

Spring 2020
Elementary
Gifted and
Talented Magnet
Course
Description
Guide

PROGRAM PHILOSOPHY

The gifted and talented magnet school program is founded on the belief that all students possess gifts and talents that need to be identified, nurtured, and rewarded. It is the responsibility of educators and parents to identify these gifts and talents and to provide an educational program that develops them. Because the gifted and talented magnet school addresses the gifts and talents of all children, there are no performance measures, auditions, or tests that need to be passed before a child is accepted into the school. Some children may have gifts and talents in one or two areas, others, in a wider variety of areas. The gifted and talented magnet school is open to any child whose parents would like for him/her to participate in the program.

The philosophy of the gifted and talented magnet school is put into effect through the structure of the curriculum and through instructional techniques. The curriculum design advocates a “choice” model for students and parents. It provides them with options and alternatives for learning and is designed to accommodate varying types of gifts, talents, strengths, needs, and interests.

PROGRAM STRUCTURE

The gifted and talented magnet school curriculum is divided into two main components: BASICS AND ELECTIVES.

BASICS

All students receive instruction in four basic areas: language arts, math, social studies, and science. Instruction in the basics component is planned to accommodate each child's skill level.

The curriculum is delivered in the context of an eight-period day with each period consisting of approximately forty-five minutes. These periods are not distinguishable in kindergarten through second grades because basic courses are grouped together without interruption. Students in grades K-2 change periods only during the time each day set aside for electives. They are placed in self-contained classrooms with enrichment activities, art, music, physical education, and library experiences being an integral part of their basics.

ELECTIVES

Elective courses offer each student opportunities to explore new areas of interest or to study a particular area in depth. Electives may also provide avenues to tailor a child's specific needs. In the elective portion of the curriculum, courses are offered in the following areas: language arts, social studies, math, science, technology, health, physical education, world language, visual arts, performing arts (instrumental and vocal music, dance, drama) and media.

Basics are offered five days each week while electives and AG selected courses are offered four days each week (Monday through Thursday). This scheduling provides more diverse experiences for students, while maintaining the integrity of the basic and elective instructional programs. Most field trips, cultural arts programs, and special school events are scheduled on Fridays in order to protect the Monday through Thursday elective program.

Electives provide an opportunity to explore and sample different subjects. Students are urged to consider building a well-balanced schedule. Over the course of one year, students are encouraged to select at least one language arts and one math elective. It is hoped that all students will select at least one course which will provide good physical exercise. Students in grades 3-5 must select at least one PE elective per year. PE and dance electives are available at all skill levels. (This because we are required to have students meet with PE teacher once a week.)

Most of the elective courses are appropriate for any student willing to learn and be exposed to new situations. These courses are highly motivational and give students the opportunity to study selected subjects.

AIG SELECTED ELECTIVE COURSES

AIG selected electives are open to students with outstanding strengths in one or more areas. Nomination for these courses may be made in several ways. All identified academically gifted students may take AIG selected academic electives. Others may be nominated by parents or teachers and screened for admission.

IMPORTANT NOTE:

This Course Description Guide was prepared to give students and parent's information on the electives which may be offered this year. **The courses that will actually become a part of the master schedule for the fall and spring are dependent on sufficient enrollment, the availability of teaching staff, and individual school programs.** For more detailed information concerning the content of courses, parents and/or students may call for an appointment with the principal, assistant principal, or magnet coordinator.

Elective Course Descriptions

K-2 LANGUAGE ARTS

AUTHORS IN THE MAKING (WITH VISUAL ART INTEGRATION)

Within every child there are stories of value. In this course students will become young authors as they delight in writing, illustrating, and making their own books. Stories will be shared with other students.

AUTHOR AUTHOR – LEGO NARRATIVE BUILDER

LEGOS are EVERYTHING AWESOME! Explore the enormous collection of LEGO's through writing and be inspired! Imagine building fantastical storyboards to learn how to SHOW NOT TELL. Learn the writing process with a fun twist using LEGO Fairy Tales, LEGO Space and LEGO Communities expansion kits. Build-up the story elements, character, setting, action and problem-solution brick by brick.

BEGINNING WRITING EXPERIENCES - AIG

In this introductory creative writing course, students develop writing skills by correlating vocabulary development, grammar, writing mechanics, and sentence composition. This course will progress from vocabulary to paragraph development.

BEST OF THE BEST K-2 - AIG

Students will be introduced to books by award-winning authors and illustrators. Among the Caldecott, Kate Greenaway, or ALA Notable Book winners they will find stories that delight and fascinate them. Their enjoyment will be shared with others through activities such as read-alongs and dramatizations.

BOOKWORMS:

Kindergarten: Ready...Set...Go...We're off on an exciting adventure! In this course designed for pre-emergent readers, kindergarten students will explore basic curriculum concepts through social interaction and hands on learning. Activities will include puppets, manipulatives, cooking, literature immersion, and projects with an emphasis on learning the alphabet and basic print concepts. Come along with us as we depart on this exciting adventure, and build your skills along the way! Teacher recommendation is required for this course.

First Grade: This course is especially designed for students in first grade who need extra support with literacy development. Small group size will allow children more individualized attention. The students will be involved in modeled, shared, guided, and independent reading activities on a daily basis. Students in this course should be recommended by their teachers.

Second-Third Grades:

This course is especially designed for students in second grade who would benefit from reading support. Students in this elective will receive small group reading instruction designed to move them to the next level in reading. Every day students will participate in Shared Reading, Literacy Activities, Guided Reading, and Read Aloud. Students in this course should be recommended by their teachers.

FAIRY TALES AND FABLES

This course will offer an in-depth look at a variety of fairy tales and fables. Students will participate in enriching activities that will enhance the stories as well as help students work towards an understanding of two of the oldest children's literary forms.

ODYSSEY OF THE MIND - ELEMENTARY

Can a team of students build a vehicle that will travel through and obstacle course and break balloon targets? Is there a way to create a performance that brings famous works of art to life? Students use cooperative planning, teamwork, creative problem solving, and the ability to transfer previous knowledge to new situations to present unique solutions to these types of problems.

THINKING POWER - AIG

Thought processes can be sharpened through directed practice. Students in this course will participate in activities to develop skills such as comparing, classifying, interpreting, and summarizing. Thinking Power is a language arts course designed to spark thinking in a variety of ways, encouraging problem solving and creativity. Planned activities incorporate the multiple intelligences observed in human thought processing. Students will participate in activities designed to address their areas of strength and to develop areas that need improvement.

SOCIAL STUDIES GRADES K-2 MAGNET COURSES

DESTINY TRAVEL AGENCY

This course will provide learners the opportunity to discover ten different cultures located around the world by "traveling" to Brazil, Mexico, England, India, New Zealand, Nigeria, Israel, Russia, and Japan. The learners will be receiving a passport that will enable them to travel to the different countries. They will also be receiving a suitcase in which to keep all of their "souvenirs." During each trip to a different country, the learners will be experiencing the following activities: recognizing different seasonal changes and times between their country and the country they are visiting, making clothes (paper dolls) to be worn during their trip, drawing simple maps of the homes and communities that are located in the country, cooking and tasting food, experiencing holidays that are celebrated in the country, exploring that country's different customs, playing games, listening and

dancing to music, replicating art, familiarizing themselves with any famous people who live there, and responding to their visit through a postcard that will be sent “home” after each trip.

WHAT'S IN THE NEWS? - AIG

Examining current events that are relevant to students' lives will be the focus of this course. People, places, and items in the news will be discussed and explored. Students also will create their own news using home and school events. This course will help them build a concept of the importance of being informed citizens.

MATHEMATICS GRADES K-2 MAGNET COURSES

BOOK INTO MATH

This course will integrate literature and mathematics. Students will be introduced to numerous children's books, both old favorites as well as unfamiliar stories. They will participate in activities designed to explore mathematical concepts as well as to develop communication skills. Students will be encouraged to work together to read, speak, write and use a variety of strategies to solve mathematical problems which occur in literature.

MATH MANIPULATION

This course will help students make sense of large numbers and develop an understanding of our place value system. Activities approach place value in a variety of ways - estimating, counting large numbers of objects, recognizing patterns, relating number system to place value, and exploring numbers in everyday contexts.

NUMBER DETECTIVES AIG (formerly Magical Math AIG)

Do you want to go on a number adventure? Come join us as we learn some math mysteries and creative ways to work with numbers! Learn mental math tricks while strengthening your addition, subtraction and multiplication skills. Learn about Ken Ken Puzzles, Magic Squares and develop your fluency with playing cards! Practice your number sense to solve problems and amaze your parents, friends and even your math teacher with the greatest magical math tricks alive!

PLUS AND MINUS

This course provides a sequential approach to reinforcement of addition and subtraction. A strong emphasis is placed on the use of manipulative materials when reviewing concepts. Many developmental activities are game-oriented to actively engage the learner. Memorization of math facts will be stressed.

SCIENCE GRADES K-2

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MAGNET COURSES

ELECTIVE COURSES GRADES K-2 SCIENCE

AFRICAN SAFARI

Information about African animals and their habitats will be explored. Students will be made aware of man's responsibility to save the animals.

HOW THINGS WORK

Students will explore the fascinating world of gadgets and tools in looking at how things work! Tools, machines, gears, and other gizmos will be used as students build their understanding of how simple machines and tools make our world an easier place in which to live.

IT'S FOR THE BIRDS AIG

This inquiry based science course will introduce primary students to birds and their characteristics, habits, life cycles and role in the environment. Students will be involved in hands on activities designed to help them identify bird characteristics compared with those of other creatures, identify and classify different types of birds, and build an understanding of a bird's life cycle and the roles birds play in their environment. Students will develop their own questions about birds and throughout the course of the elective discover the answers by participating in learning experiences such as experiments, journal keeping, reading, and first hand observation as well as creating a welcoming habitat for birds on their school grounds.

KITCHEN CHEMISTRY

In this course the students will learn, through many exciting experiments, about simple scientific phenomena, such as physical and chemical changes; states of matter--solids, liquids, and gases; and the cause and effect of heat. Students will also learn how ice cream and soap are made.

LET'S GO LIFECYCLING!

This course will examine the lifecycles of plants and animals (amphibious, aquatic, insect, and mammal). Students will observe and study the different stages, how they are alike and different, and what is required to complete those lifecycles. The opportunity to grow plants and nurture life will be included.

MY GREEN THUMB

Are you ready to use your green thumb to grow your own fruit, vegetable, or herb? In Green Thumb, we will learn the value of plants in our environment while growing our very own plant and recording our findings through various data collection methods.

PROTECTORS OF THE EARTH (NATURE AND ECOLOGY) - AIG

Save the planet! In what ways do you help preserve nature and its surroundings? In this elective students will learn about the positive and negative interactions of living organisms and their environment. Students will increase their global awareness through an in depth study of the biomes, pollution, and recycling.

SCALES AND SKIN: Focus on Dinosaurs!!

T is for tadpole! S is for snake! Reptile or amphibian? Make no mistake! Come along on an animal adventure as we learn about Dinosaurs. We'll explore habitats, body coverings, movement, appearances, and other interesting facts about these animal groups. We'll study their life cycles and how they interacted with other living things through research, literature-based projects, and hands-on activities. Don't miss out on this exciting elective!

WE DO ROBOTICS

In this elective, students will program and control robots that they build themselves using specially created software and Lego building materials. They will begin by following step-by-step instructions in order to build and program a simple robotic model.

**PHYSICAL EDUCATION and HEALTH
GRADES K-2
MAGNET COURSES**

BEGINNING GYMNASTICS

Learn all about the different events of gymnastics. Students will learn the basic skills used in on the floor, balance beam, vault and bars. Students will work individually and in small groups developing their skills and will perform their skills at the end of the quarter.

CUP STACKING

How fast can you stack cups!?! Students will work individually and in small groups developing strategies to hone their skills and learn how to improve their abilities in cup stacking.

JUMP FOR FUN

This course is designed for those interested in jumping rope. Students will develop their rhythm, coordination, balance and timing as they learn individual, partner and long rope (double-dutch) skills. Students will then use those skills and work together in small groups to build and create routines for presentation. This class will include activities for beginner and advanced jumpers.

LIFETIME SPORTS

This course is designed for the student who is interested in investigating and developing skills in a variety of lifetime sport activities. Students will learn the basic skills, rules and regulations, game play and strategies associated with sports that can be played at any age. Individual and dual sports to be covered in the course may include sports such as tennis, badminton, bowling, golf, and horseshoes.

NEW GAMES I

Students will participate in a wide variety of games which focus on the joy of play, cooperation, and trust, rather than simply striving to win. These games are based upon the philosophy, "Play hard, play fair, nobody hurt." Activity level will range from physically active to quiet group games. Good sportsmanship will be emphasized as well as practice in basic movement skills.

PE VARIETY

Do you want to have fun while learning about lots of different games and sports? Students will learn a variety of skills used in many different sports. Students will develop locomotor, non-locomotor and manipulative skills such as running, jumping, throwing and kicking through different games. In addition, students will develop positive social skills and safe practices through group activities.

RHYTHMS, ROPES, HOOPS, AND CHUTES

This course is designed to improve basic locomotor and manipulative skills in K-1 students while also improving total body coordination. Students will work with a variety of equipment to work on group cooperation with emphasis on sharing and teamwork. Rhythms and ropes will also be introduced to increase rhythm competency...

SPORTS ARENA

For the young athlete who enjoys team sports, this course will emphasize basic skill development which is essential to succeeding in sports. The importance of physical fitness, good sportsmanship, and working as a team will be stressed as students participate in drills and pre-game situations.

HUMAN MACHINE, THE

What part of the human body if stretched out would measure 25 feet in length? Give up? The intestines! Learn more fascinating information about the fabulous and incredible human body machine in this elective. You will learn all about the amazing systems of the body and see how they work together to keep you growing strong.

**ELECTIVE COURSES
GRADES K-2
VISUAL ARTS**

ALL TOGETHER

Students will explore a variety of art media to build their skills of drawing, painting, cutting and pasting, and sculpting.

CLAY SCULPTURE

Using a variety of techniques, students will learn the clay process and discover the possibilities of the uses of natural clay.

FEEL OF THINGS, THE

Using a variety of art media, students will develop skills in creating visual and tactile textures.

SHAPE OF THINGS, THE

This advanced course is for students who have developed their cutting skills and wish to explore complex cutting techniques in a two and three dimensional manner.

**PERFORMING ARTS
GRADES K-2
MAGNET COURSES**

**ELECTIVE COURSES
GRADES K-2
MUSIC**

CHORUS, K-2

Students will learn to produce a good singing tone with their voices. Students will be exposed to a variety of pieces from different styles and periods. These prepared pieces may be performed for school programs and functions.

RHYTHM BAND

Students will learn to play various rhythm instruments correctly. They will experience a variety of activities using the fundamentals of rhythm. Students will learn to read simple percussion scores. Ukulele and Percussion Crash Cans will be taught! You will be making exciting music in no time!

**ELECTIVE COURSES
GRADES K-2
DRAMA**

CREATIVE DRAMA

This course will give students the opportunity to learn about acting and the stage. They will explore their own experiences through acting, improvisation, and short plays. Students will expand their senses in developing characters and situations. It is suggested that they take this course before selecting INTRODUCTION TO THE STAGE.

INTRODUCTION TO THE STAGE

In this introductory drama course students will learn about various aspects of the theater. Students will discover the role of the actor, director, and stage technician, and will become familiar with makeup, costumes, sets, and props. They may also produce a short play.

THEATER GAMES

Through hands-on activities students will participate in improvisational theater activities to build concentration, stage presence, communication skills, self-confidence, and cooperative skills.

ELECTIVE COURSES
GRADES K-2
DANCE

CREATIVE MOVEMENT

This course is designed to build on the creative skills that were introduced in LET'S MOVE and to explore the basic elements of movement composition.

DANCE THE STORY

Choreography and performance will be the focus of this elective. Students will connect the elements of dance: space, time and energy, from inspirations in world literature and nonfiction articles. Performance opportunities include: Downtown Raleigh's SparkCon, A Parent-Student "Teach In" and informal sharings with other elective classes. A service learning project will be developed based on the themes explored this quarter.

EXPLORING BALLET

This course will introduce students to the basic skills and terminology of ballet. Students will learn the history of ballet as well as the format of a typical ballet class. The students will develop strength, flexibility and the knowledge of proper body alignment.

FOLK DANCE

Students will become familiar with the basic steps, rhythmic patterns, and dance tunes of many countries.

INTRO TO CREATIVE DANCE

This course will introduce the basic concepts of movement: Space, Time, Force, and Body by engaging the student in fun dance activities and games. Students will use music, instruments, ribbon, streamers and balloons to enhance their learning. The course will explore the difference between locomotor and non-locomotor movement. This course will focus on developing creativity, increasing kinesthetic awareness, and integrating basics with dance.

STORYBOOK DANCE

How would famous storybook characters tell their tale if they could only communicate through dance? Many stories such as *The Little Red Hen*, *The Three Little Pigs*, *Goldilocks and the Three Bears*, *Little Red Riding Hood*, and the Egyptian folk tale of *The Golden Flower* can be used for students to explore and communicate meaning through movement. Each dance will develop through the reading and discussion of the story and finally the performance of the story. The students will be actively involved in deciding the movement choreography as well as making props, costumes, and scenery for their performance of the story dances.

1, 2, 3, 4, TAP, TAP, TAP

Did you know that anyone can tap dance? If you like to make noise and can count to four, you can learn too! In this elective, students will learn how to recognize and demonstrate basic tap dancing technique. At the same time, this course will reinforce primary math skills such as patterning, spatial and number sense.

YOGA FOR KIDS

Students in this course will practice asana (postures) to build strong, flexible bodies and pranayama (breath control) to calm the mind, as well as, play games and sing songs that enable students to deepen this practice. They will learn many words in the ancient language of Sanskrit and how yoga evolved. Opportunities for service in the local community will also be emphasized (Karma Kids).

**CONTEMPORARY ARTS
GRADES K-2
MAGNET COURSES****CHESS I Beginning**

Students will study the history and fundamentals of chess. Time will be provided for them to develop skills in chess.

CHESS II Intermediate/Advanced

This course is designed for students who are knowledgeable of the fundamentals of chess and wish to improve and/or increase their skills and learn how to make notations.

Elective Course Descriptions

3-5

**ELECTIVE COURSES
GRADES 3-5
LANGUAGE ARTS**

AUTHOR AUTHOR WITH LEGOS

LEGOS are EVERYTHING AWESOME! Explore the enormous collection of LEGOs through writing and be inspired! Imagine building fantastical storyboards to learn how to SHOW NOT TELL. Learn the writing process with a fun twist using LEGO Fairy Tales, LEGO Space and LEGO Communities expansion kits. Build-up the story elements, character, setting, action and problem-solution brick by brick.

MEDIA MASTERS: THE TRUTH ABOUT ADVERTISING - AIG

Can you believe everything you see in those commercials? We live in a sea of advertising. It's everywhere we look. Students in this elective will have a chance to learn about persuasive techniques and judge the validity of products and services in an effort to become independent, well-informed consumers.

ODYSSEY OF THE MIND - AIG

The heart of learning is a constant search for simple ways to solve problems. Hunches or leaps of insight, often called "aha," enable a person to see a clear and direct answer that has eluded others. This course will help to break down barriers to problem solving so that these creative leaps of the mind can occur. Students will prepare for O.M. competition which includes team-building and problem-solving strategies

PUPPET THEATRE (Puppetry-Drama)

Through the wonderful world of puppets theatre, students will expand their oral and written communication skills, explore theatrical elements, and develop artistic strategies while creating puppetry productions. Students will enhance their social skills by working in a cooperative and supportive environment.

READING THE WORLD: BELIEVE it or NOT

Our world can be a tricky place to read. There are hidden messages surrounding us held within literature, television commercials, advertisements and so much more. It is essential that students have the reading skills to be critical thinkers and problem solvers in order to make responsible choices and come to logical conclusions. Reading the World: Believe it or Not? Is an interactive course that does just that! Students will have the opportunity to interact with engaging online activities, literature, classroom games and projects to teach the art of persuasion. Get ready to crack the code for Reading Our World!

SOAR TO SUCCESS: GRADE 4

The primary goal of this eighteen week elective is to raise fourth students reading ability to grade level or above and to help them learn and apply reading strategies (predicting, clarifying, questioning, and summarizing) across the curriculum. Teacher recommendation is required to take this course.

SOAR TO SUCCESS: GRADE 5

The primary goal of this eighteen week elective is to raise fifth students reading ability to grade level or above and to help them learn and apply reading strategies (predicting, clarifying, questioning, and summarizing) across the curriculum. Teacher recommendation is required to take this course.

SPORTS FEVER with Math Integration

So it's 1,2,3 strikes you're out at the old ball game! Touchdown! Score! Goal! Are you a sports fan? If so, this is the course for you. In this course, you will read a variety of literature that focuses on sports and athletes. Students will explore the role of sports in the United States and around the world, and how the sports we watch and play shape our identity, culture, and society.

TALK ABOUT IT! BOOK CLUB

Join the club!

During this elective, students will have the opportunity to select from and read a variety of novels. This book club allows opportunities to read novels and participate in small group seminars/discussions. Follow-up extension projects will be generated through the use of computers, songs, advertisements, literature circles, Paideia seminars, and other book enrichment choices. Students will present their book projects creatively and participate in the development of a collection of book reviews for the school library.

**ELECTIVE COURSES
GRADES 3-5
SOCIAL STUDIES****CRADLES OF CIVILIZATION**

Students will spend 8 weeks discovering the history and culture behind 4 of the major civilizations that have been influential in shaping our world today. Students will study, cook, create crafts, role play, read and write literature while taking an in-depth look at Greece, China, Egypt, and Rome.

FROM CAVEMAN TO THE GREAT WALL - AIG

This course will develop thought processes of students through a study of history. Students will experience various learning activities about prehistoric man and early civilizations

**MATHEMATICS
GRADES 3-5
MAGNET COURSES****FREAKY FRACTIONS**

This course provides reinforcement and enrichment with fractions for fourth and fifth graders. Students will become aware of the variety of ways in which fractions are commonly used, develop a repertoire of visual models for fractions, and apply these models flexibly and appropriately as they solve problems with fractions. All activities are designed to help students see the connections between fraction concepts and real-life experience.

LOGIC AND PROBLEM SOLVING - AIG

Thinking and reasoning skills will be developed in this course. Students will discover techniques for solving problems through appropriate activities which will include logic puzzles, deductive thinking exercises, and flow charting.

**ELECTIVE COURSES
GRADES 3-5
SCIENCE**

AQUATIC WORLD

Approximately 70% of our earth is water. In order for us to live in harmony on and with the earth, we need to understand our relationship with water and appreciate our dependence on it. Students will study aquatic ecosystems with an emphasis on freshwater systems. This course will combine content reading with hands-on activities so that the study about water "comes alive."

BLOOMING BOTANY

In this course students will dig in the dirt, play with plants, sample seeds, look at leaves and explore ecosystems. Join us as we learn all about plants and how they interact with their surrounding environment.

COASTAL ECOLOGY

Students will study the North Carolina coastal region, including its islands, sea life, ecosystems, and weather patterns. This course can be a wonderful experience for future marine biologists and beach-life enthusiasts!

GARDEN DESIGN: BOTANIST DESIGNERS

Join us for an AMAZING adventure into the world of plants! Together we will explore how people, animals and plants connect historically, individually and in communities. Learners will explore the idea of gardens and design innovative garden spaces that draw fellow citizens into the environment as well as the study the essentials of plant life and explore the different processes of growing plants.

GEOLOGY - AIG

Rocks, Minerals, Volcanoes, Earthquakes and Crystals! In Geology, students will dig in and learn about the Earth, its movement throughout history, the rumblings within and the varieties of rocks, minerals, and crystals, which are created underneath the Earth's surface. This elective is full of hands-on projects to keep the students on their toes and motivated to learn. Come join the fun!

INTRODUCTION TO ENGINEERING

Students will be introduced to 12 different types of engineering. They will be presented with scenarios that require them to become each type of engineer and solve a problem with their team. They will make predictions, test materials, investigate solutions, and make presentations with their team using the data and observations they complete. 21st Century Skills will be utilized as they explore each type of engineering field and develop deeper understanding of what it means to be an engineer.

INVENTIONS AIG

Inventions are all around you! Enjoy building various inventions, designing your own ideas, combining inventions to create new ideas, and researching famous inventors. Along with using a variety of supplies to create tasks based on Rube Goldberg's multi-stepped inventions, you will become an inventor yourself and have a chance to create your own inventions

LET'S EXPERIMENT

Did you ever wonder how Sir Isaac Newton discovered the three laws of motion or how the Wright Brothers figured out how to fly? For sure, they made incorrect predictions along the way, but they learned from their mistakes. They made new predictions and designed experiments to see if they were correct. In this class, you will make your own predictions about science questions. You will view demonstrations and conduct experiments to test your predictions. Exploration of science concepts of motion, matter, and energy will be your focus while practicing the steps of the scientific process. Sometimes, you will work alone, while other times you will work with classmates. You will write about what you see and do in a science journal, just like other scientists do. So, come along, and **LET'S EXPERIMENT!**

PROJECT STARWALK (ASTRONOMY)

This course deals with the branch of science that studies planets, stars, galaxies, and their effect on the environment. Let's take a look at the nighttime sky and identify some of the major constellations! Seasonal changes in the nighttime sky will be studied. Students will explore the solar system and discover how to tell time and find their way by using the sun and the stars. Myths and legends behind the names of the constellations will also be examined.

ROBOTICS

In this elective students will program and control actual robots that they build themselves using specially created software and Lego building materials. They will begin by following step-by-step instructions in order to build and program a simple robotic model. Eventually, the students will be able to imagine an original robot, program its functions, and finally "bring it to life."

ROCKS AND MINERALS: TREASURES FROM THE EARTH

This elective combines a scientific study of rocks and minerals with information on how these substances are used to stimulate the economy. Hands-on explorations, collaboration with geological experts, and an authentic opportunity to create, market, and sell a mineral-based product, gives students a greater understanding of rocks and minerals, their uses in our communities, and economics.

SCIENCE OLYMPIAD

Science Olympiad is an opportunity for students to expand their knowledge in the areas of science and technology. Students are involved in the investigative process of science by doing hands-on and inquiry-based activities. Olympiad events involve teamwork, group planning and cooperation based on "real-world" science. Parental involvement and occasional after-school practice will be expected. Students will compete against other elementary schools in April.

SIMPLE MACHINES How Things Work

Boys and girls will learn about machines the old fashioned way: BY BUILDING THEM! Using kits, students will explore the world of simple machines. They will demonstrate a real understanding for what makes things work by constructing machines with moving parts.

WHAT'S THE MATTER? (KITCHEN CHEMISTRY)

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Do you know what kind of matter a banana is made of? In this class, you will explore the properties of matter using normal, everyday ingredients you can find around the kitchen. You will think like a scientist as you work together with your peers to compare the basic properties of solids, liquids, and gases. You will keep a journal of your investigations and record your observations of what happens to matter when heat is added or the temperature of a substance is lowered. Using tools like measuring cups, graduated cylinders, and scales will help you become more accurate with ingredient amounts for your recipes you prepare. You will make connections between the science of physics and your everyday life “cooking up” some new understanding.

ELECTIVE COURSES
GRADES 3-5
COMPUTER STUDIES

ART OF ANIMATION, THE

And you thought PowerPoint was for those boring slide shows that business people used. Think again! PowerPoint can be used as a powerful animation tool. In this course, students will combine writing skills, artistic skills and technology skills to use PowerPoint and their own original artwork to animate a story they write. Students can go wherever their imaginations take them...all the way to the moon and back!

COMPUTER CODING

Computer science demystified. Anybody can learn the basics of computer programming. Students will use a blend of online software from code.org and cs-first.com. This material stresses the use of logic and critical thinking by performing fun activities and culminates in students creating their own computer games.

COMPUTER WEBMASTERS

Students will learn how to write and create their own personal web page. Students will use the computer to write stories, poems, imaginative narratives and personal narratives on a variety of topics for their web page projects. The web pages will be posted to the school's web site once peers and the instructor review them. Dialogue will be created during the review process to make sure that high quality web pages will be posted to the Internet. Students will learn how to insert photos, graphics and drawings into their web pages.

**PHYSICAL EDUCATION
GRADES 3-5
MAGNET COURSES**

CUP STACKING

Learn about the sport of Speed Stacking! Using multiple formations, styles, activities, and partner skills, students will improve their hand-eye coordination and ambidexterity by stacking cups. Students will learn formations such as the 3-6-3, 6-6, and the cycle while working independently or in small groups. Students will put all of their skills together to create and perform a routine at the end of the quarter.

INTERNATIONAL GAMES

This elective will introduce a variety of games played in different countries around the world. Students will research the rules and strategies from sports such as Cricket and Australian Rules Football.

JUMP FOR FUN

This course is designed for those interested in jumping rope. Students will develop their rhythm, coordination, balance and timing as they learn individual, partner and long rope (double-dutch) skills. Students will then use those skills and work together in small groups to build and create routines for presentation. This class will include activities for beginner and advanced jumpers.

LIFETIME SPORTS

This course is designed for the student who is interested in investigating and developing skills in a variety of lifetime sport activities. Students will learn the basic skills, rules and regulations, game play and strategies associated with sports that can be played at any age. Individual and dual sports to be covered in this course may include sports such as tennis, badminton, bowling, golf, and horseshoes.

NEW GAMES II/Rec Games

Students will participate in a wide variety of games suitable for this age level. Based on the philosophy, "Play Hard, Play Fair, Nobody Hurt," these games will promote the development of leadership ability in a cooperative group setting. Stamina and agility will be developed, as well as social interaction skills.

RACQUET SPORTS

Learn about multiple sports that involve a racquet or a paddle such as badminton, tennis, ping pong and pickle ball. Students will research these sports and practice their skills through lead up drills and games to prepare them for the specific sports. Students will work with small groups to learn how to keep score and referee the games.

RHYTHMS, ROPES, HOOPS & CHUTES

Through a variety of activities in rhythmic and rope jumping, students will improve in total body coordination.

3-5 TRACK AND FIELD

Learn the basic rules, principles, and techniques involved in track and field. Areas to be covered include running, jumping, relays and throwing. Students will be involved in a training program that

will help them learn and develop the basic skills and techniques needed to perform a variety of track and field events. This class culminates with the students competing at the Magnet Track Meet held in the spring.

TEAM SPORTS

This course is designed for the student who is interested in investigating and developing skills in a variety of team sports. Emphasis will be placed on skills, drills, rules, care of equipment, lead-up activities, and game situations. Good sportsmanship and team cooperation will be stressed. Team sports to be covered in this course will include kickball, soccer, and basketball.

**ELECTIVE COURSES
GRADES 3-5
VISUAL ARTS**

ASTOUNDING ARTISTS

Through a study of astounding artists' lives and works, students will create their own "masterpieces" using a variety of art media and methods. Observing works of art by Vincent Van Gogh, Henri Matisse, Georgia O'Keeffe, and Georges Seurat will enable students to see and understand each artist's unique style.

CALLIGRAPHY: ITALIC CURSIVE (Combined with Reading the World Language Arts)

Prerequisite: Calligraphy: Italic Manuscript In this advanced course students will learn to write cursive italic letters. Using calligraphy students will create books, greeting cards, posters, and correspondence to develop their proficiency.

CAN YOU BELIEVE YOUR EYES?

The students will work toward an understanding of how the eyes and brain are involved in optical illusions. The students will create their own optical illusions using a wide variety of art media. The students will develop an appreciation of optical illusions as works of art.

CREATIVE STITCHERY/WEAVING

Students will learn many different stitches for designing with yarn and burlap. Basic weaving techniques will be explored.

SCULPTURE

Students will explore art's three dimensional form using paper, found objects, boxes, clay, and other media.

**ELECTIVE COURSES
GRADES 3-5
MUSIC**

BCHORUS 3-5

Students will learn to sing with comfort, accuracy, and a good tone. They will develop blend and ensemble skills and the ability to sing two-part harmony. Music studied will include a variety of styles and periods. Performance will be an expected part of this course.

KEYBOARD BY SIGHT AND SOUND I

In this course, the student will learn to play a keyboard instrument. Designed for students with no previous keyboard experience, the basic fundamentals of music and playing technique will be presented.

KEYBOARD BY SIGHT AND SOUND II

This course will be a continuation of KEYBOARD BY SIGHT AND SOUND I. More in-depth study of piano literature and correct playing technique will be emphasized. Solo and ensemble performance opportunities will be included.

KEYBOARD BY SIGHT AND SOUND III

This final level of keyboard training will continue the skills and literature study begun in KEYBOARD BY SIGHT AND SOUND I and II. Emphasis will be placed on small group and individual instruction permitting students to progress at their own pace. This elective can be taken more than once.

**ELECTIVE COURSES
GRADES 3-5
MUSIC**

PATHWAY TO THE BAND I (YEAR-LONG)

Learn to play a musical instrument heard in a band. (Instruction should be scheduled for one instrument per class.)

1. Woodwinds - flute, clarinet, alto saxophone. Recommended to begin at grade four.
2. Brass - trumpet, trombone. Recommended to begin at grade four or five.
3. Percussion - bells (with mallets) and drums. Recommended to begin at grade four or five.

PATHWAY TO THE BAND II (YEAR-LONG)

This course will include instruction on woodwind, brass, and percussion instruments begun in PATHWAY TO THE BAND I. Emphasis will be on individual and group instruction. Solo and ensemble performances will be a vital part of this course.

PATHWAY TO THE ORCHESTRA I (YEAR-LONG)

Learn to play the violin, viola, or cello in this course.

PATHWAY TO THE ORCHESTRA II (YEAR-LONG)

This course will be a continuation of PATHWAY TO THE ORCHESTRA I. Emphasis will be placed on both individual and group instruction. Solo and ensemble performances will be encouraged.

RECORDER I

Interested in playing a band instrument? The recorder is a great wind instrument for beginners. The fingerings are similar to many traditional band instruments like the clarinet and saxophone. In this class students will learn proper breath control and embouchure (the way to hold your mouth) as well as learn to read music beginning with the notes B, A, and G, and adding high C and D, and low D and E. Repertoire will include folk songs and simplified versions of works by famous composers such as Handel and Beethoven. Performance opportunities may be offered.

RECORDER II

This class is for students who want to continue their study of the recorder. Students will review fingerings learned in Recorder 1 and add high E and low C. Students will gain proficiency in sight reading and learn to play in recorder ensembles. Performance opportunities may be offered. Recorder 1 is a prerequisite in order to enroll in this class.

**ELECTIVE COURSES
GRADE 3-5
DRAMA**

ACTING

In this course, students will participate in role-playing, scripted study, improvisation, and characterization. Teacher-guided study in voice, body movement, and concentration techniques will develop the actor's tools.

BEHIND THE SCENES

Students will explore a variety of technical aspects of the theater: makeup, costumes, sound, properties, scenery, and stage crafts.

THEATER PRODUCTION

This is a course in which students will be expected to participate in the production of a play. Music, art, and drama come together in the creation of the play which will be performed for a live audience.

**ELECTIVE COURSES
GRADES 3-5
DANCE**

DANCE ENSEMBLE

This course is designed for students who want to continue their dance training. Focus is on dance technique and its relationship to choreography. A highlight will be a performance experience. DANCE ENSEMBLE is open to students who have completed at least two semesters of dance at the 3-5 level, or by permission of the teacher.

INTERNATIONAL FOLK DANCE

Students will become familiar with the basic steps, rhythmic patterns, and dance tunes of many countries.

INTRODUCTION TO BALLET

This course will introduce students to the basic skills and terminology of ballet. Students will develop strength, flexibility, self-discipline, and awareness of proper body placement. The historical values of classical and contemporary ballet styles will be introduced.

INTRODUCTION TO MODERN DANCE

This course will introduce students to the foundations of modern dance technique. They will develop a personal sense of the discipline of modern dance. The historical impact of modern dance as an art form will also be examined. Students will develop strength, flexibility, and proper body alignment.

MODERN DANCE

This course will offer a more intensive study in modern dance through technique, terminology, and choreography. Students will gain increased strength, range of motion, and coordination while exploring creative expression and individual style.

TAP, INTRODUCTION

This course is designed to give an introduction to the technique of tap dancing. The focus will be on rhythmic perception, balance, and coordination. A brief history of tap dance will also be introduced.

**ELECTIVE COURSES
GRADES 3-5
CONTEMPORARY ARTS**

CUT AND SEW

CUT AND SEW is a course for beginners. Students will learn the basic steps in cutting out patterns, attaching snaps and buttons, hemming, and stitching. Take-home projects will be completed.

**ELECTIVE COURSES
GRADES 3-5
MEDIA**

SCHOLASTIC PURSUIT

SCHOLASTIC PURSUIT reinforces the knowledge students have acquired throughout the elementary grades. Emphasis is placed on research, questioning, and listening skills. Students gather information to compete among themselves in mini academic contests. A team is finally chosen from this class to compete in a system-wide academic tournament.

TELLING A STORY WITH VIDEO Graphic Novels

Telling a Story with Video incorporates the unique technologies of digital video and I-Movie as well as word processing to assist students in developing a short movie. They will review the elements of a short story and study main ideas, characters, and story development through viewing simple video stories. In the class, students brainstorm, outline, write, and edit a story of their own creation. Students will then develop a storyboard of appropriate scenes that best tells their story through video. Students will learn to use a digital video camera and tape simple scenes created from their storyboards. Their characters, scenes and props are of their own creation. They can draw from things at home, school or from computer-generated images to serve their creativity. They will link their scenes together to create a movie. Other components include reviewing simple video, taped stories and watching the "Making of Jurassic Park", which shows the transition of the film industry to digital animation.