CHA Standards by Grade and Subject

0 - 5 ART

- Generate and conceptualize artistic ideas and work
- Organize and develop artistic ideas and work
- Refine and complete artistic work
- Select, analyze and interpret artistic work for presentation
- Develop and refine artistic techniques and work for presentation
- Convey meaning through the presentation of artistic work
- Perceive and analyze artistic work
- Interpret intent and meaning in artistic work
- Apply criteria to evaluate artistic work
- Synthesize and relate knowledge and personal experiences to make art
- Relate artistic ideas and works with societal, cultural, and historical context to deepen understanding

0 - 5 COMPUTER SCIENCE

- Students leverage technology to take an active role in choosing, achieving and demonstrating competency in their learning goals, informed by the learning sciences
- Students recognize the rights, responsibilities, and opportunities of living, learning, and working in an interconnected digital world, and they act and model in ways that are safe, legal, and ethical
- Students critically curate a variety of resources using digital tools to construct knowledge, produce creative artifacts, and make meaningful learning experiences for themselves and others
- Students use a variety of technologies within a design process to identify and solve problems by creating new, useful, or imaginative solutions
- Students develop and employ strategies for understanding and solving problems in ways that leverage the power of technological methods to develop and test solutions
- Students communicate clearly and express themselves creatively for a variety of purposes using the platforms, tools, styles, formats, and digital media appropriate to their goals
- Students use digital tools to broaden their perspectives and enrich their learning by collaborating with others and working effectively in teams locally and globally

0 - 5 LANGUAGE ARTS

- Reading Literature
- Key Ideas and Details
- Craft and Structure
- Integration of Knowledge and Details
- Range and Level of Complexity
- Reading Foundational Skills

- Phonics Recognition
- Fluency
- Reading Informational Text
- Key Ideas and Details
- Craft and Structure
- Integration of Knowledge and Details
- Range and Level of Complexity
- Writing
- Texts Types and Purposes
- Production and Distribution
- Research to Build and Present Knowledge
- Range
- Speaking and Listening
- Comprehension and Collaboration
- Presentation of Knowledge and Ideas
- Language
- Conventions of Standard English
- Knowledge of Language
- Vocabulary Acquisition and Use
- Accelerated Reader Program
- Average AR Reading Level
- Average AR Quiz Score
- AR Points Earned

0 - 5 MUSIC

- Generate and conceptualize artistic ideas and work
- Organize and develop artistic ideas and work
- Refine and complete artistic work
- Select, analyze, and interpret artistic work for presentation
- Develop and refine artistic techniques and work for presentation
- Convey meaning through the presentation of artistic work
- Perceive and analyze artistic work
- Interpret intent and meaning in artistic work
- Apply criteria to evaluate artistic work
- Synthesize and relate knowledge and personal experiences to make art
- Relate artistic ideas and works with societal, cultural, and historical context to deepen understanding

0 - 5 PE AND HEALTH

PE

- Motor skills and movement patterns
- Application of concepts, principles, strategies, and tactics related to movement and performance
- Knowledge and skills to achieve a health-enhancing level of physical fitness
- Personal and social behavior respectful of self and others
- Recognition of the value of physical activity

HEALTH

- Can comprehend concepts related to health promotion and disease prevention to enhance health
- Can analyze the influence of family, peers, culture, media, technology, and other factors on health behaviors
- Can access valid information and products and services to enhance health
- Can use interpersonal communication skills to enhance health and avoid or reduce health risks
- Can use decision-making skills to enhance health
- Can use goal-setting skills to enhance health
- Demonstrates the ability to practice health-enhancing behaviors and avoid or reduce health risks
- Demonstrates the ability to advocate for personal, family, and community

0 - 5 SOCIAL STUDIES

Social Studies Skills

- Knows that there are many points of view to an argument and can share one's own position with evidence
- Knows how to ask quality questions and find appropriate materials to find answers to those questions
- Knows that there are many ideas, issues, and conflicts going on in the world around one and can listen in order to understand the different points of view and use one's own voice to enact change
- Knows that there are many ways to share ideas and can evaluate evidence and determine the best tools to express one's own knowledge and understanding

Civics

- Knows that different communities create rules to promote the common good and individual liberties
- Recognizes that one has rights and responsibilities as a citizen in one's own community
- Knows that there are different communities nearby and that there may be different rules for different communities
- Understands that when one shows concern for the well-being of one's classroom, school, and community, one is being civic-minded

Economics

- Can make decisions about how to use resources to benefit oneself and others
- Understands the basic elements of a communityâ€™s economic system, including producers, distributors, and consumers of goods and services
- Knows that government has a role in the economy
- Knows that when people specialize and trade, it leads to increased economic interdependence, which is a fundamental step in understanding how the world economy functions

History

- Knows that the study of chronology is necessary for understanding cultures, global connections, and historical events
- Knows that history is a series of connected events shaped by multiple cause-effect relationships, linking past to present
- Understands that historical events can be interpreted differently by different individuals, families, and communities
- Can use the historical inquiry process that is based in materials, including primary source documents, to study and analyze the past and understand current issues and events

Geography

- Knows that the use of tools (e.g., maps, globes, charts, graphs) is important to understanding the world around us. Different cultures may use different tools, and have different names and different perspectives when looking at the world around us
- Knows that the human-environment interactions are essential aspects of human life in all societies and that they occur at local-to-regional scale. Human actions modify the physical environment, and, in turn, the physical environment limits or promotes human activities
- Knows that people, products, and ideas can move, connecting local and global communities to each other

0 - 5 SPANISH

- Student can read words, phrases, and sentences with minimal errors in pronunciation. Student is reading smoothly, and pronunciation is not adding pauses to the pace.
- Student can understand and communicate what was read or what he/she read.
- Student can communicate effectively using Spanish Vocabulary orally. Student is able to understand dialogue and respond using Spanish.
- Student can construct meaningful sentences that inform about or explain a topic.
- Student uses and understands precise language and domain-specific vocabulary.
- Student uses the language to investigate, explain, and reflect on the nature of language through comparisons of the language studied and their own.
- Student uses the language to investigate, explain, and reflect on the concept of culture through comparisons of the cultures studied and their own.

0 - CHARACTER & STUDY SKILLS

- Works independently
- Solves own problems
- Follows two-step directions
- Organizes materials
- Completes class work on time
- Completes and turns in homework on time
- Works well with others
- Respects others
- Resolves conflict positively
- Shows kindness
- Demonstrates effort and strives for quality
- Perseveres
- Focuses on task at hand
- Follows rules
- Accepts responsibility for actions
- Demonstrates a positive attitude
- Contributes positively to the classroom.
- Writes name on classwork and homework before turning in
- Waits for appropriate moments to share
- Demonstrates whole body listening

0 - MATH

Counting and Cardinality

- Know numbers and the count sequence
- Count to tell the numbers of objects
- Compare numbers
- Operations and Algebraic Thinking
- Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from

Numbers and Operations in Base Ten

- Work with numbers 11-19 to gain foundations for place value

Measurement and Data

- Describe and compare measurable attributes
- Classify objects and count the number of objects in each category

Geometry

- Identify and describe shapes
- Analyze, compare, create and compose shapes

0 - SCIENCE

Life Science

- Use observations to describe patterns of what plants and animals (including humans) need to survive

Physical Science

- Plan and conduct an investigation to compare the effects of different strengths or different directions of pushes and pulls on the motion of an object
- Analyze data to determine if a design solution works as intended to change the speed or direction of an object with a push or a pull
- Use tools and materials provided to design and build a structure that will reduce the warming effect of sunlight on Earth's surface
- Make observations to determine the effect of sunlight on Earth's surface

Earth and Space Science

- Use and share observations of local weather conditions to describe patterns over time
- Construct an argument supported by evidence for how plants and animals (including humans) can change the environment to meet their needs
- Use a model to represent the relationship between the needs of different plants and animals (including humans) and the places they live.
- Ask questions to obtain information about the purpose of weather forecasting to prepare for, and respond to, severe weather
- Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment

Engineering, Technology, and Applications of Science

- Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool
- Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem
- Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs
- Analyze data to determine if a design solution works as intended to change the speed or direction of an object with a push or a pull
- Ask questions to obtain information about the purpose of weather forecasting to prepare for, and respond to, severe weather
- Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment

0- 5 LIBRARY

- Students will demonstrate understanding of literacy foundations and concepts.
- Students will select, analyze, and interpret literature through presentation.
- Students will demonstrate author, illustrator, and publisher awareness and convey understanding through author studies.

- Students will demonstrate the ability to use appropriate decision-making to personalize their library experience.
- Students will demonstrate respectful and appropriate library behavior.
- Students will be able to apply their understanding of appropriate digital citizenship and internet safety.

1 - 2 CHARACTER & STUDY SKILLS

- Works independently ; follows directions; uses time productively; organizes materials and work space and is prepared to work; asks for help when needed
- Works well with others; respects rights, property, feelings, and ideas of others; resolves conflict positively
- Demonstrates effort and strives for quality; perseveres
- Follows school/class rules; accepts responsibility for actions; demonstrates a positive attitude; contributes positively to the classroom
- Reflects on work; evaluates quality of work and sets goals to improve; completes class work on time
- Reflects on work; evaluates quality of work and sets goals to improve; completes homework on time

1 - MATH

Operations and Algebraic Thinking

- Represent and solve problems involving addition and subtraction
- Understand and apply properties of operations and the relationship between addition and subtraction
- Add and subtract within 20
- Work with addition and subtraction equations

Numbers and Operations in Base Ten

- Extend the counting sequence
- Understand place value
- Use place value understanding and properties of operations to add and subtract

Measurement and Data

- Measure lengths indirectly and by iterating length units
- Tell and write time
- Represent and interpret data

Geometry

- Reason with shapes and their attributes

1 - SCIENCE

Life Science

- Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs
- Read texts and use media to determine patterns in the behavior of parents and offspring that help offspring survive
- Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like, their parents

Physical Science

- Plan and conduct investigations to provide evidence that vibrating materials can make sound and that sound can make materials vibrate
- Make observations to construct an evidence-based account that objects in darkness can be seen only when illuminated
- Plan and conduct investigations to determine the effect of placing objects made with different materials in the path of a beam of light
- Use tools and materials to design and build a device that uses light or sound to solve the problem of communicating over a distance

Earth and Space Science

- Use observations of the sun, moon, and stars to describe patterns that can be predicted
- Make observations at different times of year to relate the amount of daylight to the time of year

Engineering, Technology, and Applications of Science

- Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool
- Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem
- Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs

2 - MATH

Operations and Algebraic Thinking

- Represent and solve problems involving addition and subtraction
- Add and subtract within 20
- Work with equal groups of objects to gain foundations for multiplication

Numbers and Operations in Base Ten

- Understand place value
- Use place value understanding and properties of operations to add and subtract

Measurement and Data

- Measure and estimate lengths in standard units
- Relate addition and subtraction to length
- Work with time and money

- Represent and interpret data

Geometry

- Reason with shapes and their attributes

2 - SCIENCE

Life Science

- Plan and conduct an investigation to determine if plants need sunlight and water to grow
- Develop a simple model that mimics the function of an animal in dispersing seeds or pollinating plants
- Make observations of plants and animals to compare the diversity of life in different habitats

Physical Science

- Plan and conduct an investigation to describe and classify different kinds of materials by their observable properties
- Analyze data obtained from testing different materials to determine which materials have the properties that are best suited for an intended purpose
- Make observations to construct an evidence-based account of how an object made of a small set of pieces can be disassembled and made into a new object
- Construct an argument with evidence that some changes caused by heating or cooling can be reversed and some cannot

Earth and Space Science

- Identify evidence from patterns in rock formations and fossils in rock layers to support and explanation for changes in a landscape over time
- Make observations and/or measurements to provide evidence of the effects of weathering or the rate of erosion by water, ice, wind, or vegetation
- Analyze and interpret data from maps to describe patterns of Earthâ€™s features
- Generate and compare multiple solutions to reduce the impacts of natural Earth processes on humans
- Obtain and combine information to describe that energy and fuels are derived from natural resources and that their uses affect the environment

Engineering, Technology, and Applications of Science

- Develop a simple model that mimics the function of an animal in dispersing seeds or pollinating plants
- Compare multiple solutions designed to slow or prevent wind or water from changing the shape of the land
- Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool
- Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem

3 - 5 CHARACTER & STUDY SKILLS

- Comes to class prepared with all required materials.
- Works independently to solve problems and to find answers to questions.
- Manages class time wisely.
- Turns in homework on time.
- Shows persistence despite difficulty or time needed to complete the task.
- Is not easily distracted by others or themselves.
- Follows verbal directions the first time given.
- Reads, understands and follows written directions.
- Organizes assignments, materials and learning space. Uses organizational tools.
- Shows respect for self, peers, adults, materials, and the learning environment.
- Shows patience.
- Demonstrates active listening by raising a hand to answer questions and contributes thoughtfully during class discussions.
- Stays focused, listens to others, and completes their share of the work during cooperative projects.
- Accepts responsibility for actions and follows through on commitments.
- Demonstrates self-control.
-

3 - MATH

Operations and Algebraic Thinking

- Represent and solve problems involving multiplication and division
- Understand properties of multiplication and the relationship between multiplication and division
- Multiply and divide within 100
- Solve problems involving the four operations, and identify and explain patterns in arithmetic

Numbers and Operations in Base Ten

- Use place value understanding and properties of operations to perform multi-digit arithmetic

Numbers and Operations -- Fractions

- Develop understanding of fractions as numbers

Measurement and Data

- Solve problems involving measurement and estimation
- Represent and interpret data
- Geometric measurement: understand concepts of area and relate area to multiplication and addition
- Geometric measurement: recognize perimeter

Geometry

- Reason with shapes and their attributes

3 - SCIENCE

Life Science

- Develop models to describe that organisms have unique and diverse life cycles but all have in common birth, growth, reproduction, and death
- Construct an argument that some animals form groups that help members survive
- Analyze and interpret data to provide evidence that plants and animals have traits inherited from parents and that variation of these traits exists in a group of similar organisms
- Use evidence to support the explanation that traits can be influenced by the environment
- Analyze and interpret data from fossils to provide evidence of the organisms and the environments in which they lived long ago
- Use evidence to construct an explanation for how the variations in characteristics among individuals of the same species may provide advantages in surviving, finding mates, and reproducing
- Construct an argument with evidence that in a particular habitat some organisms can survive well, some survive less well, and some cannot survive at all
- Make a claim about the merit of a solution to a problem caused when the environment changes and the types of plants and animals that live there may change

Physical Science

- Plan and conduct an investigation to provide evidence of the effects of balanced and unbalanced forces on the motion of an object
- Make observations and/or measurements of an objectâ€™s motion to provide evidence that a pattern can be used to predict future motion
- Ask questions to determine cause and effect relationships of electric or magnetic interactions between two objects not in contact with each other
- Define a simple design problem that can be solved by applying scientific ideas about magnets

Earth and Space Science

- Represent data in tables and graphical displays to describe typical weather conditions expected during a particular season
- Obtain and combine information to describe climates in different regions of the world
- Make a claim about the merit of a design solution that reduces the impacts of a weather-related hazard

Engineering, Technology, and Applications of Science

- Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost
- Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem
- Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved

4 - MATH

Operations and Algebraic Thinking

- Use the four operations with whole numbers to solve problems
- Gain familiarity with factors and multiples
- Generalize and analyze patterns

Numbers and Operations in Base Ten

- Generalize place value understanding for multi-digit whole numbers
- Use place value understanding and properties of operations to perform multi-digit arithmetic

Numbers and Operations -- Fractions

- Extend understanding of fraction equivalence and ordering
- Build fractions for unit fractions
- Understand decimal notation for fractions, and compare decimal fractions

Measurement and Data

- Solve problems involving measurement and conversion of measurements
- Represent and interpret data
- Geometric measurement: understand concepts of angle and measure angles

Geometry

- Draw and identify lines and angles, and classify shapes by properties of their lines and angles

4 - SCIENCE

Life Science

- Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction
- Use a model to describe that animals receive different types of information through their senses, process the information in their brain, and respond to the information in different ways

Physical Science

- Develop a model of waves to describe patterns in terms of amplitude and wavelength and that waves can cause objects to move
- Generate and compare multiple solutions that use patterns to transfer information
- Develop a model to describe that light reflecting from objects and entering the eye allows objects to be seen
- Use evidence to construct an explanation relating the speed to the energy of an object
- Make observations to provide evidence that energy can be transferred from place to place by sound, light, heat, and electric currents
- Ask questions and predict outcomes about the changes in energy that occur when objects collide
- Ask questions to determine cause and effect relationships of electric or magnetic interactions between two objects not in contact with each other

- Apply scientific ideas to design, test, and refine a device that converts energy from one form to another

Earth and Space Science

- Identify evidence from patterns in rock formations and fossils in rock layers to support and explanation for changes in a landscape over time
- Make observations and/or measurements to provide evidence of the effects of weathering or the rate of erosion by water, ice, wind, or vegetation
- Analyze and interpret data from maps to describe patterns of Earthâ€™s features
- Generate and compare multiple solutions to reduce the impacts of natural Earth processes on humans
- Obtain and combine information to describe that energy and fuels are derived from natural resources and that their uses affect the environment

Engineering, Technology, and Applications of Science

- Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost
- Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem
- Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved

5 - MATH

Operations and Algebraic Thinking

- Write and interpret numerical expressions
- Analyze patterns and relationships

Numbers and Operations in Base Ten

- Understand the place value system
- Perform operations with multi-digit whole numbers and decimals to hundredths

Numbers and Operations -- Fractions

- Use equivalent fractions as a strategy to add and subtract fractions
- Apply and extend previous understandings of multiplication and division

Measurement and Data

- Convert like measurement units within a given measurement system
- Represent and interpret data
- Geometric measurement: understand concepts of volume

Geometry

- Graph points on the coordinate plane to solve real-world mathematical problems
- Classify two-dimensional figures into categories based on their properties

5 - SCIENCE

Life Science

- Use models to describe that energy in animalsâ€™ food (used for body repair, growth, motion, and to maintain body warmth) was once energy from the sun
- Support an argument that plants get the materials they need for growth chiefly from air and water
- Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment

Physical Science

- Develop a model to describe that matter is made of particles too small to be seen
- Measure and graph quantities to provide evidence that regardless of the type of change that occurs when heating, cooling, or mixing substances, the total weight of matter is conserved
- Make observations and measurements to identify materials based on their properties
- Conduct an investigation to determine whether the mixing of two or more substances results in new substances
- Support an argument that the gravitational force exerted by Earth on objects is directed down
- Use models to describe that energy in animalsâ€™ food (used for body repair, growth, motion, and to maintain body warmth) was once energy from the sun

Earth and Space Science

- Support an argument that the apparent brightness of the sun and stars is due to their relative distances from the Earth
- Represent data in graphical displays to reveal patterns of daily changes in length and direction of shadows, day and night, and the seasonal appearance of some stars in the night sky
- Develop a model using an example to describe ways the geosphere, biosphere, hydrosphere, and/or atmosphere interact
- Describe and graph the amounts and percentages of water and fresh water in various reservoirs to provide evidence about the distribution of water on Earth
- Obtain and combine information about ways individual communities use science ideas to protect the Earth’s resources and environment

Engineering, Technology, and Applications of Science

- Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost
- Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem
- Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved