
drawing conclusions (R)

Uses Computer Programs:
Ecotype

Graphs using:
line graphs (R)
point graphs (I)

Designs and constructs
independent projects (I)

Conducts research using:
general science source books
encyclopedias
internet

Writes:
research paper (R)
formal lab report (I)

7TH GRADE

Human & General Biology

Designs Investigations independently with guidance using:
controlled experiments (R)
hypothesis testing (R)

Conducts Investigations using:
accurate observations (R)
accurate recording of data (R)
analysis of data (R)
hypothesis construction (R)

Uses Computer Programs:
Nutritionist

Graphs using:
double y axis plot (I)
interpretation

Designs and constructs
independent projects (R)

Conducts research using:
general science source books
encyclopedias
internet
science textbooks

Writes:
research paper (R)
formal lab report (R)

8TH GRADE

Earth & Physical Science

Designs Investigations independently with guidance using:
controlled experiments (R)
hypothesis testing (R)

Conducts Investigations using:
accurate observations (R)
accurate recording of data (R)
analysis of data (R)
hypothesis construction (R)

Uses Computer Programs:
Dalton Science Software
Excel

Graphs using:
mathematical relationships
interpretation
data tables

Designs and constructs
independent projects (R)

Conducts research using:
textual resources
internet
museums

Writes:
formal lab report (R)

4TH GRADE

5TH GRADE

LITERARY SKILLS

Fiction vs. Nonfiction (R)
Literary Genres (R)

Fiction vs. Nonfiction (M)
Literary Genres (R)

Literary Appreciation (R)
Book Selection Techniques (R)
Significant Literary Awards (R)
Publishing Process (R)
Presentation Skills* (I)

Literary Appreciation (R)
Book Selection Techniques (R)
Significant Literary Awards (R)
Publishing Process (R)
Presentation Skills* (R)

LOCATING SKILLS

MS Library Layout and Sections (I)
Dewey Decimal System (R)
MSL materials retrieval (I)
Library Protocol (I)
Public and Special Libraries (I)

MS Library Layout and Sections (R)
Dewey Decimal System (R)
MSL materials retrieval (R)
Library Protocol (R)
Public and Special Libraries (R)

INFORMATION LITERACY SKILLS

Library Online Catalog

Simple Search Strategies (R)

Library Online Catalog

Simple Search Strategies (M)
Advanced Search Strategies (I)

T.I.G.E.R.

T = THINK
I = IDENTIFY
G = GATHER
E = EXTRACT
R = REVISE

Information Retrieval/Research Skills

Parts of a Book (I)
Boolean Search Strategies (I)
Database, Search Engine, or Site Specific Searches (I)
Specifications of Information Sources** (I)
Web Site Evaluation (I)
T.I.G.E.R. Research Process (I)

Information Retrieval/Research Skills

Parts of a Book (R)
Boolean Search Strategies (R)
Database, Search Engine, or Site Specific Searches (R)
Specifications of Information Sources** (R)
Web Sites Evaluation (I)
T.I.G.E.R. Research Process (R)

Electronic Resources

MSL Web Site Content (I)
Online Encyclopedias (I)
Biographical Databases (I)

Equipment*** (I)

Electronic Resources

MSL Web Site Content (R)
Online Encyclopedia (R)
Biography Databases (R)
Newspaper/Magazine (I)
Other Subject Specific Databases (I)

Equipment*** (R)

Citation Skills

Title Page and Title Page Verso (R)

Citation Skills

Title Page and Title Page Verso (M)
MLA Style Bibliography (I)

Intellectual Integrity

Intellectual Properties (I)

Intellectual Integrity

Intellectual Properties (R)
Plagiarism (I)

NOTES

* Presentation Skills include Book Talks, Reading Aloud, Reader's Theater, Storytelling, Electronic Presentation Tools (Power Point, Web Authoring) etc.
** Information Sources include Print, Artifacts, Databases, Audio-Visual Materials, Web Sites, etc.
*** Equipment includes computers, copy machines, scanners, microform readers, etc.

6TH GRADE

Literary Genres (R)

Literary Appreciation (R)
Book Selection Techniques (M)
Significant Literary Awards (R)
Publishing Process (R)
Presentation Skills* (R)

MS Library Layout and Sections (M)
Dewey Decimal System (M)
MSL materials retrieval (M)
Library Protocol (M)
Public and Special Libraries (R)
HS Library Layout and Sections (I)
HS Library materials retrieval (I)

Library Online Catalog

Advanced Search Strategies (R)

Information Retrieval/Research Skills

Parts of a Book (R)
Boolean Search Strategies (R)
Database, Search Engine, or Site Specific Searches (R)
Specifications of Information Sources** (R)
Web Sites Evaluation (R)
T.I.G.E.R. Research Process (R)

Electronic Resources

MSL Web Site Content (R)
Online Encyclopedia (R)
Biography Databases (R)
Newspaper/Magazine (R)
Other Subject Specific Databases (R)
Access NetLibrary and Ebooks (I)

Equipment*** (R)

Citation Skills

Title Page and Title Page Verso (M)
MLA Style bibliography (R)

Intellectual Integrity

Intellectual Properties (R)
Plagiarism (R)
Intellectual Freedom (I)
Copyright Laws (I)

7TH GRADE

Literary Genres (M)
YA Literature (I)
Literary Appreciation (R)

Significant Literary Awards (R)
Publishing Process (M)
Presentation Skills* (R)

Public and Special Libraries (R)
HS Library Layout and Sections (R)
LH Library materials retrieval (R)

Library Online Catalog

Advanced Search Strategies (R)

Information Retrieval/Research Skills

Parts of a Book (M)
Boolean Search Strategies (R)
Database, Search Engine, or Site Specific Searches (R)
Specifications of Information Sources** (R)
Web Site Evaluation (R)
T.I.G.E.R. Research Process (R)

Electronic Resources

MSL Web Site Content (R)
Online Encyclopedia (M)
Biography Databases (M)
Newspaper/Magazine (R)
Other Subject Specific Databases (R)
Access NetLibrary and Ebooks (R)

Equipment*** (R)

Citation Skills

MLA Style Bibliography (R)

Intellectual Integrity

Intellectual Properties (R)
Plagiarism (R)
Intellectual Freedom (R)
Copyright Laws (R)

8TH GRADE

YA Literature (R)
Literary Appreciation (M)

Significant Literary Awards (M)
Presentation Skills* (R)

Public and Special Libraries (R)
HS Library Layout and Sections (M)
HS Library materials retrieval (R)

Library Online Catalog

Advanced Search Strategies (M)

Information Retrieval/Research Skills

Boolean Search Strategies (R)
Database, Search Engine, or Site Specific Searches (R)
Specifications of Information Sources** (M)
Web Site Evaluation (R)
T.I.G.E.R. Research Process (M)

Electronic Resources

MSL Web Site Content (R)
Newspaper/Magazine (R)
Other Subject Specific Databases (R)
Access NetLibrary and Ebooks (R)

Equipment*** (R)

Citation Skills

MLA Style Bibliography (R)

Intellectual Integrity

Intellectual Properties (M)
Plagiarism (R)
Intellectual Freedom (R)
Copyright Laws (R)

NOTES



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