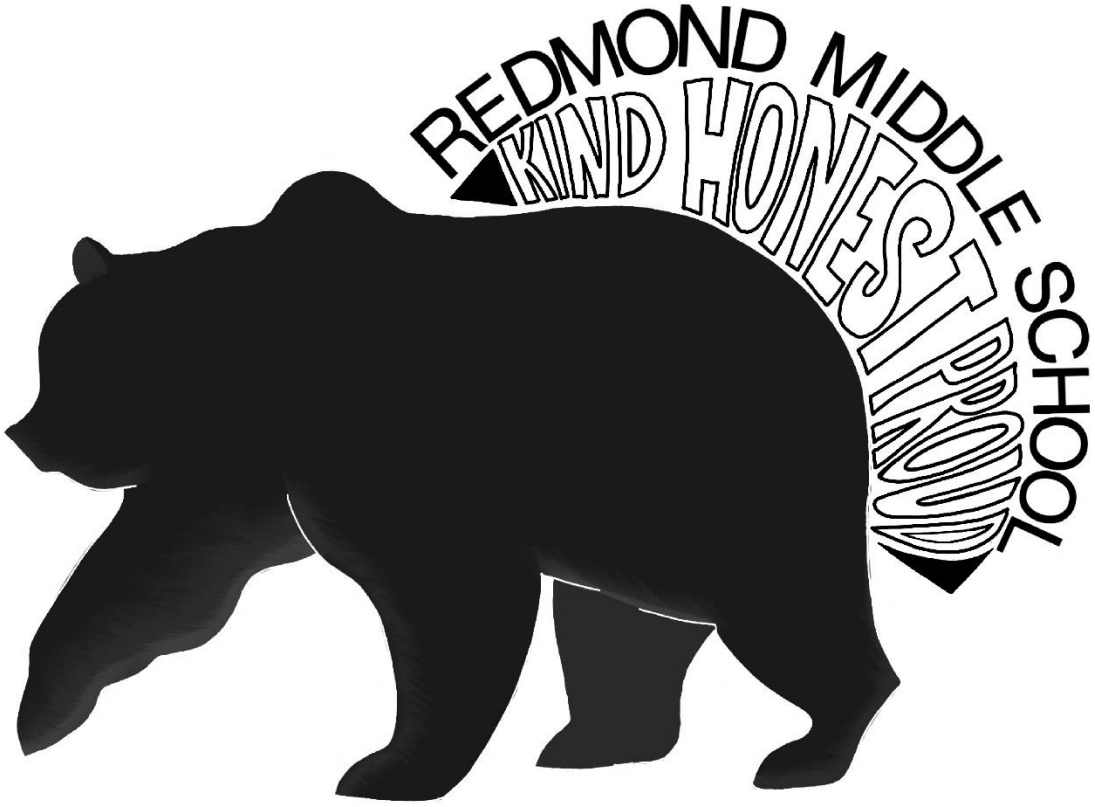
Redmond Middle School



Course Catalog

2021-2022

10055 166th Ave NE
Redmond, WA 98052
425 936-2440

EXAMPLE THREE YEAR PLANNER

Sixth Grade

1st Semester	2nd Semester
English	English
Social Studies	Social Studies
Science	Science
Mathematics	Mathematics
Physical Ed	Grizzly Prep
Grizzly Experience or Music	Grizzly Experience or Music

Seventh Grade

1st Semester	2nd Semester
English	English
U.S. History 1	U.S. History 1
Integrated Science 1	Integrated Science 1
Mathematics	Mathematics
Physical Ed	Health
Elective	Elective

Eighth Grade

1st Semester	2nd Semester
English	English
U.S. History 2	U.S. History 2
Integrated Science 2	Integrated Science 2
Mathematics	Mathematics
Physical Ed	Elective
Elective	Elective

REQUIRED CLASSES

LANGUAGE ARTS

ENGLISH LANGUAGE ARTS 6

In Language Arts, students develop their vocabulary and reading comprehension skills in a variety of literary and informational texts, through both in-class and independent reading experiences. They deepen what they know about texts by analyzing literary/story elements, literary devices, and text organizational structures. They learn to evaluate texts and authors and to share reading experiences with others. In writing, students build on what they have learned in previous grades about writing for different audiences and purposes, the writing process, and traits of effective writing. They deepen their understanding and skills about expository writing and are introduced to persuasive writing. They learn to evaluate their own writing and to reflect on their own progress as writers.

ENGLISH LANGUAGE ARTS 7

Language Arts focuses on writing and revision skills, grammar, vocabulary, and reading skills. Emphasis is on writing as a process utilizing CCSS Expository and Argumentative writing standards and the Schaeffer model of paragraphs and essays. Reading and writing skills will be emphasized in instruction throughout the year as an essential for developing lifelong learning.

ENGLISH LANGUAGE ARTS 8

Effective communication is a fundamental tool for lifelong success. Reading and writing are basic skills for all types of communication. In 8th grade Language Arts, emphasis is placed on becoming accomplished readers with the skills required to discover meaning in both informational and narrative text. Students will learn techniques and strategies for becoming competent readers while discovering the truths of life found in literature. Reading Comprehension Strategies enable students to obtain the skills needed to read "between the lines" and "beyond the lines" of literary texts. Additionally, students will discover valuable methods for presenting their thoughts effectively and efficiently in writing. The curriculum focuses on vocabulary, grammar analysis, reading analysis through higher level thinking and comprehension skills, CCSS Writing Standards, Schaeffer model of paragraphs and essays, and correct grammar skills.

MATHEMATICS

MATHEMATICS 1 – 6th GRADE

District Adopted Curriculum:
Glencoe Math Course 1
In this course students focus on four critical areas: (1) connecting ratio and rate to whole number multiplication and division and using concepts of ratio and rate to solve problems; (2) completing understanding of division of fractions and extending the notion of number to the system of rational numbers, which includes negative numbers; (3) writing, interpreting, and using expressions and equations; and (4) developing understanding of statistical thinking by describing and summarizing numerical data sets. Students also build on their work with area by reasoning about relationships among shapes to determine area, surface area, and volume.

MATHEMATICS 2 – 7TH GRADE

District Adopted Curriculum:
Glencoe Math Course 2
In this course students build on their understanding from 6th grade by focusing on four critical areas: (1) develop understanding of and applying proportional relationships; (2) developing understanding of operations with rational numbers (explain the rules for adding, subtracting, multiplying, and dividing with negative numbers) and working with expressions and linear equations; (3) solving problems involving scale drawings and informal geometric constructions, and working with two- and three-dimensional shapes to solve problems involving area, surface area, and volume; and (4) drawing inferences about populations based on samples.

MATHEMATICS 3 – 8TH GRADE

District Adopted Curriculum:
Glencoe Math Course 3
In this course instructional time focuses on three critical areas: (1) formulating and reasoning about expressions and equations, including modeling an association in bivariate data with a linear equation and solving linear equations and systems of equations; (2) grasping the concept of a function and using functions to describe quantitative relationships; (3) analyzing two- and three-dimensional space and figures using distance, angle, similarity, and congruence, and understanding and applying the Pythagorean Theorem.

PHYSICAL EDUCATION & HEALTH

6TH GRADE PHYSICAL EDUCATION
ONE SEMESTER

The Physical Education Department provide every student with the opportunity to participate in a variety of physical activities while learning the skill development and content standards of physical education. PE provides movement education, sport education, and fitness education along with sportsmanship and cooperation. Students will learn the basic strategies, skills, and rules in a variety of team, partner and individual sports and activities. Health, and skill related components are taught and practiced. **Fitness T-Shirts are required, fee is $10.00**

7TH/8TH GRADE PHYSICAL EDUCATION
ONE SEMESTER

The Physical Education Department provide every student with the opportunity to participate in a variety of physical activities while learning the skill development and content standards of physical education. PE provides movement education, sport education, and fitness education along with sportsmanship and cooperation. Students will learn the basic strategies, skills, and rules in a variety of team, partner and individual sports and activities. Health and skill related components are taught and practiced. The culminating knowledge helps students set goals and develop an effective fitness plan that will encourage students to live an active, healthy life. **Fitness T-Shirts are required, fee is $10.00**

HEALTH – GRADE 7
ONE SEMESTER

In Health class, a strong emphasis is placed on personal responsibility and healthy choices to promote lifelong wellness. Students gain an understanding of the causes of diseases, including how health risks versus a healthy lifestyle can affect some diseases. They begin to relate short-term and long-term consequences of health choices and apply healthy skills to specific personal, family, and community health concerns. Students learn to refine critical thinking skills which will help them avoid unsafe situations, analyze health information, and maintain healthy relationships. Students being to investigate health in the broader context of community.

SCIENCE

6TH GRADE SCIENCE

Students develop understanding of key concepts to help them make sense of life, earth and physical science. Science concepts and processes introduced in grades K-5: Physical, Earth and Life Science, are investigated with increasing depth where students plan and conduct their own experiments, devise data tables, analyze data, and communicate the results they obtain. Throughout the class, students learn to think critically and logically to make connections between prior science knowledge and evidence produced from investigations, models and system thinking. We follow the Next Generation Science Standards utilizing crosscutting concepts, and science/engineering practices, embedded in the disciplinary core ideas. The science strands/modules include: Impact of the Water Cycle, Impact of Weather on Living Things, Humans Depend on Natural and Synthetic Materials, Cycling of Matter and Energy in Plants and Cycling of Matter and Energy in Ecosystems.

7TH GRADE SCIENCE

Students develop understanding of key concepts to help them make sense of life, earth and physical science. Science concepts and processes introduced in grades K-5: Physical, Earth and Life Science, are investigated with increasing depth where students plan and conduct their own experiments, devise data tables, analyze data, and communicate the results they obtain. Through hands-on lab activities, class discussions, individual and group projects and activities, students investigate science topics relevant to their own lives and build understandings. We follow the Next Generation Science Standards utilizing crosscutting concepts, and science/engineering practices, embedded in the disciplinary core ideas. The science strands/modules include: Climate change, Fields of Force and Non-Contact Forces, Geologic Change, Foundation of Chemical Reactions, and Cell Division and Heredity, and Adaptations, Evidence for Evolution, Newton's Laws and Kinetic Energy, Sun-Earth-Moon System: Seasons, Sun-Earth-Moon System: The Moon and Eclipses, Gravitational Forces and Scale in the Universe, and Wave

8TH GRADE SCIENCE

Students in 8th grade science develop understanding of key concepts to help them make sense of life, earth, and physical science. Science concepts and processes introduced in grades K-5: Physical, Earth and Life Science, are investigated with increasing depth where students plan and conduct their own experiments, devise data tables, analyze data, and communicate the results they obtain. Through hands-on lab activities, class discussions, individual and group projects and activities, students investigate science topics relevant to their own lives and build understandings. We follow the Next Generation Science Standards utilizing crosscutting concepts, and science/engineering practices,

embedded in the disciplinary core ideas. The science strands/modules include: Natural Selection and Adaptations, Evidence for Evolution, Newton's Laws and Kinetic Energy, Sun-Earth-Moon System: Seasons, Sun-Earth-Moon System: The Moon and Eclipses, Gravitational Forces and Scale in the Universe, and Wave Properties and Their Adaptations in Technology.

SOCIAL STUDIES

SOCIAL STUDIES – GRADE 6

The focus of 6th Grade Social Studies is the study of ancient civilizations. As they learn about ancient civilizations, students study characteristics of cultures and regions, different forms of government and economic systems, and the impact of ancient civilizations on world history. As in previous grades, students use the lenses of history, economics, civics, and geography and apply important Social Studies skills, as they read, research, explore, and learn about the world around them and their place in it.

UNITED STATES HISTORY - GRADE 7

Seventh grade students will study U.S. History with concentration on the American Revolution, development of the US Constitution, Westward Expansion, and the Civil War (1763-1877).

UNITED STATES/WASHINGTON STATE HISTORY - GRADE 8

Eighth grade U.S. History is the study of the United States from the late 1800s to the present. Areas of emphasis include the Progressive Era, the Great Depression, World War II, and the Modern Era. Units are integrated with Washington State history. Students will develop an understanding of how America has been shaped and molded during the last century and a half. This is a continuation of the history taught in the seventh grade.

ELECTIVE CLASSES

CONSUMER SCIENCE

CULINARY ARTS
GRADES 7, 8
ONE SEMESTER

In this class you will prepare an impressive variety of foods. Students exhibit initiative, organization, creativity, independence, and personal responsibility. Topics covered include use of small and large appliances, lab planning and food preparation skills, time management, measuring/mixing equipment skills, teamwork, leadership, and organizational skills. Areas of study include: Food and kitchen safety, nutrition, food preparation, food industry careers, and foods from various cultures.

ELECTIVES, ADDITIONAL

GRIZZLY EXPERIENCE
6th GRADE
YEAR LONG

This class introduces all 6th grade students, except those taking year-long music, to the Redmond Middle School Elective Program. Students will experience a ten-week introduction to Art, Family and Consumer Sciences, Engineering, and Modern Music History.

GRIZZLY PREP
6TH GRADE
ONE SEMESTER

Taken the semester opposite 6th grade PE, this is a general education class taken by every 6th grader. The goal of the course is to help students build not only meaningful and positive relationships and connections with one another, but also equip them with foundational skills needed to be successful in middle school and beyond. Upon completion of the class, students will know how to use a planner, manage their time, and adequately prepare for tests depending on their preferred learning style. Students will also reflect on and determine who they are/who they want to be as an individual, as a learner, and as a member of our Grizzly community and larger society. Beyond that, students will analyze how their experiences have shaped them into who they are, how they act, and what they think. Students will also explore the Microsoft Office Suite. While this class does not give homework, students are expected to be intentional in applying what they learn to their life both in and outside of school.

LEADERSHIP 1 & 2
GRADES 7, 8
ONE SEMESTER

Leadership 1 is a foundational class designed to help students become school leaders and in our greater community. Curriculum will include skill building related to the LWSD Leadership Power Standards: problem solving, goal setting, critical thinking skills, team-work skills (listening and cooperation) and communication. It will also include an introduction to servant leadership through meeting the needs of others, and character development through the Eight Essential character traits of leaders. The course culminates in the completion of a service-learning project designed to help build a positive school culture.

LEADERSHIP 2
GRADES 7, 8
ONE SEMESTER

Prerequisite: Successful completion of Leadership 1.

An advanced course designed to build upon the foundations built in Leadership 1, students will continue to grow and develop skills related to the LWSD Leadership Power Standards. problem solving, goal setting, critical thinking skills, team-work skills (listening and cooperation) and communication. Students in Leadership 2 are responsible for helping to

develop a safe, kind, and welcoming school culture through the planning and implementation of service projects and events for our community. Projects examples include assemblies, fundraising, after-school social events, school culture building activities, and service projects. This class challenges all students to serve as leaders and role models within our school community and to work to embrace and engage their own leadership why. **Important Note:** Certain projects or events may require committing to work outside of class time before/after school as needed.

PEER MENTORING
GRADES 7, 8
ONE SEMESTER

Peer Mentoring is for students interested in being mentors for the Transitions classroom. In this class, student mentors will learn about different disabilities and related careers and work with transition room students.
Application form is required and is available in the Student Services Office.

YEARBOOK 1
GRADES 7, 8
ONE SEMESTER (SPRING)

This class is focused on learning the components that go into creating a student designed yearbook, which students will do in Yearbook 2. Students will learn the importance of themes as well as become skilled with utilizing publishing software. They will also learn how to write content, including the development of open-ended interview questions and becoming comfortable with the art of interviewing, and using journalistic style writing to report on events around the school. Technical editing, digital photography and communication skills will also be taught.
school year.

Important Note – The follow up to this course will be Yearbook 2 during the fall semester of the following school year.

YEARBOOK 2
GRADES 7, 8
ONE SEMESTER (FALL)

This class is focused on creating a student designed yearbook for the current academic year. Students will learn how to develop themes and use publishing software. They will also learn to write content, including interview techniques, using Journalistic style. Technical editing, digital photography and communication skills will also be taught.

Important Note: After the 1st semester, students will be expected to attend an after-school meeting once a week through April and/or continue to work on pages assigned, as needed, to complete the Yearbook. Time and/or day of meetings will be determined based on class needs.

FINE ARTS

ART & DESIGN I
GRADES 7, 8
ONE SEMESTER

This course introduces students to the history of art and design. Technical skills such as art vocabulary, methods, and concepts will be introduced through exploration of the elements and principles of art and design. Students will learn production skills through experimentation with a range 2D and 3D art forms and materials, including drawing, painting, sculpture, photography, digital arts, and other mixed media. Career Exploration, Business and Marketing, and Visual Communications will be explored. *This course is part of the Skilled & Technical Arts program pathway in high school.*

ART & DESIGN II
GRADES 7, 8
ONE SEMESTER

This course goes beyond beginning techniques. Students will gain a deeper understanding of the elements of art and

principles of design through fun and challenging projects. Projects are designed to bring out each student's unique individual talents and allow for their own personal expression within the lesson criteria. The Art & Design II class can be taken in both 7th and 8th grade year. *This course is part of the Skilled & Technical Arts program pathway in high school.*

CHOIR
YEAR LONG

This class is designed for to study and appreciate different styles of music. Develop a strong sense for musical excellence and be a member of an ensemble that performs at school events and in the community.

DRAMA 1 & 2
GRADES 7, 8
ONE SEMESTER

Drama is a high-energy, interactive class - get ready to be on your feet! Together we will build group dynamics and increase our performance skills and self-confidence. We will explore pantomime, tableaux, character work, script writing, vocal skills, creative interpretation of the written word, monologue, short scenes, longer scenes, and improvisation. We will also look at some different types of media where your dramatic skills could be applied in the 21st century.

CADET BAND
YEAR LONG

This class is open to students with two years of experience, primarily 6th grade, but also for students that do not have previous playing experience but would like to learn a band instrument. Music reading, and instrumental rehearsal and performance skills are improved by focusing on several method books and appropriate literature in various musical styles. We will work out of Essential Elements 2000 Book 2, along with appropriate concert band literature. Skills are assessed through Standards Based Grading. Students also evaluate recorded performances of themselves and others through written concert reviews, developing writing skills. We have an evening concert each quarter and will also participate in one festival each year.

Requirements: Provide own instrument or rent from music store or school. Not all instruments are available from the school. A small maintenance fee is charged to use the school-owned instruments. Participation in evening concerts is required.

CONCERT BAND
YEAR LONG

This class provides continued focus on developing reading strategies and performance skills through intermediate literature, solo and chamber music, and numerous performance opportunities. We will work out of Essential Technique by Rhodes, Bierschenk and Lautzenheiser and will have completed the common scales. Performance evaluations through written reviews and standards-based assessments help students develop self-evaluation and strategize for improvement.

Important Notes: Provide own instrument or rent from music store or school. Not all instruments are available from the school. A small maintenance fee is charged to use the school-owned instruments. Students will also participate in at least one festival each year. Participation in evening concerts and festivals is required.

SYMPHONIC BAND
YEAR LONG

This class provides continued focus on developing reading strategies and performance skills through increasingly advanced literature, solo and chamber music, and numerous performance opportunities. Students work out of I Recommend by James Ployhar, and other repertoire. Performance evaluations through written reviews and standards-based assessments help students develop self-evaluation and strategize for improvement.

Important Notes: Provide own instrument or rent from music store or school. Not all instruments are available from the school. A

small maintenance fee is charged to use the school-owned instruments. Students will also participate in at least one festival each year. Participation in evening concerts and festivals is required

JAZZ BAND
YEAR LONG

6:40 – 7:30 A.M. 5 days per week

Prerequisite: 1-2 years of Band experience, and must be in another performance class

This class is an extension of performance skills developed in the larger band class. Instruments involved include saxophone, trumpet, trombone, bass, drum set, piano, and guitar. Piano and guitar skills needed are usually more advanced and students should have had at least 3 years of study on those two instruments. Students learn jazz performance skills and improvisation, and become familiar with the styles of Jazz, Latin, Rock, and Funk. Performances include evening concerts, some school assemblies, and two jazz festivals.

Important Notes: Student must provide own transportation and provide own instrument. This is a graded credit class. Participation in evening concerts and extracurricular festivals is required.

INTRODUCTION TO GUITAR
GRADES 7, 8
ONE SEMESTER

This class is for the beginning guitarist. It is not intended as an advanced course for experienced players. The student will learn how to apply basic musical concepts such as harmony, rhythm, and melody to the guitar. We will cover basic techniques, scales, note reading, chords, strum/accompaniment patterns.
The overall objective of this program is to introduce the guitar to the student and then continually improve the students' performance abilities on the instrument, improve their self-discipline, and their abilities to work within a group. This will be done through group rehearsals, performances, assigned responsibilities within the class, and specific expectations of the students. At the end of the class you will be able to read and play basic chord symbols and melodies. You will also be introduced to some of the important personalities that have made the guitar the most popular and widely used instrument that it is.

Students need to provide their own acoustic guitar and the book Essential Elements for Guitar, by Will Schmidt. A few basic models of guitars are available for students who may be unable to afford an instrument.

FOUNDATIONS ORCHESTRA
YEAR LONG

This class is for anyone who has played a violin, viola, cello, or bass for a year or less, or wants to start playing. Students will spend most of the time on learning and refining how to play an instrument. Students are expected to practice almost every day. The class will perform at multiple concerts throughout the year, including a some that are off campus. The equivalent playing level for this class is String Explorers, Book 1, Units 1-11.

CADET ORCHESTRA
YEAR LONG

Designed for more advanced musicians, this class meets every day to play and learn new techniques, such as shifting, more bowing styles, and tougher rhythms. Regular practice is required. We perform at multiple concerts throughout the year, including a couple off-campuS. Equivalent playing level is String Explorers, Book 1, Units 12-End and most of Book 2.

PREMIERE ORCHESTRA
YEAR LONG

Intended for mostly 7th graders who have completed Foundations or Cadet Orchestra, this group will dive into more complex musical concepts and fine-tune playing techniques. Students will also play through more music

than prior years. The class will perform at multiple concerts throughout the year. Students can also audition and participate in events such as Jr. All-State and Honor Orchestra.

ADVANCED ORCHESTRA
YEAR LONG

Prerequisites: Two years of orchestra at RMS or teacher permission.

In this group, students spend a lot of time focusing on ideas about musicality and interpretation. This group participates in many concerts and even some field trips. Students will be expected to practice every day and the music will be quite challenging.

LANGUAGE ARTS

ENGLISH LANGUAGE LEARNERS (ELL)

This is a multi-leveled class of students with varying English proficiencies. It is designed to allow students to grow in their English skills at a pace that best fits their learning style and needs. We will focus on the four domains of language acquisition: speaking, listening, reading, and writing. Core instruction follows the Washington State English Language Proficiency Standards and is designed to support academic success across the middle school curriculum. Students are placed in classes by level (as determined by the WELPA and ELPA 21 Assessments) and teacher evaluations.

READING ACCELERATION
GRADES 6, 7, 8

Students who fall below the state's standardized tests in reading and/or writing will be placed in the Reading Acceleration support class. This class will help improve their skill sets in the areas of reading comprehension, fluency, and written expression. This class uses an online, individualized program as well as whole-class activities to boost students' skills in all other content-area subjects.

MATHEMATICS

MATHEMATICS 6+
YEAR LONG

This course prepares students to take the 7+ Course as seventh graders. Students who complete the 6+ course and the 7+ course (available for the 2022-23 school year) have the option to enroll in Algebra in 8th grade.

This is a comprehensive sixth grade math course that also incorporates some of the seventh-grade standards. This course emphasizes connections to prior learning about operations, mathematical thinking, conceptual understanding, and discourse.

Content is focused on these areas:

1) developing understanding ratio, rate and proportion and application in a variety of contexts; 2) extending understanding of the number system and operations to include rational numbers: fractions, decimals, and negative numbers; 3) writing, interpreting, and using expressions and equations; 4) describing and summarizing numerical data sets; 5) reasoning about relationships among shapes to determine area, surface area and volume.

ALGEBRA
GRADES 7 & 8
YEAR LONG

Prerequisites: meeting standard on Algebra aptitude test, math grades, state assessment.

District Adopted Curriculum:
Big Ideas Algebra 1

Algebra 1 formalizes and extends the mathematics that students learned in the middle grades. The course focuses on five critical areas: (1) develop fluency writing, interpreting, and translating between various forms of linear equations and inequalities, and simple exponential functions, and using them to solve problems; (2) compare and contrast

linear and exponential functions, translate between different representations, use function notation, and interpret arithmetic sequences as linear functions and geometric sequences as exponential functions; (3) using regression techniques to describe linear relationships quantitatively and make judgments about the appropriateness of linear models; (4) extend the laws of exponents to rational exponents, see structure in and create quadratic and exponential expressions, and solve equations, inequalities and systems of equations involving quadratic expressions; and (5) compare quadratic, linear, and exponential functions to model phenomenon. They also identify the real solutions of quadratic equations as the zeroes of a related quadratic function and expand their experience to more specialized functions – absolute value, step, and those that are piecewise defined. The Mathematical Practice Standards apply throughout the course, and together with the content standards allow students to experience math as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

GEOMETRY
GRADE 8
YEAR LONG

Prerequisite: Algebra I

District Adopted Curriculum:
Big Ideas Geometry

In Geometry, students explore more complex geometric situations and deepen their explanations of geometric relationships, moving towards formal mathematical arguments. The course focuses on six critical areas: (1) using previous experience with rigid motions, students develop notions about what it means for two objects to be congruent, establish triangle congruence based on these rigid motions along with formal constructions, and use this as a familiar foundation for the development of formal proof, solving problems and proving theorems about triangles, quadrilaterals, and other polygons; (2) build a formal understanding of similarity, using earlier experience with dilations and proportional reasoning, and apply similarity to right triangle trigonometry and the Pythagorean Theorem, and use the Laws of Sines and Cosines to find missing measures; (3) work with the geometry of two- and three-dimensional objects, as well as shapes of cross-sections and the result of rotating a two-dimensional object about a line; (4) build on the previous work with the Pythagorean Theorem to find distances and use a rectangular coordinate system to verify geometric relationships, including properties of special right triangles and quadrilaterals, slopes of parallel and perpendicular lines, and the connection of geometric and algebraic definitions of the parabola; (5) prove basic theorems about circles, and use coordinate geometry to find equations of circles and determine intersections between lines and circles or parabolas, or between two circles; and (6) compute and interpret theoretical and experimental probabilities of compound events to make informed decisions, and make use of geometric probability models whenever possible. The Mathematical Practice Standards apply throughout the course, and together with the content standards allow students to experience math as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

SAFETY NET MATH
GRADES 6, 7, 8

By state criteria, this course provides instruction for students who were not proficient on the previous year's state test scores in mathematics. The purpose of the class is to assist the student in the acquisition of grade-level skills and concepts and to support the student in their current mathematics development.

TECHNOLOGY

COMPUTER LITERACY
GRADES 7, 8
ONE SEMESTER

Computer Literacy is an entry level technology course that is designed to develop computer knowledge while increasing technology access opportunities for students. This course will encourage students to use computer technology in research, to communicate ideas and design projects using the software that is on students' laptops. Typing skills are reinforced through an online keyboarding curriculum. Additional creative and organizational applications may also be introduced to students depending on student pace and needs to allow for classroom differentiation.

DIGITAL MIXED MEDIA
GRADES 7, 8
ONE SEMESTER

This course is designed for students with some computer experience Students learn the fundamentals of digital design using Adobe Photoshop and Illustrator and work their way to creating original animations. The class also covers essential photo and movie editing and a review of basic computer use. Each project gives student the opportunity to create a piece of work that coincides with their experience level.

DESIGN AND MODELING
GRADES 7, 8
ONE SEMESTER

This unit uses solid modeling software (a sophisticated mathematical technique for representing solid objects) to introduce students to the design process. Utilizing this design approach, students understand how design influences their lives. Students also learn sketching techniques and use descriptive geometry as a component of design, measurement, and computer modeling. Students brainstorm, research, develop ideas, create models, test and evaluate design ideas, and communicate solutions.
The Gateway to Technology (GTT) program features a project-based curriculum designed to challenge and engage the natural curiosity and imagination of middle school students. The knowledge that students gain and the skills they build from GTT create a strong foundation for further STEM (Science, Technology, Engineering and Mathematics) learning in high school and beyond. Throughout GTT, students acquire knowledge and skills in problem solving, teamwork and innovation as well as explore STEM careers.

EXPLORING ROBOTICS
GRADES 7, 8
ONE SEMESTER

Students learn about the history and impact of automation and robotics as they explore mechanical systems, energy transfer, machine automation, and computer control systems. Using the VEX Robotics® platform, students apply what they know to design and program traffic lights, robotic arms and more. Participate in a variety of robotic projects as you experience the jobs of a Mechanical, Electrical and Computer Engineer. Apply the design process as you use industry-leading technology, learn sketching techniques, measuring, dimensioning, and computer modeling fundamentals necessary to solve an engineering problem. Design mechanical and automated systems that meet desired needs within realistic constraints.

PLTW DESIGN AND MODELING
GRADES 7, 8
ONE SEMESTER

Students discover the design process and develop an understanding of the influence of creativity and innovation in their lives. Using Autdodesk® design software, students create a virtual image of their designs and produce a portfolio to showcase their innovative solutions. Demonstrate and expand your skills in leadership, critical thinking and problem solving. Students learn about engineering, manufacturing, 3D printing workplace readiness skills while incorporating academic concepts and the process of design

and developments. Instruction includes sketching, measurement, safety, and use of 3D printing machinery.

WOODS TECHNOLOGY I
GRADES 7, 8
ONE SEMESTER

Woods Technology I will provide you with the basic skills needed to produce quality woodworking projects. From classic chess boards to Adirondack chairs, we'll make a variety of projects while safely using hand and power tools. Students will gain essential understandings of personal safety, basic woodworking, orthographic projection, planning and following instructions and working as a team to manage a shop. Major assignments and projects include machine safety, 1'x4' project, whistle, cell phone holder and independent projects.

WOODS TECHNOLOGY II
GRADES 7, 8
ONE SEMESTER

Prerequisite: Woods Technology I

A continuation of Woods Technology I, this course is a student driven class. **Students are expected to demonstrate their learning and be model examples to Woods Technology I students.** Students will work individually or in small groups to plan and produce finely crafted projects. Students will continue to demonstrate their essential understandings of personal safety, woodworking, drafting, planning and orthographic projection. Major assignments and projects include a Joiner-E project, machine safety, project plan, advanced woodworking projects and a woodworking portfolio.

WORLD LANGUAGES

FRENCH
GRADE 8
YEAR LONG

Students will develop a beginning level of proficiency in listening, speaking, read and writing. Students will develop and awareness and appreciation for French-speaking people and cultures.

JAPANESE
GRADE 8
YEAR LONG

The student will develop an elementary level of proficiency in listening, speaking, reading, and writing. First semester we will learn Hiragana and second semester we will learn Katakana. At the end of the year, we will be introduced to the first Kanji. We will learn the polite form of speech the first year. We regularly use Japanese media to learn about popular culture and hear the language in natural contexts.

SPANISH
GRADE 8
YEAR LONG

Students will develop a beginning level of proficiency in listening, speaking, read and writing. Students will develop and awareness and appreciation for Spanish-speaking people and cultures.