



**2018-2019
Course
Description
Catalog**
Kindergarten – 8th grade

***Celebrating 19 years of educational
service to our communities***

Our high schools are accredited by the North
Central Association



Dear Students and Parents,

Skyline Education has a proud 18-year tradition of offering an outstanding program of academic courses, athletic programs, and fine arts. Our mission of providing a high-quality college preparatory education that bolsters character development through academics, arts, and athletics, leads us to seek offerings that will best prepare students for life after high school. This course book provides a brief description of every course, the sequence of those courses, and policies at Skyline Education.

Skyline's academic curriculum and school culture promote:

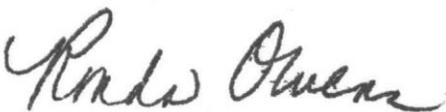
- A **results-focused education** with a clear end in mind that begins in Kindergarten and builds to mastery of the knowledge and skills that colleges and employers value
- **Clear and consistent goals** with an emphasis on real-world application of knowledge and skills
- **Relevant content** that increases ability to effectively use critical thinking and problem-solving skills to communicate, collaborate, and adapt to new situations in either college or in the workplace
- A sound, rigorous, **evidence-based preparation** for success in college and/or career.

Course selection plays an integral role in a student's future options. In high school, staff will support all students as they design a four-year, goal-oriented plan that will support their successes for many years to come. We want every student to be prepared for the future. This preparation begins by making informed choices regarding the classes to pursue in high school. Our academic deans are highly skilled and dedicated to helping each student reach his or her goals.

It is critical for both students and parents to be involved in the course selection process and work closely with their assigned academic dean to make the appropriate selection necessary to meet his or her goals. Please feel free to reach out to the principal, teachers, and academic deans for assistance and with any questions you may have.

Faculty and staff at Skyline Education are here to support every student in an effort to achieve their lifelong pursuits. Remember that your involvement and partnership in this process is essential for success. Join us on our journey!

Sincerely,

A handwritten signature in black ink that reads "Ronda Owens". The signature is written in a cursive, flowing style.

Ronda Owens, M. Ed.
CEO, Skyline Education, Inc.

District Mission

Our mission is to provide each student and family we serve with high quality **COLLEGE PREPARATORY** educational programs and services designed to engage the individual student's strengths and interests and foster a love of learning while developing character through academics, arts, and athletics.

Educational Philosophy

With dynamic effort and direction, all students will strive to reach their full potential and be empowered to lead successful and productive lives.

Our charter schools are founded on the premise that all students can be successful in college. For this to become reality, we must provide students with a focused, standards based curriculum. Student mastery will be achieved through content-rich lessons that imparts core knowledge and essential learning skills.

In order to achieve academic excellence, our program will focus on character development through academics, athletics, and the arts. Combining a constant focus on character development and academic excellence, will lead our students to be prepared for the challenges that lie ahead of them in education and in life.

School Contact Information

South Phoenix Campus

Grades	School	Administration
K-4	South Phoenix Prep and Arts Academy 7450 S. 40 th Street Phoenix, AZ 85042 Phone: (877) 225-2118 Fax: (877) 821-5462	TBA, Principal
5-8	South Valley Prep and Arts Academy 7470 S. 40 th Street Phoenix, AZ 85042 Phone: (877) 225-2118 Fax: (877) 821-5462	Tasha Gant, M.Ed., Principal
9-12	Skyline Prep and Arts Academy 7500 S. 40 th Street Phoenix, AZ 85042 Phone: 1 (877) 225-2118 Fax: 1 (877) 821-5462	Tasha Gant, M.Ed., Principal

Chandler Campus

Grades	School	Administration
K-6	Vector Prep and Arts Academy 2020 N. Arizona Ave. Suite 5 Chandler, AZ 85225 Phone: (480) 779-2000 Fax: (877) 821-5462	Greg Garland, Principal
7-12	AZ Compass Prep School 2020 N. Arizona Ave. Suite 206 Chandler, AZ 85225 Phone: 1 (480) 779-2000 Fax: 1 (877) 821-5462	Phillip Wilson, M.Ed., Principal

Bapchule Campus

Grades	School	Administration
5-12	Skyline Gila River- District 5 978 N. Preschool Road P.O. Box 1885 Bapchule, AZ 85221 Phone: (480) 403-8580 Fax: (520) 315-3233	Vaughn Flannigan, Principal

Preschools

Grades	School	Administration
Ages 3-5	Chandler Preschool 2020 N. Arizona Ave. Suite 5 Chandler, AZ 85225 Phone: (480) 779-2000	Natasha Gillen, Director
Ages 3-5	South Phoenix Preschool Phone: (480) 779-2000	Jewel White, Director

Table Of Contents

Course Catalog Description	7
K-8 Enrollment	8
Overview of STEAM and Traditional Programs	8
Grading and Incomplete Grades	9
Promotion and Retention	10
High School Credit	10
Academic Honors	11
Extracurricular Eligibility	12

Course Catalog

Curriculum Overview and Learning Resources	14
--	----

English Language Arts	
K-5 th	16
6-8 th	22

Mathematics	
K-5 th	26
6-8 th	32

Science	
K-5 th	36
6-8 th	42

Social Studies	
K-5 th	47
6-8 th	51

Fine Arts/Visual Arts	
K-8 th	54

General Electives	
K-8 th	58

Appendix	
STEAM Program of Study	60

Course Catalog Description

This course description catalog is a comprehensive list of courses available in the Skyline School system.

Course offerings may vary from campus to campus based upon available facilities, highly qualified staff, and adequate student enrollment.

Annual Public Notification of Nondiscrimination Skyline Education does not discriminate on the basis of race, color, national origin, sex, age, or disability in admission to its programs, services, or activities, in access to them, in treatment of individuals, or in any aspect of their operations. Skyline Education's Career and Technical Education Department does not discriminate in enrollment or access to any of the available programs. The limitation of English language skills shall not be a barrier to admission or participation in the district's activities and programs. Skyline Schools also does not discriminate in its hiring or employment practices.

This notice is provided as required by Title VI of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973, Title IX of the Education Amendments of 1972, the Age Discrimination Act of 1975, and the Americans with Disabilities Act of 1990. Questions, complaints, or requests for additional information regarding these laws may be forwarded to the designated compliance coordinator(s):

Director of Special Education: Dawn Livesey

Directors of Athletics: Zyzick Owens, Chandler Campus; Jamarei Bryant, South Campus, and Michael Craig, D5 Campus

K-8 Enrollment

Enrollment

To enroll you need to call or visit the school and complete an Enrollment packet for the desired school and program.

Two programs are offered to meet the diverse needs of our student population. You can choose to enroll your child in the Traditional Program or into the STEAM Academy.

Students entering Kindergarten will need to take the Kindergarten readiness exam, regardless of which program they chose.

Overview of STEAM Program

The K-6th Grade STEAM Program is a small learning community at Skyline Education that utilizes standards driven thematic units to engage students in learning based on Science, Technology, Engineering, the Arts, and Mathematics. Our integrated curriculum sets the foundation for learning in all content areas, while focusing on STEAM principles that awaken students' curiosity of the world around them.

Every Friday, students will be given opportunities to become problem-solvers within their thematic unit of studies. They will be given the freedom to design, engineer, fabricate, create, build, and collaborate on projects that include real problems.

The STEAM Program Goals:

- Provide hands-on experiential learning
- Expose students to real world problems and approaches to solve those problems
- Set the foundation for independent and critical thinking
- Learn how to use science and engineering practices to solve problems
- Create a well-rounded and versatile thinker

STEAM Nights:

Each campus will have one STEAM Night per semester. This is an evening of hands-on science, technology, engineering, arts, and math activities covering different STEAM topics and connections to STEAM careers. All family members are welcome to attend and activities will be suitable for all age groups.

This program is limited to 30 students per grade level. Students that wish to enter the program after the 30 student limit is reached, will be placed on a waiting list and placed in our traditional program until space is available. (For more information, see appendix A)

Overview of Traditional Program

The K-8th Grade Traditional Program follows the traditional curriculum, but embraces a student-centered learning model that challenges students to be critical thinkers. The core subject areas are aligned and are taught with a strong literacy and art focus.

Every Friday, students will be given opportunities to become creative critical thinkers within their unit of studies. They will be given the freedom to design, fabricate, create, build, and collaborate on projects that include a strong literacy and art focus such as creating reader's theatre scripts, puppet shows, wax museum etc...

The Traditional Program Goals:

- Provide direct instruction with hands-on learning opportunities
- Master the skills and content necessary to solve problems based on real-world scenarios
- Build knowledge of various subjects as they explore the different content areas through literacy and art.
- Create a critical thinker with a solid foundation in the core subjects.

Traditional Literacy and Arts Night:

Each campus will have one Traditional Literacy and Arts Night per semester. This is an evening of hands-on themed literacy activities that align with standards already taught and showcase student work. All family members are welcome to attend and activities will be suitable for all age groups.

Grading

Multiple assessment structures are needed to gain an accurate picture of student readiness and mastery.

Graded tasks may include but are not limited to the following:

1. Summative Assessments
2. Alternative Assessments
3. Long term Projects
4. Labs
5. Daily Activities

Students attending Skyline Education schools will be assessed using the following grading scales.

Grading Scale	GPA
90-100 = A	A = 4.0
80-89 = B	B = 3.0
70-79 = C	C = 2.0
60-69 = D	D = 1.0
0-59 = F	F = No credit
Incomplete = I	

Students in K-2 use the standards based grade scale.

Standards-based Grading Scale
HP – Highly Proficient
P – Proficient
PP – Partially Proficiency
MP – Minimally Proficient

Teachers and administrators can address any questions or concerns you have about the grading scale.

Testing

Testing is a State requirement.

State mandated testing (AZMerit) requires mandatory full-day attendance.

Students who attend regularly are given the knowledge and skills necessary to demonstrate academic excellence and the ability to do well in the college, university, or career of their choice.

These tests are designed to represent the necessary grade level knowledge and skills student need to be successful. It provides data that is analyzed to assess the needs of the students and the resources that are needed to ensure growth and academic achievement.

Students are encouraged to do their best.

Incomplete Grades

Students who receive a grade of Incomplete must complete the necessary course work within two weeks, unless they have a medical condition and documentation that justifies extending the deadline.

An Incomplete grade signifies that a portion of the required course work has not been completed and evaluated in the prescribed time period owing to unforeseen but fully justified reasons and that there is still a possibility of earning credit.

It is the responsibility of the student to reach an agreement with the teacher on the means by which the remaining course requirements will be satisfied.

A final grade is assigned when the work agreed upon has been completed and evaluated.

When assigning a grade of Incomplete ("I"), the instructor shall:

- Complete *the Statement of Requirements for Completion of Course Work* (see Appendix D)
- Retain a signed copy for his/her records
- File a signed copy with the department for future reference
- Provide a signed copy to the student and parent.

When specific requirements are completed, the instructor will report a change of grade.

If the requirements are not met in the timeframe set by the teacher and/or a medical extension was not approved through the administration, then the grade becomes an F or no credit.

Promotion, and Retention of Students

Attendance is an important factor in a student's ability to successfully complete the course requirements and master the content.

At anytime a teacher may make a recommendation for promotion to a higher level course or to retain a student.

Promotion from one grade to the next is based upon the ability to succeed at the next grade level. When formulating a recommendation for retention the teacher works closely with the school's principal to ensure the recommendation is in the best interest of the student.

Parents/Guardians are notified of

additional tutoring prior to Winter Break and again during April if necessary for a retention.

Teachers base their recommendation to promote or retain students on the following criteria:

- achievement on summative assessments
- attendance
- mastery of standards
- achievement on standardized tests
- age, maturity, and effort
- Tutoring attendance and mastery of concepts]
- Interventions

Parent(s) may request promotion passed the current grade or retention for their student by providing a written request during the school year and must be approved by the President of Skyline Education. All submissions must be complete by the close of the third quarter, for the following year. Promotions are not done after the school has started.

Final promotion/retention decision are determined by Skyline Administration and the current Principal of the School.

High School Credits earned in Middle School

Middle school students who exceed state standards on the Az Merit may take a placement exam to qualify them to earn high school credit, while in middle school.

The student would need to be enrolled into one of the district high schools and take a high school course.

These courses must be approved by the legal guardian and the administration prior to starting the class.

Course selection and placement is dependent upon the Az Merit scores, student readiness, and appropriate communication between parents, students, teachers, and building administrators.

Students could start high school with 0.5 credit for each of the high school courses, they took while still in Middle School.

These course would fulfill some of the requirements needed to obtain a high school diploma and meet the necessary requirements for admission into institutions of higher learning, however that is determined by the High School they attend. Skyline Education students will be able to transfer the credit.

Academic Honors

Students will be recognized quarterly for academic achievement based on the following criteria.

Standards Based Award criteria:

	Highly Proficient	Proficient
--	--------------------------	-------------------

Math	Students earn HP status in all domains.	Students earn P (or better) in each domain.
ELA	Students earn HP status in all strands.	Students earn Proficient (or better) in each strand.

Traditional Grading Award criteria:

	Highest Honors	Honors
Math	Students earn a 3.8 or higher.	Students earn a 3.5 or higher.
ELA		
Science		
Social Studies		

Skyline Scholars

Skyline Scholar requirements are:
A cumulative grade point average of 3.80 or better without any grades lower than a “D” and without any I’s on the transcripts.

Extracurricular Eligibility for Skyline Students

Eligibility

There is an activity participation fee for each interscholastic activity or sport as established in school policy.

Eligibility for participation in these extracurricular activities, a student must pass all courses with a “C” or better, the quarter prior to participation.

Students that are ineligible to participate or play, may apply for

eligibility reinstatement at weekly intervals.

The student must be passing all current classes to be considered for reinstatement.

Academic Eligibility

Skyline Education’s network of schools currently participate in the [CAA \(Charter Athletic Association\)](#).

Per CAA Constitution.

4.4 Eligibility of players

4.4.1. Each school must maintain and enforce an academic eligibility policy with a minimum of all passing academic grades (No F’s).

4.4.1.1 If a player that is not academically eligible participates in a CAA game/contest, that game/contest is declared a forfeit.

4.4.2. Players must take no less than 51 percent of their schooling through the school’s curriculum.

4.4.2.1 Students must be enrolled in 3 core curriculum classes at their school in order to be considered eligible for that school.

4.4.2.2. In a student’s last year of high school, they are only required to take as many classes as necessary to complete their graduation requirements in order to be considered eligible.

4.4.3. Students transferring into a school after the official start date of a season (First official day of practice) must sit out that season unless they did not play that particular sport the year before. With the exception of students who change address or domicile to a

location closer to the school the student is transferring to. This includes junior high and high school.

4.4.4. High school students cannot be 19 on or before September 1st

4.4.4.1 Limit of 4 years of High School eligibility from 9th-12th grade per sport. (2017)

4.4.4.2 Student athletes 6th grade or below may not play on varsity level teams.

4.4.4.3 Junior Varsity athletes can be in grades 7th – 11th only.

4.4.5. Junior high students cannot be 15 on or before September 1st.

4.4.6. Players must be in eighth grade or below to play junior high sports. The individual school is responsible for determining the accurate grade level of the student based on their standards.

4.4.7 The grade level of a home school student, due to the unique structure of their curriculum, shall be of no consequence and age will be the sole determining factor.

4.4.7.1 Once a student has met the State of Arizona requirements for graduation or any other states, they lose eligibility to continue to compete in the CAA, even if they still meet age requirement.

4.4.8. Once a 7th or 8th grade student has played in 3 or more regular season games with the varsity or junior varsity team they may not return to the junior high team.

4.4.9. For all High School competitions (except football, track and cross country) a varsity or junior varsity a team is only eligible to participate in a maximum of 24

games during the season with no more than 2 tournaments excluding the state tournaments.

4.4.9.1 A game is defined as contest that 5 or more CAA athletes from one CAA team participate in together.

4.4.9.1 Junior high team is only eligible to participate in a maximum of 16 games and with no more than 1 tournament excluding the state tournament.

4.4.10 For all High School competitions in the following sports football, track and cross country a varsity or junior varsity team is only eligible to participate in a maximum of 12 games or competitions during the season excluding the state tournament.

4.4.10.1 A game or competition is defined as contest that 5 or more CAA athletes from one CAA team participate in together.

4.4.11. In accordance with title 9, women may only participate on men's teams when a corresponding sport is not offered by the member school. A co-ed team must enter the league as a men's team.

4.4.12 All student athletes must watch the NFHS Concussion video to be eligible to compete in a CAA contest/game. See website for details.

4.4.13. The league will entertain applications for hardship before each scheduling meeting but is under no obligation to accept them.

4.4.13 Hardships:

4.4.13.1 Combining of Teams – The joining together of students from two

or more member schools in the same area or close proximity to form a single team shall be permitted subject to the following conditions:

4.4.13.2 Permission must be obtained from the *Disciplinary Committee* on an annual basis.

4.4.13.3 If a combined school team is approved. The team will be set into a division based on their boys and girls grades 9-11 enrollment, shall be combined for division level placement. (3A or 2A)

4.4.13.4 Home school athletes who want to compete at a member school must submit a letter stating that 51 percent of their curriculum is received from home schooling. Letter needs to be signed by parents.

4.4.13.5 Students who attend local Junior High or High school, where a particular sport is not offered and are requesting to compete for a current CAA member school must submit the CAA Hardship Form prior to the start of that particular sport season.

4.4.14. Schools failing to comply with the guidelines defined in Article 4.4 will be held accountable per the guidelines established in Article 7.

Curriculum Overview K-8th Grade

English Language Arts and Math Curriculum K-8th Grade

In K-8th grade, students will have access to Engage NY curriculum for both English Language Arts and Math. These curricula provide instructional practices on achieving 21st century literacy and supports

Arizona College and Career Ready Standards (AZCCRS). It also provides additional guidance on implementation of the standards with English Language Learners (ELLs), Multilingual Learners (MLLs), and Students with Disabilities (SWDs).

Spelling and Word Skills K-5th Grade

Students in grades K-2 will have access to the Skills Strand in the Engage NY curriculum. Within the Skills Strand, students are taught sound-spelling correspondences in the English language and decoding skills through a comprehensive phonics program. In addition to phonics, they are also taught spelling, grammar, and writing.

In grades 3-5th, students will have access to Sitton Spelling and Word Skills curriculum. They will be given opportunities to expand on spelling and language skills, proofreading, and assessment readiness. Students will improve knowledge of spelling rules, spelling patterns, and grammar as well as expand their word study knowledge by studying word roots and endings.

Science Curriculum K-4th Grade

In K-4th grade, students will have access to FOSS (Full Option Science System), a research-based science curriculum. The FOSS kits provide tools and strategies to engage students and teachers in enduring experiences that lead to deeper

understanding of the natural world aligning to AZCCRS and Next Generation Science Standards (NGSS).

Science Curriculum 5-8th Grade

In 5-8th grade, students have access to Lab-Aids, a research based core curriculum that supports AZCCRS and NGSS. Students are provided with guided and open-ended inquiry opportunities to experience the scientific process and natural phenomena.

Learning Resources

Learning Resources K-4th Grade

Study Island

Study Island is a digital program that allows our K-4 students to work on targeted skills until mastered. Students will have access to this program at school as well as at home. Parents may request student login information with their student's teacher. This program can be found at:

<https://login.studyisland.com/studyisland/signin>

Reading A-Z

Reading A-Z is another resource available to all K-4 students. Students will have access to printable books on their independent reading level to target a multitude of reading comprehension skills, exposure to

informational and fictional texts, and a variety of genres. This program can be found at: <https://www.readinga-z.com/>

USA Test Prep

USA Test Prep is an online student performance tracking system that allow students in grade 3-12th grade To work on targeted skills based on their benchmark assessment or teacher created test. Students will have a personalized learning path to help them master skills that they are not currently proficient in in all core subject areas. This program can be found at:

<https://www.usatestprep.com/member-login>



English Language Arts

Kindergarten-5th grade

To view AZCCRS ELA standards, [click here](#).

Key Features of the Standards	
<p>Reading: Text complexity and the growth of comprehension</p>	<p>The Reading standards place equal emphasis on the sophistication of what students read and the skill with which they read. Whatever they are reading, students must also show a steadily growing ability to discern more from and make fuller use of text, including making an increasing number of connections among ideas and between texts, considering a wider range of textual evidence, and becoming more sensitive to inconsistencies, ambiguities, and poor reasoning in texts.</p>
<p>Writing: Text types, responding to reading, and research</p>	<p>The Standards acknowledge the fact that whereas some writing skills, such as the ability to plan, revise, edit, and publish, are applicable to many types of writing; other skills are more properly defined in terms of specific writing types: arguments, informative/explanatory texts, and narratives. Standard 9 stresses the importance of the writing-reading connection by requiring students to draw upon and write about evidence from literary and informational texts. Because of the centrality of writing to most forms of inquiry, research standards are prominently included in this strand, though skills important to research are infused throughout the document</p>
<p>Speaking and Listening: Flexible communication and collaboration</p>	<p>Including but not limited to skills necessary for formal presentations, the Speaking and Listening standards require students to develop a range of broadly useful oral communication and interpersonal skills. Students must learn to work together, express and listen carefully to ideas, integrate information from oral, visual, quantitative, and media sources, evaluate what they hear, use media and visual displays strategically to help achieve communicative purposes, and adapt speech to context and task.</p>
<p>Language: Conventions, effective use, and vocabulary</p>	<p>The Language standards include the essential “rules” of standard written and spoken English, but they also approach language as a matter of craft and informed choice among alternatives. The vocabulary standards focus on understanding words and phrases, their relationships, and their nuances and on acquiring new vocabulary, particularly general academic and domain-specific words and phrases.</p>

The Kindergarten – 5th grade standards define what students should understand and be able to do by the end of each grade. They correspond to the College and Career Readiness (CCR) anchor standards below by number. The CCR and grade-specific standards are necessary complements—the former providing broad standards and the latter providing additional specificity—that together define the skills and understandings that all students must demonstrate.

Key Ideas and Details

1. Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.
2. Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.
3. Analyze how and why individuals, events, and ideas develop and interact over the course of a text.

Craft and Structure

4. Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.
5. Analyze the structure of texts, including how specific sentences, paragraphs, and larger portions of the text (e.g., a section, chapter, scene, or stanza) relate to each other and the whole.
6. Assess how point of view or purpose shapes the content and style of a text.

Integration of Knowledge and Ideas

7. Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.*
8. Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence.
9. Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take.

Range of Reading and Level of Text Complexity

10. Read and comprehend complex literary and informational texts independently and proficiently.

Kindergarten

In kindergarten, students will learn the alphabet and the basic features of letters and words. They will break down spoken and written words into syllables and letters and identify the sounds each letter makes. These important skills will enable students to learn new words and to read and understand simple books and stories.

Students will also learn to write and share information in a variety of ways, including drawing, writing letters and words, listening to others, and speaking aloud.

Activities in these areas will include:

- Naming and writing upper- and lowercase letters
- Matching letters to sounds and using other methods to figure out unfamiliar words when reading and writing
- Learning and using new words,
- Identifying words that rhyme
- Reading common words such as the, of, you, are, she, and my
- Asking and answering questions about a story the teacher reads out loud
- Identifying characters, settings, and major events in a story
- Recognizing the person, place, thing, or idea that an illustration shows
- Participating in discussions by listening and taking turns speaking
- Using a combination of drawing, speaking, and writing to describe an event, give information about a topic, or share an opinion
- Taking part in shared reading, writing, and research projects
- Expressing thoughts, feelings, and ideas clearly

1st grade

In Grade 1, students will build important reading, writing, speaking, and listening skills. Students will continue to learn the letters and sounds that make up words. They will think, talk, and write about what they read in stories, articles, and other sources of information. In their writing, students will work on putting together clear sentences on a range of topics using a growing vocabulary.

Activities in these areas will include:

- Reading stories and showing they understand the lesson or moral of the story
- Examining a story, including characters, settings, and major events
- Comparing and contrasting the experiences of different characters
- Identifying the reasons an author gives to support a point
- Explaining differences between texts that tell stories and texts that provide information
- Learning and using new words

- Participating in class discussions by listening, responding to what others are saying, and asking questions
- Describing people, places, things, and events, expressing feelings and ideas clearly
- Learning basic rules of spoken and written English
- Working with others to gather facts and information on a topic
- Writing to describe an event, provide information on a topic, or share an opinion

2nd grade

In Grade 2, students will continue to build important reading, writing, speaking, and listening skills. They will think, talk, and write about what they read in variety of texts, such as stories, books, articles, and other sources of information including the Internet.

In their writing, students will learn how to develop a topic and strengthen their skills by editing and revising.

Activities in these areas will include:

- Reading stories, including fables and folktales from different cultures, and identifying the lesson or moral of the story
- Reading texts about history, social studies, or science and identifying the main idea
- Answering who, what, where, when, why, and how questions about stories and books
- Describing the reasons that an author gives to support a point
- Learning and using new words
- Learning the rules of spoken and written English
- Participating in class discussions by listening and building on what others are saying
- Describing in their own words information learned from articles or books read aloud
- Working together to gather facts and information on a topic
- Writing about a short series of events and describing actions, thoughts, and feelings
- Writing about opinions on books using important details and examples to support a position

3rd grade

In Grade 3, students will build important reading, writing, speaking, and listening skills.

They will think, talk, and write about what they read in a variety of articles, books, and other texts. In their writing, students will pay more attention to organizing information, developing ideas, and supporting these ideas with facts, details, and reasons.

Activities in these areas will include:

- Reading a wide range of stories and describing how a story teaches a lesson
- Describing characters in a story and how their actions contributed to events
- Reading texts and answering questions about what they learned
- Referring to information from illustrations such as maps or pictures as well as the words in a text to support their answers
- Learning and using new words, including words related to specific subjects (such as science words)
- Participating in class discussions by listening, asking questions, sharing ideas, and building on the ideas of others
- Giving a class presentation on a topic or telling a story using relevant facts and details and speaking clearly
- Writing stories with dialogue and descriptions of character's actions, thoughts, and feelings
- Gathering information from books, articles, and online sources to build understanding of a topic and writing research or opinion papers over extended periods of time

4th grade

In Grade 4, students will continue to build important reading, writing, speaking, and listening skills. They will read challenging literature, articles, and other sources of information and continue to grow their vocabulary. They will also be expected to clearly explain in detail what they have read by referring to details or information from the text. In writing, students will organize their ideas and develop topics with reasons, facts, and details.

Activities in these areas will include:

- Identifying the theme or main idea of a story, play, or poem
- Comparing stories from different cultures
- Explaining how an author uses facts, details, and evidence to support their points
- Reading and understanding information presented in charts, graphs, timelines, and other illustrations
- Learning and using new words, including words related to specific subjects (such as science words)
- Participating in class discussions by listening, asking questions, sharing ideas, and building on the ideas of others

- Giving a class presentation on a topic or telling a story using relevant, organized facts and details and speaking clearly
- Writing stories with dialogue and descriptions of character's actions, thoughts, and feelings
- Writing research or opinion papers over extended periods of time
- Taking notes and organizing information from books, articles, and online sources to learn more about a topic

5th grade

In Grade 5, students will continue to build important reading, writing, speaking, and listening skills. They will read more challenging literature, articles, and other sources of information and continue to grow their vocabulary. Students will also be expected to understand and clearly summarize what they have learned from readings and classroom discussions, referring to specific evidence and details from the text.

Students will write regularly and continue to develop their ability to gather, organize, interpret, and present information.

Activities in these areas will include:

- Determining the theme of a story, play, or poem, including how characters respond to challenges
- Comparing and contrasting stories that deal with similar themes or topics
- Explaining how authors use reasons and evidence to support their points or ideas
- Drawing on information from multiple books, articles, or online sources to locate an answer or to solve a problem quickly
- Learning the rules of spoken and written English
- Learning and using new words, including words related to specific subjects (such as science words)
- Understanding figurative language
- Participating in class discussions by listening, asking questions, sharing ideas, and building on the ideas of others
- Giving a class presentation on a topic or telling a story, introducing relevant facts and details in a clear, logical order
- Writing research or opinion papers over extended periods of time



English Language Arts

6th-8th grade

To view AZCCRS ELA standards, [click here](#).

Key Features of the Standards	
<p>Reading: Text complexity and the growth of comprehension</p>	<p>The Reading standards place equal emphasis on the sophistication of what students read and the skill with which they read. Whatever they are reading, students must also show a steadily growing ability to discern more from and make fuller use of text, including making an increasing number of connections among ideas and between texts, considering a wider range of textual evidence, and becoming more sensitive to inconsistencies, ambiguities, and poor reasoning in texts.</p>
<p>Writing: Text types, responding to reading, and research</p>	<p>The Standards acknowledge the fact that whereas some writing skills, such as the ability to plan, revise, edit, and publish, are applicable to many types of writing; other skills are more properly defined in terms of specific writing types: arguments, informative/explanatory texts, and narratives. Standard 9 stresses the importance of the writing-reading connection by requiring students to draw upon and write about evidence from literary and informational texts. Because of the centrality of writing to most forms of inquiry, research standards are prominently included in this strand, though skills important to research are infused throughout the document</p>
<p>Speaking and Listening: Flexible communication and collaboration</p>	<p>Including but not limited to skills necessary for formal presentations, the Speaking and Listening standards require students to develop a range of broadly useful oral communication and interpersonal skills. Students must learn to work together, express and listen carefully to ideas, integrate information from oral, visual, quantitative, and media sources, evaluate what they hear, use media and visual displays strategically to help achieve communicative purposes, and adapt speech to context and task</p>
<p>Language: Conventions, effective use, and vocabulary</p>	<p>The Language standards include the essential "rules" of standard written and spoken English, but they also approach language as a matter of craft and informed choice among alternatives. The vocabulary standards focus on understanding words and phrases, their relationships, and their nuances and on acquiring new vocabulary, particularly general academic and domain-specific words and phrases.</p>

The 6–8 standards define what students should understand and be able to do by the end of each grade. They correspond to the College and Career Readiness (CCR) anchor standards below by number. The CCR and grade-specific standards are necessary complements—the former providing broad standards and the latter providing additional specificity—that together define the skills and understandings that all students must demonstrate.

Key Ideas and Details

1. Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.
2. Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.
3. Analyze how and why individuals, events, and ideas develop and interact over the course of a text.

Craft and Structure

4. Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.
5. Analyze the structure of texts, including how specific sentences, paragraphs, and larger portions of the text (e.g., a section, chapter, scene, or stanza) relate to each other and the whole.
6. Assess how point of view or purpose shapes the content and style of a text.

Integration of Knowledge and Ideas

7. Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.*
8. Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence.
9. Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take.

Range of Reading and Level of Text Complexity

10. Read and comprehend complex literary and informational texts independently and proficiently.

6th grade

In Grade 6, students will read a range of challenging books, articles, and texts, and will be expected to demonstrate their understanding of the material by answering questions and contributing to class discussions. In writing, students will continue to work on their use of language, sentence structure, and organization of ideas. They will also be expected to integrate information from different sources and respond to challenging content through written interpretation and analysis.

Activities in these areas will include:

- Providing detailed summaries of texts
- Determining the theme of a text and how it is conveyed
- Describing how a story or play unfolds and how characters respond to conflicts
- Using reading strategies to determine the meaning and context of unknown words
- Comparing and contrasting various texts
- Understanding the figurative and (implied) meaning of words and phrases
- Identifying and evaluating specific claims or arguments in a text
- Supporting written claims or arguments with clear reasons and relevant evidence
- Producing clear and coherent writing appropriate to the task, purpose, and audience
- Participating in class discussions about various texts and topics
- Conducting short research projects to answer a question, drawing on several sources

7th grade

In Grade 7, students will continue to develop the ability to cite relevant evidence when interpreting or analyzing a text or supporting their points in speaking and writing. Your child will also build academic vocabulary as he or she reads more complex texts, including stories, plays, historical novels, poems, and informational books and articles.

Activities in these areas will include:

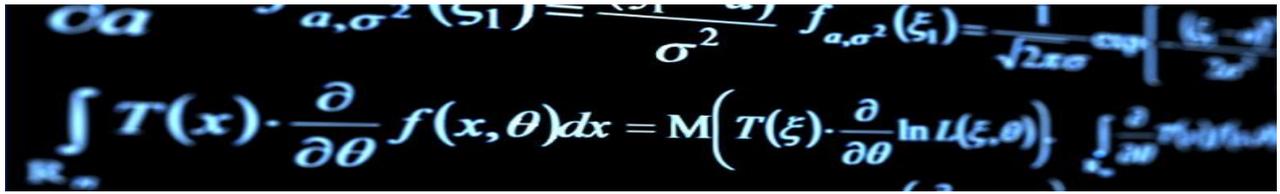
- Analyzing how the form or structure of a play or poem contributes to its meaning
- Analyzing how particular elements of a story or play interact
- Determining how an author develops and contrasts the points of view of different characters or narrators in a text

- Conducting short research projects, drawing on several sources and identifying related questions for further research and investigation
- Engaging in a range of classroom discussions on topics and texts, expressing ideas clearly and building on the ideas of others
- Identifying a speaker's argument and specific claims and evaluating the reasoning and evidence behind these claims
- Using clues such as word roots to a word to determine the meaning of a word
- Interpreting figures of speech or references to literature or mythology in a text
- Writing for a range of purposes and audiences

8th grade

In Grade 8, students will read major works of fiction and nonfiction from all over the world and from different time periods. They will continue to learn how to understand what they read and evaluate an author's assumptions and claims. They will also conduct research that will require the analysis of resources and accurate interpretation of literary and informational text. Activities in these areas will include:

- Identifying what a reading selection explicitly says and drawing inferences based on evidence from the text
- Analyzing the impact of specific word choices on meaning and tone, including analogies or allusions to other texts
- Evaluating the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient
- Connecting information and ideas efficiently and effectively in writing
- Analyzing the purpose of information presented in diverse media formats, such as video clips or interactive maps
- Participating in class discussions on various topics, texts, and issues by expressing ideas and building on the ideas of others
- Developing a large vocabulary of multi-use academic words and phrases
- Interpreting figures of speech, such as puns or verbal irony, in context



Mathematics

Kindergarten – 5th grade

The AZ College and Career Readiness standards call for greater focus, coherence, and rigor when teaching mathematics. Rather than racing to cover many topics in a mile-wide, inch-deep curriculum, the standards ask math teachers to significantly narrow and deepen the way time and energy are spent in the classroom.

The Mathematical Practice Standards apply throughout each course and, together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

To view AZCCRS math standards, [click here](#).

Domain Progression

Kindergarten	1	2	3	4	5
Counting & Cardinality					
Number & Operations in Base Ten					
			Numbers & Operations - Fractions		
Operations and Algebraic Thinking					
Geometry					
Measurement and Data					

Kindergarten

In kindergarten, instructional time will focus on two critical areas: (1) representing, relating, and operating on whole numbers, initially with sets of objects; (2) describing shapes and space.

In kindergarten, your child will focus primarily on two important areas. The first is learning numbers and what numbers represent. The second is addition and subtraction. Students will also learn to identify and work with shapes.

Activities in these areas include:

- Counting how many objects are in a group and comparing the quantities of two groups of objects
- Comparing two numbers to identify which is greater or less than the other
- Understanding addition as putting together and subtraction as taking away from
- Adding and subtracting very small numbers quickly and accurately
- Breaking up numbers less than or equal to 10 in more than one way (for example, $9=6+3$, $9=5+4$)
- For any number from 1 to 9, finding the missing quantity that is needed to reach 10
- Representing addition and subtraction word problems using objects or by drawing pictures
- Solving addition and subtraction word problems involving numbers that add up to 10 or less or by subtracting from a number 10 or less

1st grade

In Grade 1, instructional time will focus on four critical areas: (1) developing understanding of addition, subtraction, and strategies for addition and subtraction within 20; (2) developing understanding of whole number relationships and place value, including grouping in tens and ones; (3) developing understanding of linear measurement and measuring lengths as expressing length units; and (4) reasoning about attributes of, and composing and decomposing geometric shapes. Students will also use charts, tables, and diagrams to solve problems.

Activities in these areas will include:

- Quickly and accurately adding and subtracting numbers together up to 10
- Understanding the rules of addition and subtraction (for example, $5+2=2+5$)
- Solving word problems that involve adding or subtracting numbers up to 20
- Understanding what the different digits mean in two-digit numbers (place value)

- Comparing two-digit numbers using the comparison symbols
- Understanding the meaning of the equal sign (=) and determining if statements involving addition and subtraction are true or false
- Measuring the lengths of objects using a shorter object as a unit of length
- Organizing objects into categories and comparing the number of objects in each
- Dividing circles and rectangles into halves and quarters

2nd grade

In Grade 2, Instructional time will focus on four critical areas: (1) extending understanding of base-ten notation; (2) building fluency with addition and subtraction; (3) using standard units of measure; and (4) describing and analyzing shapes.

Students will extend their understanding of place value to the hundreds place and use this knowledge to solve word problems, including those involving length and other units of measure. Students will continue to work on their addition and subtraction skills, quickly and accurately adding and subtracting numbers up to 100 and they will build a foundation for understanding fractions by working with shapes and geometry.

Activities in these areas will include:

- Quickly and accurately adding numbers together that total up to 20 or less or subtracting from numbers up through 20
- Solving one- or two-step word problems by adding or subtracting
- Understanding what the different digits mean in a three-digit number
- Adding and subtracting three-digit numbers
- Measuring lengths of objects in standard units such as inches and centimeters
- Solving addition and subtraction word problems involving length
- Solving problems involving money
- Breaking up a rectangle into same-size squares
- Dividing circles and rectangles into halves, thirds, or fourths
- Solving addition, subtraction, and comparison word problems using information presented in a bar graph
- Writing equations to represent addition of equal numbers

3rd grade

In Grade 3, instructional time will focus on four critical areas: (1) developing understanding of multiplication and division and strategies for multiplication and division within 100; (2) developing understanding of fractions, especially unit fractions (fractions with numerator 1); (3) developing understanding of the

structure of rectangular arrays and of area; and (4) describing and analyzing two-dimensional shapes.

Students will continue to build their concept of numbers, developing an understanding of fractions as numbers. They will learn the concepts behind multiplication and division and apply problem-solving skills and strategies for multiplying and dividing numbers up through 100 to solve word problems. Students will also make connections between the concept of the area of a rectangle and multiplication and addition of whole numbers.

Activities in these areas will include:

- Understanding and explaining what it means to multiply or divide numbers
- Multiplying all one-digit numbers from memory (knowing their times table)
- Multiplying one-digit numbers by multiples of 10 (such as 20, 30, 40)
- Solving two-step word problems using addition, subtraction, multiplication, and division
- Understanding the concept of area
- Relating the measurement of area to multiplication and division
- Understanding fractions as numbers
- Understanding and identifying a fraction as a number on a number line
- Comparing the size of two fractions
- Expressing whole numbers as fractions and identifying fractions that are equal to whole numbers (for example, recognizing that $\frac{3}{1}$ and 3 are the same number)
- Measuring weights and volumes and solving word problems involving these measurements
- Representing and interpreting data

4th grade

In Grade 4, instructional time will focus on three critical areas: (1) developing understanding and fluency with multi-digit multiplication, and developing understanding of dividing to find quotients involving multi-digit dividends; (2) developing an understanding of fraction equivalence, addition and subtraction of fractions with like denominators, and multiplication of fractions by whole numbers; (3) understanding that geometric figures can be analyzed and classified based on their properties, such as having parallel sides, perpendicular sides, particular angle measures, and symmetry.

In grade four, your child will use addition, subtraction, multiplication, and division to solve word problems, including problems involving measurement of volume, mass, and time. Students will continue to build their understanding of fractions—creating equal fractions, comparing the size of fractions, adding and subtracting fractions, and multiplying fractions by whole numbers. They will also start to understand the relationship between fractions and decimals.

Activities in these areas will include:

- Adding and subtracting whole numbers up to 1 million quickly and accurately
- Solving multi-step word problems, including problems involving measurement and converting measurements from larger to smaller units
- Multiplying and dividing multi-digit numbers
- Extending understanding of fractions by comparing the size of two fractions
- Creating equal fractions ($\frac{3}{4} = \frac{3 \times 2}{4 \times 2} = \frac{6}{8}$)
- Adding and subtracting fractions with the same denominator
- Building fractions from smaller fractions ($\frac{3}{8} = \frac{1}{8} + \frac{1}{8} + \frac{1}{8}$)
- Connecting addition and subtraction of whole numbers to multiplying fractions by whole numbers
- Connecting addition of fractions to the concept of angle measurement
- Representing and interpreting data
- Converting fractions with denominators of 10 or 100 into decimals
- Locating decimals on a number line
- Comparing decimals and fractions using the symbols $>$ (more than), $=$ (equal to), and $<$ (less than)

5th grade

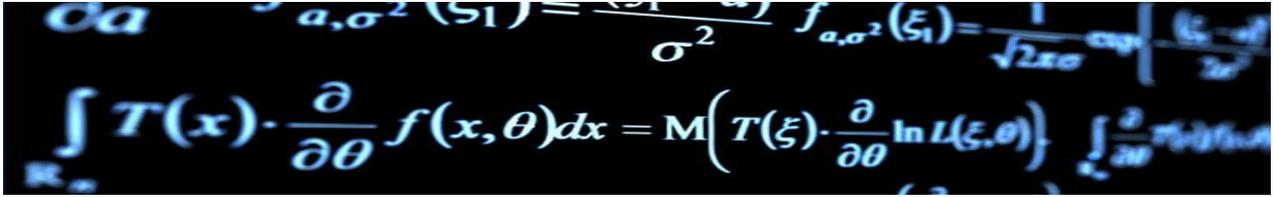
In Grade 5, instructional time will focus on three critical areas: (1) developing fluency with addition and subtraction of fractions, and developing understanding of the multiplication of fractions and of division of fractions in limited cases (unit fractions divided by whole numbers and whole numbers divided by unit fractions); (2) extending division to 2-digit divisors, integrating decimal fractions into the place value system and developing understanding of operations with decimals to hundredths, and developing fluency with whole number and decimal operations; and (3) developing understanding of volume.

In grade five, students will build their understanding of the place value system by working with decimals up to the hundredths place. Students will also add, subtract, and multiply fractions, including fractions with unlike denominators. They will continue to expand their geometry and measurement skills, learning the concept of volume and measuring the volume of a solid figure.

Activities in these areas will include:

- Quickly and accurately multiplying multi-digit whole numbers
- Dividing numbers with up to four digits by two digit numbers
- Using exponents to express powers of 10 (in 10^2 , 2 is the exponent)
- Reading, writing, and comparing decimals to the thousandths place

- Adding, subtracting, multiplying, and dividing decimals to the hundredths place
- Writing and interpreting mathematical expressions using symbols such as parentheses. For example, “add 8 and 7, then multiply by 2” can be written as $2 \times (8+7)$.
- Adding and subtracting fractions with unlike denominators (bottom numbers) by converting them to fractions with matching denominators
- Multiplying fractions by whole numbers and other fractions
- Dividing fractions by whole numbers and whole numbers by fractions
- Analyzing and determining relationships between numerical patterns
- Measuring volume using multiplication and addition



Mathematics

6th – 8th grade

To view AZCCRS math standards, [click here](#).

Domain Progressions

6	7	8
Ratios and Proportional Relationships		
The Number System		
Expressions and Equations		
		Functions
Geometry		
Statistics and Probability		

6th grade

In Grade 6, instructional time will 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.

In grade six, your child will learn the concept of rates and ratios and use these tools to solve word problems. Students will work on quickly and accurately dividing multi-digit whole numbers and adding, subtracting, multiplying, and dividing multi-digit decimals. Students will extend their previous work with fractions and decimals to understand the concept of rational numbers—any number that can be made by dividing one integer by another, such as $\frac{1}{2}$, 0.75, or 2. Students will also learn how to write and solve equations—mathematical statements using symbols, such as $20+x = 35$ —and apply these skills in solving multi-step word problems.

Activities in these areas will include:

- Understanding and applying the concepts of ratios and unit rates, and using the correct language to describe them (for example, the ratio of wings to beaks in a flock of birds is 2 to 1, because for every 2 wings there is 1 beak)
- Building on knowledge of multiplication and division to divide fractions by fractions
- Understanding that positive and negative numbers are located on opposite sides of 0 on a number line
- Using pairs of numbers, including negative numbers, as coordinates for locating or placing a point on a graph
- Writing and determining the value of expressions with whole-number exponents (such as $15+32$)
- Identifying and writing equivalent mathematical expressions by applying the properties of operations. For example, recognizing that $2(3+x)$ is the same as $6+2x$
- Understanding that solving an equation such as $2+x = 12$ means answering the question, "What number does x have to be to make this statement true?"
- Representing and analyzing the relationships between independent and dependent variables
- Solving problems involving area and volume

7th grade

In Grade 7, instructional time will focus on four critical areas: (1) developing understanding of and applying proportional relationships; (2) developing understanding of operations with rational 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.

In grade seven, students will further develop their understanding of rates and ratios, using tables, graphs, and equations to solve real-world problems involving proportional relationships. Students will also work on quickly and accurately solving multi-step problems involving positive and negative rational numbers.

Additionally, students will expand their knowledge of geometry and apply the properties of operations to solve real world problems involving the measurement of multi-dimensional objects.

Activities in these areas will include:

- Determining whether two quantities are in a proportional relationship and using knowledge of rates, ratios, proportions, and percentages to solve multi-step problems
- Identifying the unit rate of change (the constant rate at which the value of a variable changes) in tables, graphs, equations, and verbal descriptions
- Calculating the unit rates associated with ratios of fractions, including quantities measured in different units (for example, the ratio of $\frac{1}{2}$ a mile for every $\frac{1}{4}$ of an hour means that you travel 2 miles in an hour)
- Solving problems using equations to find the value of one missing variable
- Applying the properties of operations to generate equivalent mathematical expressions
- Solving multi-step word problems by adding, subtracting, multiplying, and dividing positive and negative rational numbers in any form (including whole numbers, fractions, or decimals)
- Understanding that numbers cannot be divided by 0
- Converting rational numbers to decimals using long division
- Describing situations in which positive and negative quantities combine to make 0
- Finding the area of two-dimensional objects and the volume and surface area of three-dimensional objects

8th grade

In Grade 8, instructional time will focus 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 linear 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.

Students take their understanding of unit rates and proportional relationships to a new level, connecting these concepts to points on a line and ultimately using them to solve linear equations that require them to apply algebraic reasoning as well as knowledge of the properties of operations.

Students will also expand their understanding of numbers beyond rational numbers to include numbers that are irrational— meaning that they cannot be written as a simple fraction.

Activities in these areas will include:

- Understanding that every rational number (such as $\frac{1}{2}$, 0.3, 2, or -2) can be written as a decimal, but that the decimal form of an irrational number is both non-repeating and infinite
- Applying the properties of exponents to generate equivalent numerical expressions
- Determining the value of square roots of small perfect squares and cube roots of small perfect cubes
- Graphing proportional relationships and interpreting the unit rate as the slope (how steep or flat a line is)
- Solving and graphing one- and two-variable linear equations
- Understanding that a function is a rule that assigns to each value of x exactly one value of y , such as $y=2x$, a rule that would yield such ordered pairs as $(-2,-4)$, $(3,6)$, and $(4,8)$
- Comparing the properties of two functions represented in different ways (in a table, graph, equation, or description)
- Determining congruence (when shapes are of equal size and shape) and similarity (same shape but different sizes)
- Learning and applying the Pythagorean Theorem (an equation relating the lengths of the sides of a right triangle)
- Solving problems involving the volume of cylinders, cones, and spheres



Science

Kindergarten – 5th grade

Science instruction should involve students actively using scientific processes to understand course content and make connections to real life and related areas of study. In meeting the goal of the standards students are exposed to the six strands (Inquiry Process, History and Nature of Science, Science in Personal and Social Perspective, Life Science, Physical Science, and Earth and Space Science) Students will have the opportunity to develop both the skills and content knowledge necessary to be scientifically literate members of the community.

To view the AZ Science standards, [click here](#)

Strand	Concept	K	1	2	3	4	5
1 Inquiry Process	1 - Observations, Questions and Hypotheses						
	2 - Scientific Testing (Investigation and Modelling)						
	3 - Analysis and Conclusions						
	4 - Communication						
2 History and Nature of Science	1- History of Science as a Human Endeavor						
	2 - Nature of Scientific Knowledge						
3 Science in Personal and Social Perspectives	1 - Changes in Environment						
	2 - Science and Technology in Society						
	3 - Human Population Characteristics (HS)						
4 Life Science	1 - Characteristics of Organisms (K-4), Structure and Function in Living Systems (5-8), The Cell (HS)						
	2 - Life Cycles (K-4), Reproduction and Heredity (5-8), Molecular Basis of Heredity (HS)						
	3 - Organisms and Environments (K-4), Populations of Organisms in an Ecosystem (5-8), Interdependence of Organisms (HS)						
	4 - Diversity, Adaptation, and Behavior (K-8) Biological Evolution (HS)						
	5 - Matter, Energy and Organization in Living Systems (HS)						
5 Physical Science	1 - Properties of Objects and Materials (K-4), Properties and Changes of Properties in Matter (5-8), Structures and Properties of Matter (HS)						
	2 - Position and Motion of Objects (K-4), Motion and Forces (5-8, HS)						
	3 - Energy and Magnetism (K-4), Transfer of Energy (5-8), Conservation of Energy and Increase in Disorder (HS)						
	4 - Chemical Reaction (HS)						
	5 - Interactions of Energy and Matter (HS)						
6 Earth and Space Science	1 - Properties of Earth Materials (K-4), Structure of the Earth (5-8), Geochemical Cycles (HS)						
	2 - Objects in the Sky (K-3), Earth's Processes and Systems (4-8), Energy in the Earth System (Internal & External) (HS)						
	3 - Changes in the Earth and Sky (K-4), Earth in the Solar System (5-8), Origin and Evolution of the Earth System (HS)						

	4 – Origin and Evolution of the Universe (HS)						
--	--	--	--	--	--	--	--

Kindergarten

In kindergarten, students will learn to observe objects using the different senses and ask questions about their observations. They will explore and participate in guided investigations and discovery based projects. Students will apply concepts learning in reading and math to organize data based on similar and different characteristics and communicate their findings. Using tools responsibly and safely is also discussed.

Activities in these areas will include:

- Observe common objects using multiple sense.
- Ask questions based on experiences with objects, organisms, and events in the environment.
- Demonstrate safe behavior and appropriate procedures
- Perform simple measurements using non-standard units of measure to collect data.
- Organize, compare, classify, and sequence objects, organisms, and event according to various characteristics.
- Communicate observations with diagrams, pictures, charts, and words.
- Give examples of how people use science in their everyday lives.
- Identify how diverse people/cultures have contributed to the field of science.
- Distinguish between living and nonliving things.
- Know the names of body parts and the senses.
- Understand the relationship between organisms and their environment.
- Investigate different forms of energy, spatial relationships, and the way objects move.

1st grade

In first grade, students will build upon the skills and knowledge they acquired in Kindergarten. Many of the concepts are similar, but on a more complex level to encourage discovery and exploration on deeper levels.

Activities in these areas will include:

- Demonstrate safe behavior and appropriate procedures
- Record data from guided investigations in an organized and appropriate format
- Compare the results of the investigation to predictions made prior to the investigation.
- Communicate the results of an investigation using pictures, graphs, models, and/or words.

- Identify various technologies (e.g., automobiles, radios, refrigerators) that people use.
- Describe how suitable tools help make better observations and measurements.
- Identify the characteristics of living things, including growth and development, reproduction, and response to stimulus.
- Identify observable similarities and differences between/among different groups of animals.
- Identify stages of human life from infancy to adulthood.
- Compare the habitats (e.g., desert, forest, prairie, water, underground) in which plants and animals live.
- Classify objects by observable properties (shape, texture, size, color, weight...)
- Understand the Earth and our Environment.

2nd grade

In second grade, students will participate in planning and conducting investigations. Students will explore the relationship between curiosity and discovery as they learn to formulate questions from observation and experiences.

Students will apply concepts learning in reading and math to organize data based on similar and different characteristics and communicate their findings. Using tools responsibly and safely is also discussed.

Activities in these areas will include:

- Predict the results of an investigation.
- Construct reasonable explanations of observations on the basis of data obtained (e.g., Based on the data, does this make sense? Could this really happen?).
- Generate questions for possible future investigations based on the conclusions of the investigation.
- Identify parts of a system too small to be seen (e.g., plant and animal cells).
- Analyze how various technologies impact aspects of people's lives (e.g., entertainment, medicine, transportation, communication).
- Identify a simple problem that could be solved by using a suitable tool.
- Describe the basic functions of the digestive, respiratory, and circulatory system.
- Describe the life cycle of various insects, mammals, and organisms.
- Classify objects and materials in terms of measurable properties using scientific tools.
- Demonstrate the water cycle and that water can be found in the form of a gas, liquid, and solid.

3rd grade

In third grade, students will build upon the skills and knowledge they have already acquired. Many of the concepts are similar, but on a more complex level to encourage discovery and exploration on deeper levels. Students will begin to formulate questions and recognize the value in asking questions as a problem-solving strategy. The students will incorporate more and more concepts from reading and math with more of an emphasis on math as the two subjects begin to align.

Activities in these areas will include:

- Formulate relevant questions about the properties of objects, organisms, and events of the environment using observations and prior knowledge.
- Predict the results of an investigation based on observed patterns.
- Plan a simple investigation.
- Use metric and U.S. customary units to measure objects.
- Organize data using the different methods (bar graphs, pictographs, and tally charts).
- Construct reasonable interpretations of the collected data based on questions.
- Communicate investigations and explanations using evidence and appropriate terminology.
- Describe an investigation in ways that enable others to repeat it.
- Understand changes in Environments
- Identify the ways we use tools and technology and how that has impacted our culture.

4th grade

In fourth grade, students will participate in planning and conducting investigations with an emphasis on recording the data. Students will explore the relationship between curiosity and discovery as they learn to formulate questions from observation and experiences. They will begin to understand the difference between a fun experiment and a scientific experiment that can be repeated to prove a theory.

Students will apply concepts learned in reading and math to organize data based on similar and different characteristics and communicate their findings. Using tools responsibly and safely is also discussed.

Activities in these areas will include:

- Locate information (e.g., book, article, website) related to an investigation
- Conduct controlled investigations (e.g., related to erosion, plant life cycles, weather, magnetism) in life, physical, and Earth and space sciences.

- Communicate with other groups or individuals to compare the results of a common investigation.
- Explain various ways scientists generate ideas.
- Describe how natural events and human activities have positive and negative impacts on environments.
- Compare structures in plants and animals that serve different functions in growth and survival.
- Differentiate renewable resources from nonrenewable resources.
- Recognize the characteristics that make an animal successful in its environment.

5th grade

In fifth grade, students will build upon the skills and knowledge they have already acquired. Many of the concepts are similar, but on a more complex level to encourage discover and exploration on deeper levels. Students will begin to formulate questions and recognize the value in asking questions as a problem-solving strategy. The students will incorporate more and more concepts from reading and math with more of an emphasis on math as the two subjects begin to align.

Activities in these areas will include:

- Conduct simple investigations
- Analyze data obtained in a scientific investigation to identify trends and form conclusions.
- Identify possible relationships between variables in simple investigations (e.g., time and distance; incline and mass of object).
- Provide examples that support the premise that science is an ongoing process that changes in response to new information and discoveries.
- Describe qualities of the scientists' habits of mind (e.g., openness, skepticism, integrity, tolerance).
- Propose a solution, resource, or product that addresses a specific human, animal, or habitat need.
- Identify the relationship between structures and functions of organisms.
- Understand the physical and chemical properties of matter



Science

6th – 8th grade

Science instruction should involve students actively using scientific processes to understand course content and make connections to real life and related areas of study. In meeting the goal of the standards students are exposed to the six strands (Inquiry Process, History and Nature of Science, Science in Personal and Social Perspective, Life Science, Physical Science, and Earth and Space Science) Students will have the opportunity to develop both the skills and content knowledge necessary to be scientifically literate members of the community.

To view the AZ Science standards, [click here.](#)

Strand	Concept	6	7	8
1 Inquiry Process	1 - Observations, Questions and Hypotheses			
	2 – Scientific Testing (Investigation and Modelling)			
	3 – Analysis and Conclusions			
	4 - Communication			
2 History and Nature of Science	1- History of Science as a Human Endeavor			
	2 – Nature of Scientific Knowledge			
3 Science in Personal and Social Perspectives	1 – Changes in Environment			
	2 - Science and Technology in Society			
	3 – Human Population Characteristics (HS)			
4 Life Science	1 – Characteristics of Organisms (K-4), Structure and Function in Living Systems (5-8), The Cell (HS)			
	2 – Life Cycles (K-4), Reproduction and Heredity (5-8), Molecular Basis of Heredity (HS)			
	3 – Organisms and Environments (K-4), Populations of Organisms in an Ecosystem (5-8), Interdependence of Organisms (HS)			
	4 – Diversity, Adaptation, and Behavior (K-8) Biological Evolution (HS)			
	5 – Matter, Energy and Organization in Living Systems (HS)			
5 Physical Science	1 – Properties of Objects and Materials (K-4), Properties and Changes of Properties in Matter (5-8), Structures and Properties of Matter (HS)			
	2 – Position and Motion of Objects (K-4), Motion and Forces (5-8, HS)			
	3 – Energy and Magnetism (K-4), Transfer of Energy (5-8), Conservation of Energy and Increase in Disorder (HS)			
	4 – Chemical Reaction (HS)			
	5 – Interactions of Energy and Matter (HS)			
6 Earth and Space Science	1 – Properties of Earth Materials (K-4), Structure of the Earth (5-8), Geochemical Cycles (HS)			
	2 – Objects in the Sky (K-3), Earth's Processes and Systems (4-8), Energy in the Earth System (Internal & External) (HS)			
	3 – Changes in the Earth and Sky (K-4), Earth in the Solar System (5-8), Origin and Evolution of the Earth System (HS)			
	4 – Origin and Evolution of the Universe (HS)			

6th grade

In sixth grade, students will be able to differentiate between questions, predictions, and hypothesis. They will begin to see the relationship between science, reading, and math as they research, and collect and organize data. Students will begin to use varied forms of data collection, so they are better able to analyze the results and draw conclusions from their investigations. The systematic approach of the scientific method lends itself to complex problem solving skills, and the writing process for its thorough and structured approach.

Activities in these areas will include:

- Locate research information, not limited to a single source, for use in the design of a controlled investigation.
- Conduct a controlled investigation using scientific processes.
- Keep a record of observations, notes, sketches, questions, and ideas using tools such as written and/or computer logs.
- Communicate the results of an investigation with appropriate use of qualitative and quantitative information
- Create a list of instructions that others can follow in carrying out a procedure (without the use of personal pronouns).
- Describe how a major milestone in science or technology has revolutionized the thinking of the time (e.g., Cell Theory, sonar, SCUBA, underwater robotics).
- Apply the following scientific processes to other problem solving or decision making situations.
- Evaluate the interactions between human populations, natural hazards, and the environment.
- Analyze the relationships among various organisms and their environment.

7th grade

In seventh grade, students will build upon the skills and knowledge they have already acquired.

The students will incorporate more and more concepts from reading and math with more of an emphasis on math as the two subjects begin to align. Math is no longer is a component of science that helps with the collection of data, but because a scientific tool that can be utilized to analyze the data and ensure accurate results.

Science requires a lot of research, vocabulary, and writing of notes, reports, data analysis, and reports. There is an emphasis on writing with proper conventions, structure and organization, and editing skills.

Activities in these areas will include:

- Write clear, step-by-step instructions for following procedures (without the use of personal pronouns).

- Conduct a controlled investigation, utilizing multiple trials, to test a hypothesis using scientific processes.
- Analyze environmental benefits of the following human interactions with biological or geological systems.
- How organisms obtain and use resources to develop and thrive
- Analyze the interactions of living organisms with their ecosystems
- Describe the composition and interactions between the structure of the Earth and its atmosphere.
- Understand the processes acting on the Earth and their interaction with the Earth systems.
- Understand the relationships of the Earth and other objects in the solar system.

8th grade

In eighth grade, students will build upon the skills and knowledge they have already acquired. Many of the concepts are similar, but on a more complex level to encourage discover and exploration on deeper levels.

The students will begin to formulate questions and recognize the value in asking questions as a problem-solving strategy. The students will incorporate more and more concepts from reading and math with more of an emphasis on math as the two subjects begin to align.

Math is no longer is a component of science that helps with the collection of data, but because a scientific tool that can be utilized to analyze the data and ensure accurate results.

Science requires a lot of research, vocabulary, and writing of notes, reports, data analysis, and reports. There is an emphasis on writing with proper conventions, structure and organization, and editing skills.

Activities in these areas will include:

- Formulate predictions, questions, or hypotheses based on observations.
Locate appropriate resources.
- Design and conduct controlled investigations.
- Communicate results of investigations.
- Analyze and interpret data to explain correlations and results; formulate new questions.
- Develop viable solutions to a need or problem.
- Describe the interactions between human populations, natural hazards, and the environment.
- Understand how science is a process for generating knowledge.
- Identify individual, cultural, and technological contributions to scientific knowledge.

- Understand the basic principles of heredity.
- Identify structural and behavioral adaptations.
- Understand physical and chemical properties of matter.
- Understand the relationship between force and motion.



Social Studies

Kindergarten-5th grade

Social Studies combines history, geography, economics, current events and citizenship with the social emotional competencies.

To view the K-5 Social studies standards, [click here](#).
To view the Social Emotional standards, [click here](#)

Kindergarten

In kindergarten, the history strands introduce the concept of exploration as a means of discovery and a way of exchanging ideas, goods, and culture. Important presidents and symbols of our country are also introduced.

Activities in these areas will include:

- Retell personal events to show an understanding of how history is the story of events, people, and places in the past.
- Recognize that George Washington was our first president.
- Recognize that classmates have varied backgrounds but may share principles, goals, customs, and traditions.
- Identify people who help keep communities and citizens safe (e.g., police, firefighters, nurses, doctors).
- Recognize that resources are renewable, recyclable, and non-renewable.
- Recognize that astronauts (e.g., John Glenn, Neil Armstrong, Sally Ride) are explorers of space.
- Identify examples of responsible citizenship in the school setting and in stories about the past and present.

1st grade

In first grade, the history strands introduce the concept that settlement enabled cultures and civilizations to develop in different places around the world, advancing their own and later civilizations. North America and Egypt are

introduced as examples. Exploration is revisited by introducing the impact of interaction between Native Americans and Europeans during the period of colonization.

Activities in these areas will include:

- Place important life events in chronological order on a timeline.
- Retell stories to describe past events, people, and places.
- Recognize that the development of farming allowed groups of people to settle in one place and develop into cultures/civilizations.
- Identify national symbols and monuments that represent American democracy.
- Identify characteristics of maps and globes and recognize different types of maps serve various purposes.
- Describe the interaction of Native Americans with the Spanish and Pilgrims and describe the exchange of ideas, culture, and goods.
- Recognize that civilizations in the Americas had similar characteristics to the Egyptians.
- Discuss physical and human features in the world.
- Compare the way people lived in Colonial times with how people live today.
- Identify ways humans adapt to their environment.
- Understand characteristics of weather patterns.
- Use information from written documents, oral presentations, and the media to discuss current local and state events.
- Use geography concepts and skills (e.g., recognizing patterns, mapping, graphing) to find solutions for problems (e.g., trash, leaky faucets, bike paths, traffic patterns) in the local environment.

2nd grade

In second grade, the history strands introduce how the United States became a nation. The impact of exploration is revisited through the introduction of western expansion of the New Nation. The development of cultures and civilizations and their contributions are expanded into the continent of Asia.

Activities in these areas will include:

- Recognize how archaeological research adds to our understanding of the past.
- Discuss how scarcity requires people to make choices due to their unlimited needs and wants with limited resources.
- Discuss that opportunity cost occurs when people make choices and something is given up.
- Recognize that prehistoric Native American mound-building cultures lived in Central and Eastern North America.

- Recognize that American colonists and Native American groups lived in the area of the Thirteen Colonies that was ruled by England.
- Know that the United States became an independent country as a result of the Revolutionary War.
- Discuss that Asian civilizations have changed from past to present.
- Identify traits of character that are important to the preservation and improvement of democracy.
- Recognize ways of protecting natural resources.
- Connect current events with historical events using information from class discussions and various resources.

3rd grade

In third grade, the history strands introduce the reasons for and effects of the exploration of North America to provide a foundation for further study in fourth and fifth grades. The idea of freedom is explored through the study of our nation from the Civil War through late 19th and early 20th century immigration. The development of cultures and civilizations and their contributions are expanded through the introduction of ancient Greece and Rome.

Activities in these areas will include:

- Identify goods and services.
- Discuss technological advances that facilitated exploration of the New World.
- Discuss the contributions of Ancient Greek teachers/philosophers whose thinking contributed to the development of their own and later civilizations.
- Discuss the three branches of state and national government and recognize that there are different levels of government.
- Construct charts and graphs to display geographic information.
- Discuss reasons why people left their home country to start a new life in the United States.
- Describe changes over time in transportation.

4th grade

In the fourth grade, the history strands emphasize the history of Arizona and the Southwest from its earliest civilizations to modern times. Early civilizations in Central and South America and their encounters with Europeans, as well as events in the Middle Ages which spurred exploration of the New World, are also studied to provide the historical foundation for the exploration and settlement of the Southwest.

Activities in these areas will include:

- Describe the difference between primary and secondary sources.
- Use different types of maps to solve problems.

- Give examples of how voluntary exchanges of goods and services can be mutually beneficial.
- Describe the cultures and contributions of the Mogollon, Ancestral Puebloans (Anasazi), and Hohokam (e.g., location, agriculture, housing, arts, trade networks; adaptation and alteration of the environment).
- Discuss life in Europe as it existed at the time of the Aztec and Incan/Inkan empires in the Americas.
- Describe why state and local governments collect taxes.
- Describe the impact of Spanish colonization on the Southwest.
- Describe the risk entrepreneurs take.
- Understand the role of the state governments.

5th grade

In fifth grade, the history strands emphasize American history from the earliest Native American cultures to the Civil War. The issues of exploration and rebellion as they occurred throughout the world are also studied in more depth.

Activities in these areas will include:

- Construct timelines of the historical era being studied investigation to identify trends and form conclusions.
- Identify the democratic principles and ideals associated with the historically significant documents including: Mayflower Compact, Declaration of Independence, Articles of Confederation...
- Recognize the contributions and roles of the founding fathers in creating the American government.
- Identify the location of significant geographic features from content studied on a physical or political map.
- Describe how specialization (e.g., division of labor) improved standards of living in the three colonial regions and the Pre-Civil War North and South.
- Identify how voluntary exchange helps both buyers and sellers as in colonial trade in North America.
- Explain the reasons for the explorations of Samuel Champlain, Henry Hudson, John Cabot, Jacques Cartier, Ponce de Leon, and Hernan de Soto in the New World.



Social Studies

6th – 8th grade

The National Curriculum Standards for Social Studies includes Essential Social Studies Skills and Strategies in which 18 of those are in literacy. There are ten themes that run through the social studies standards.

To view the 6-8 Social studies standards, [click here](#).

6th grade

In sixth grade, history strands emphasize World history from its earliest cultures through Enlightenment, including the early cultures of America. It includes world governments, geography, economics and current events.

Activities in these areas will include:

- Construct charts, graphs, and narratives using historical data.
- Formulate questions that can be answered by historical study and research.
- Determine the credibility and bias of primary and secondary sources.
- Interpret maps, charts, and geographic databases using geographic information.
- Compare how money, as opposed to barter, facilitates trade.
- Explain how trade promoted economic growth throughout world regions.
- Describe the characteristics of hunting and gathering societies in the Americas.
- Explain why places and regions serve as cultural symbols such as Jerusalem being a sacred place for Jews, Christians, and Muslims.
- Describe the lifestyles of humans in the Paleolithic and Neolithic Ages.
- Compare the different forms of government of the major ancient civilizations.
- Interpret the demographic structure of places and regions using a population pyramid.
- Describe ways that human dependence on natural resources influences economic development, settlement, trade, and migration.

7st grade

In seventh grade, the history strands focus on American History through the Civil War through the Great Depression. They also study the impact of the Industrial Revolution and imperialism on world events. Students will learn about politics, government and the responsibilities of good citizenship. Grades 7 and 8 students learn about the foundations and institutional practices of the US as a representative democracy and constitutional republic.

Activities in these areas will include:

- Analyze Arizona's transition from territory to statehood.
- Describe how the powers of checks and balances are used in our system of government.
- Interpret thematic maps, graphs, charts, and databases depicting various aspects of the United States and world regions.
- Describe the characteristics of a market economy.
- Identify the government's role in progressive reforms including women's suffrage, labor unions, temperance movement, and civil rights movement.
- Discuss physical and human features in the world.
- Identify the functions and relationships among various private and public institutions and differentiate between human capital and physical capital.
- Analyze the factors leading to the Civil War.
- Determine the effect of the Industrial Revolution on the Western World.

8st grade

In eighth grade, the history strands emphasize the historical foundations and democratic principles that framed our Constitution and led to our form of democracy. The history of World War II to the contemporary world is studied. Grades 7 and 8 students learn about the foundations and institutional practices of the US as a representative democracy and constitutional republic.

Activities in these areas will include:

- Describe the difference between a primary source document and a secondary source document and the relationships between.
- Analyze the purpose and weaknesses of the Articles of Confederation and the outcome and compromises made by the Constitutional Convention.
- Analyze the struggle between the federalists and the anti-federalists over the ratification of the Constitution.
- Identify common characteristics of contemporary and historical regions on the basis of climate, landforms, ecosystems, and culture.
- Examine relationships and interactions among regions.
- Identify how the role of the media, images, and advertising influences the perception of a place.
- Analyze the following events which led to the American Revolution.

- Review the rise of totalitarianism in Europe following World War I.
- Compare the process of how a bill becomes a law at the federal and state level.
- Identify the factors that led to the breakup of USSR, unification of Germany, cheap labor forces, outsourcing of services, and the oil industry and how that influences the location, distribution and interrelationships of economic activities in different regions.
- Describe how competition affects supply and demand from the vantage point of the consumer and producer.
- Identify the organization and functions of the Federal Reserve System.
- Describe the spread of Communism after World War II.
- Describe types of personal investments.
- Identify interdependence such as the North American Free Trade Agreement, European Union, International Monetary Fund/ World, takes place between nations.
- Explain the impact of World War II on economic recovery from the Great Depression.
- Describe Arizona's contributions to the war effort.
- Describe how the following impacted the Vietnam War.
- Examine the fall of Communism and the unification of European nations.



Arts & Athletics

Kindergarten – 8th grade

The Arts and Athletics program is an important part of the Skyline Education mission. The programs offers an integrated performance and visual arts education, aligned to the Arizona State Grade Articulated and National Standards, as well as the National Standards for Arts Education.

Skyline Education also offers a comprehensive athletic program that establishes a strong relationship between success on and off the court or playing field.

In the Arts, the courses offered range within the disciplines of Performing and Visual Arts. Students in grades K-8 experience and create as they progress through the programs of dance (ballet, jazz, modern, hip-hop and lyrical dance), theater, music, multi-medium and multi-dimensional art, photography, graphics, and beyond. Students create, relate and evaluate from beginning through advanced levels by practical, written, and performance-based assessment.

The Athletic program, utilizes the Arizona State Standards for Physical Education and the seasonal sports schedule to establish a development and dynamic physical education program that includes competitive sports.

Arts and Athletics are programs that are integrated into the daily schedule. Years of research shows that Arts and Athletics are closely linked to almost everything that we as a nation say we want for our children and demand from our schools: academic achievement, social and emotional development, civic engagement, and equitable opportunity ([Smith, Edutopia.org](http://Smith.Edutopia.org)).

*Availability of some of these classes may vary between schools.

*Performing Arts, Storytelling, and Theatrical performances are embedded in the Social Studies and Language Arts content areas.

K-8 Courses

Athletics

K-6 Physical Education – Athletic Fundamentals (Full year)

This course offers students a foundation in physical education and kinesthetic. Topics include safety, stretching, increasing endurance, developing leadership qualities, building self-esteem, working as a team, and having fun. The students will explore a variety of team sports with an emphasis on promoting and encouraging a lifetime of participating in physical fitness.

**Opportunities to participate in sports through USAL.*

7-8 Physical Education – Athletic Development (Full year)

This course offers students an opportunity to develop specific skills that will enhance participation in sports. Topics include safety, strength conditioning, building up speed and stamina, developing leadership qualities, building self-esteem, working as a team, and having fun.

The students will explore a variety of sports with an emphasis on promoting and encouraging a lifetime of participating in physical fitness.

**Opportunities to participate in competitive sports is based on interest.*

Arts

Visual Art

This course offers an opportunity for students to learn about the world in a different way than other academic disciplines. Students will have hands on experience creating art with a variety of media such as drawing, painting, clay, and other 3-D materials. Through these projects this course will incorporate Art History, learning about other cultures, social topics, as well as a sense of identity and self-expression. Students will learn presentation skills as well as responding to their own and others' artwork.

Performing Arts

Creative Movement (Full Year)

This course is an introduction to the basic concepts of rhythm and movement using creative games that expand their individual creativity. The students will learn spacial awareness, listening skills, group socialization and structure.

The students will strengthen their bodies and learn coordination to ready themselves for the next level in dance. Our goal is to make sure we are building the love of dance in each child, nurturing their natural creativity in a fun and loving atmosphere. Additionally, our goal is

to awaken interest, enthusiasm and self-confidence through dance.

Dance Foundations (Full Year)

This is an intro level dance class designed for students who have very limited or no dance experience. This class will teach hip-hop, lyrical, military, and modern dance steps. Students are expected to dress out in appropriate dance attire for this class. Students will perform dance routines at assemblies.

Music

K- 1st Graders Choir (Full Year)

In this course students learn steady beat, simple rhythm and melody through song and body percussion. Choir students perform at assemblies and production throughout the year.

2nd Graders Orff Instruments (Full Year)

This course further enhances our student's music understanding by allowing them to apply steady beat, simple rhythm and melodic lines with the use of Orff instruments, hand drums and other rhythm instruments. Singing is also a part of this course. These students also perform throughout the year.

3rd Graders Recorders (Full Year)

In this course students learn how to play the recorder as well as learn to read notes and basic rhythms. Because of hygiene safety each student needs to have their own instrument which will be available for purchase through the

school. Performances are required throughout the school year for various assemblies and productions.

4th – 8th Graders String Ensemble (Full Year)

In this course students will have the opportunity to learn to play a string instrument. They will be able to choose **violin, viola, cello or bass**. For this class students will need to rent an appropriate sized instrument (which the teacher recommends), an Essential Elements book 1 for the instrument, shoulder rest or cello stop. These items are available at nearby music stores. Students do not need to have a knowledge of music or how to play the instrument already. Fundamentals of string playing and music skills are taught in this class. Students perform many times throughout the school year.

Intermediate: (Audition only)

This class builds upon the knowledge mastered in the beginning class. For this class students will need to rent an appropriate sized instrument (which the teacher recommends), an Essential Elements book 2 for the instrument, shoulder rest or cello stop. These items are available at nearby music stores. Students perform throughout the school year at various assemblies and productions.

Advanced: (Audition only)

This class will be exploring string chamber music, fiddle music, and pop music as well as the fundamental techniques of playing

string instruments. For this class students will need to rent an appropriate sized instrument (which the teacher recommends), an Essential Elements book 3 for the instrument, shoulder rest or cello stop. These items are available at nearby music stores. Students perform throughout the school year at various assemblies and productions.



General Elective Courses

General elective course provides an opportunity for students to enhance their education by exploring and experiencing courses that build leadership, technology, and presentation skills

*Availability of some of these classes may vary between schools

K-8 Courses

Leadership (half year)

Grades: 5th-8th

This course is designed to develop leadership, problem-solving and positive character skills for lifelong service and citizenship. Activities are based on The 7 Habits of Highly Effective People, social/emotional competencies, and college and career plans.

Publications (half year)

Students in the publications class learn copywriting, photographic layout, and design skills involved in the production of different forms of publications.

Robotics (half year)

This course will follow basic principles of the curriculum from the FIRST LEGO League (FLL) program, which exposes students to science, technology, engineering and

math. This program encourages imaginative and creative thinking and innovation.

Students will problem solve, research, and use critical thinking as essential components of these subjects. FLL introduces students to engineering challenges based on real-world scenarios by building LEGO-based robots to complete specific tasks.

There is a possibility students could compete in competitions.

K-2 Technology (half year)

K-2 Technology is an introduction to the fundamentals of how to use personal computers and includes the AZ Educational Technology Standards. The primary focus is beginning keyboarding skills with a goal of touch-typing, word processing skills, internet safety and "netiquette" will be discussed.

3-5 Technology (half year) (0.5 credit)

Grades: 3rd-5th grade

This program series is an introduction to the basics of coding, technology and design using Java, Game Design and/or Minecraft.

Internet safety and “netiquette” will be discussed.

Technology I (half year)

Grades : 6th – 8th grade

Microsoft Word processing.

This course will use word processing software to create, name and manage files, edit and format different texts, and apply themes.

Technology II (half year)

Grades : 6th – 8th grade

Microsoft- Desktop Presentation PowerPoint

Use of PowerPoint to produce quality presentation visuals with animation and sound.

Technology III (half year)

Grades : 6th – 8th grade

Microsoft Publisher

Introduction to publishing and design. Students will learn to create publications using a template or from scratch, use building blocks such as Page Parts to create pages, use the Backstage View to manage information about files, add text and images to a publication, and create a layout.

Technology IV (half year)

Grades: 6th – 8th grade

Microsoft Access- Database Management

Introduction to the basic elements, exploration of additional components and common database management problems related to the Microsoft Access program.

Technology V (half year)

Grades: 6th – 8th grade

Microsoft Excel Level 1

Beginning computer spreadsheet skills for solving business problems using Excel, including calculations, forecasting, and projections.

Technology VI (half year)

Grades: 6th – 8th grade

Microsoft Excel Level 2

Intermediate spreadsheet skills for solving business problems using Excel, including calculations, forecasting, and projections.

Appendix A



SCIENCE | TECHNOLOGY | ENGINEERING | ARTS | MATHEMATICS

Academy
Program of Study
Kindergarten – 6th Grade
2018-2019

*7th and 8th Grade projected in 2019-2020



School Contact Information

South Phoenix Campus

School	Grade	Administration
South Phoenix Prep and Arts Academy 7450 S. 40 th Street Phoenix, AZ 85042 Phone: (877) 225-2118 Fax: (877) 821-5462	K-4	Jessica Carlson, Principal
	5-6	Tasha Gant, Principal

Chandler Campus

School	Grade	Administration
Vector Prep and Arts Academy 2020 N. Arizona Ave. Suite 5 Chandler, AZ 85225 Phone: (877) 225-2118 Fax: (877) 821-5462	K-6	Greg Garland, Principal

District 5 Campus

School	Grade	Administration
Skyline Gila River District 5 975 N. Preschool Road Bapshule, AZ 85121	5-6	Vaughn Flannigan, Principal





District Mission

Our mission is to provide each student and family we serve with high quality college preparatory educational programs and services designed to stimulate life-long learning while developing character through academics, arts, and athletics.

Educational Philosophy

Our charter schools are founded on the premise that all students can be successful in college. For this to become reality, we must provide children with a focused, college prep curriculum beginning with the elementary grades. Student mastery will be achieved through scientifically-based and content-rich curriculum that imparts core knowledge and essential learning skills. In order to achieve academic excellence, our program must also have a specific focus on character development through academics, athletics, and the arts. Combining the constant focus on character development and academic excellence will lead our students to be prepared for the challenges that lie ahead of them in education and in life. As a vector, with dynamic effort and direction, all students will strive to reach their full potential and be empowered to lead successful and productive lives.





Our Steam Program

The K-6th Grade STEAM Academy is a small learning community at Skyline that utilizes standards driven thematic units to engage students in learning based on Science, Technology, Engineering, the Arts, and Mathematics. Our integrated curriculum sets the foundation for learning in all content areas, while focusing on STEAM principles that awaken students' curiosity of the world around them.

The Academy Goals:

- ✓ Provide hands-on experiential learning
- ✓ Expose students to real world problems and approaches to solve those problems
- ✓ Set the foundation for independent and critical thinking
- ✓ Learn how to use science and engineering practices to solve problems
- ✓ Create a well-rounded and versatile thinker



Learning Opportunities for Students:

- ✓ A commitment to teaching Next Generation Science concepts and practices at all grades
- ✓ School wide design challenges
- ✓ Engineering curriculum is embedded in classroom instruction
- ✓ Family STEAM Nights
- ✓ Computer Science instruction at all grade levels
- ✓ G Suite for Education beginning in Grade 3
- ✓ Invention Convention

Why choose STEAM?

STEAM students embrace a design mindset and dynamic learning through...

1. Creating and Exploring
2. Hands-On Activities
3. Self-Directed Projects
4. Problem-Based Learning
5. Teamwork and Leadership
6. Connecting to the Community
7. Being Self-Aware and Reflective

STEAM

SCIENCE | TECHNOLOGY | ENGINEERING | ARTS | MATHEMATICS

What type of student would enjoy STEAM?

Students who would thrive in the STEAM program would...

- ✓ Be passionate about Science, Technology, Engineering, the Arts, and Mathematics
- ✓ Enjoy learning through inquiry, experimentation, and reflection
- ✓ Be able to cooperate with peers for group projects, but also enjoy learning independently
- ✓ Have a strong interest in wanting to understand how things work and like to create, design, and build things

Exploring STEAM: What Your Child will Learn:

At Skyline Education, your child will be given opportunities to explore an open mind and engage in natural curiosity through an integrated curriculum. They will acquire higher order thinking skills and develop valuable communication, observations skills, and build their confidence by giving each student hands-on learning experiences.



Science

Science is a way of thinking. Your child will observe, experiment, make predictions, share discoveries, ask questions, and ponder how things work.

Technology

Technology is a way of doing. Your child will use innovative tools, identify problems, be inventive, and make things work.

Engineering

Engineering is a way of doing. Your child will solve problems, use a multitude of materials, design, create, and build things that work.

Art

Art is a way of expressing. Your child will use their imagination and creativity and explore art in a variety of forms such as visual and performing arts to interpret ideas into something profound.

Math

Math is a way of measuring. Your child will explore shapes, volume, size, sequencing, and patterning.

STEAM

SCIENCE | TECHNOLOGY | ENGINEERING | ARTS | MATHEMATICS

Kindergarten to Second Grade

Students in grades K-2 will be given an opportunity to learn in an interactive, student-centered atmosphere using project-based learning. This approach has students acquire knowledge and skills that are aligned to Arizona College and Career Ready Standards (ACCRS) through an integrated curriculum. Students will work on a variety of projects per each themed unit of study by investigating and responding to an engaging question, problem, or challenge.

On Fridays, students will be given opportunities to explore their learning further by solving real world problems or investigating inquiry questions they have gathered through the week and show what they learned as they journey through each unit.



Third to Sixth Grade

Students in grades 3-6 will be given an opportunity to learn in an interactive, student-centered atmosphere using project-based learning with a strong emphasis on technology. Each student will have access to G Suite for Education in our computer labs or Chromebook mobile laptop carts. This approach has students acquire knowledge and skills that are aligned to Arizona College and Career Ready Standards (ACCRS) through an integrated curriculum.

On Fridays, students will be given opportunities to become problem-solvers within their thematic unit of studies. They will be given the freedom to design, engineer, fabricate, create, build and collaborate on projects that include real problems.

Our students will have the ability to develop their understanding of the content and demonstrate their understanding in a variety of ways. This allows us to respect and appreciate our diverse student population and the multiple intelligences they possess.



SCIENCE | TECHNOLOGY | ENGINEERING | ARTS | MATHEMATICS

Six Pillars of Character

At Skyline Education, we value character education. That's why we base our programs around six core values to ensure that all our students develop the characteristics to become good friends, strong leaders, and unified partners.

SIX PILLARS OF CHARACTERS

CHARACTER	COLOR	DESCRIPTION
TRUSTWORTHINESS	Blue: Think True Blue	<ul style="list-style-type: none"> • Be honest • Don't deceive, cheat or steal • Be reliable—do what you say you'll do • Have the courage to do the right thing <ul style="list-style-type: none"> • Build a good reputation • Be loyal—stand by your family, friends and country
RESPECT	Yellow/Gold: Think the Golden Rule	<ul style="list-style-type: none"> • Treat others with respect; follow the Golden Rule • Be tolerant of differences • Use good manners, not bad language • Be considerate of the feelings of others <ul style="list-style-type: none"> • Don't threaten, hit or hurt anyone • Deal peacefully with anger, insults and disagreements
RESPONSIBILITY	Green: Think being responsible for a garden of finances; or as in being solid and reliable like an oak	<ul style="list-style-type: none"> • Do what you are supposed to do • Persevere: keep on trying! • Always do your best • Use self-control <ul style="list-style-type: none"> • Be self-disciplined • Think before you act—consider the consequences • Be accountable for your choices
FAIRNESS	Orange : Think of dividing an orange into equal sections to share fairly with friends	<ul style="list-style-type: none"> • Play by the rules • Take turns and share • Be open-minded; listen to others • Don't blame others carelessly
CARING	Red : Think of a heart	<ul style="list-style-type: none"> • Be kind • Be compassionate and show you care • Express gratitude • Forgive others • Help people in need
CITIZENSHIP	Purple : Think regal purple as representing the state	<ul style="list-style-type: none"> • Do your share to make your school and community better • Cooperate • Get involved in community affairs • Stay informed; vote <ul style="list-style-type: none"> • Be a good neighbor • Obey laws and rules • Respect authorities • Protect the environment