FOURTH GRADE

Fourth grade is the bridge year between childhood and preadolescence. Students go through many changes throughout the year and need to feel secure, confident, and comfortable with themselves, their peers, and their surroundings. They must be able to negotiate, compromise, and mediate differences with their fellow students in acceptable ways. Fourth grade is also a time when students become acutely aware of boy/girl differences and are very concerned about issues of rules and fairness. During the year, students are presented a variety of opportunities to help them develop the social skills necessary to cope with all of these social-emotional issues, as well as guided conversations with the US Student Character Committee. Fourth graders have an irrepressible enthusiasm for learning. This is the time when key skills, such as organization and time management, are developed in order for students to become independent, responsible learners.

The fourth grade curriculum includes many units of study which allow students to view the world through the eyes of another, generally someone their own age, but perhaps in a different time or place. Chapin's Virtues and developing the students' leadership role in the Lower School supports discussions on the theme of empathy across many types of literature and genre. Our Language Arts and Social Studies lessons are strongly linked, and our fourth graders begin to find universal truths about relationships, families, and ultimately, about themselves. Cooperative learning activities in social studies and science, whether working on a design challenge presentation with a partner or exploring the far reaches of the universe, encourage the students to develop their critical-thinking and social skills that enhance their friendships and their learning. The irrepressible enthusiasm that fourth graders have for learning is met with appropriately challenging work that is supported by incrementally increased demands and teacher guidance. Children leave their fourth grade year confident that they have mastered many of the skills necessary for success in Chapin's Upper School and for taking on greater levels of independence and complexity.

CLASSROOM EXPECTATIONS

Respect, Responsibility, Honesty, Kindness, and Perseverance are the shared virtues of Chapin School. These virtues are the framework of our fourth grade expectations. Respect and kindness must be shown to all students at all times. Students' sense of responsibility and perseverance continues to develop as they are held increasingly accountable for their behavior, as well as their academic performance. The workload in fourth grade increases and we expect students to work hard and to do their best. Over the course of the school year, students develop strategies for organizing and maintaining their materials, completing and turning in homework on time, and creating a positive school community. Instilling a positive growth mindset leads to a greater ability to persevere. The value of academic integrity develops through our focus on honesty. Fourth graders are looked up to as leaders of the Lower School and should strive to model the five virtues.

HOMEWORK

Our homework policy, as stated in the *Chapin Handbook and Directory*, is that fourth grade students will usually have forty minutes of homework a night, plus independent reading time. This is a suggested guideline and will vary from night to night, and from teacher to teacher to a small degree. Our goal is not to standardize homework amounts for our students because children vary in their abilities, focus, and motivation. Our focus is on providing a guideline for daily expectations.

Parent or adult assistance is requested in ensuring that homework has been completed and packed for the next day. We ask that parents not "over-correct" students' homework; teachers need to know when students need more time and instruction on a topic. Homework provides some of that information to teachers. Please reach out if homework is far exceeding the forty minute guideline.

STANDARDIZED TESTING

The CTP IV, published by Educational Records Bureau, is administered in late April/early May. The battery of tests includes both verbal and quantitative reasoning sections, as well as achievements tests in vocabulary, reading comprehension, writing mechanics, writing concepts and skills, and mathematics. Results of this test, which include national, suburban and independent school norms, are mailed to parents as soon as they are available to us, approximately one month after test administration. Students with a diagnosed and documented need for additional testing time or other testing accommodations will be tested in accordance with their needs. Please note that no more than time and a half will be given in any case. If you think your child needs special testing accommodations, please make an appointment to speak with the Lower School Division Head.

FIELD TRIPS

Fourth graders take a variety of field trips as extensions and/or culminations of many of our academic units/topics. When students leave the school campus they are a representative of Chapin School and are expected to dress and behave accordingly. Please refer to more detailed permission slips as they become available.

CO-CURRICULAR SUBJECTS

Physical Education (PE)- 3x every six day rotation*
World Language- 2x every six day rotation
(Alternating semesters of Mandarin and Spanish)
Music- 1x every six day rotation
Chorus- 1x every six day rotation
Art- 2x every six day rotation
Library- 1x every six day rotation
Technology- 1x every six day rotation
Science- 3x every six day rotation
Social Studies- 3x every six day rotation
Academic Integration- 3x every six day rotation
*Students will change clothing all three days for PE

LANGUAGE ARTS

Chapin School's Language Arts curriculum is a balanced program that fosters students' skills in listening, speaking, reading, and writing. Through active participation in small and large group instruction and discussions, students develop skills in critical-thinking and effective oral and written communication. Our reading program features class novels selected around a particular theme (e.g. Chapin's five virtues, Immigration). Often these themes tie directly to broader character education initiatives and units presented in social studies. Also fundamental to our reading program are independent reading selections tailored to students' reading goals, interests, and ability level. Personalized reading goals are identified, recorded, and accessible to students during daily independent reading sessions. As students demonstrate proficiency with strategies related to these goals, new goals are identified and related strategies presented, providing students with ongoing support, challenge, and purpose for their independent reading. For fiction selections, group lessons center around analysis of plot, character, and theme. For non-fiction selections, students develop techniques for organizing, critical questioning, and demonstrating their understanding of new information.

Fourth graders are also provided with a host of tools to grow as young writers. In addition to daily responses to literature, students compose extended creative and informational writing pieces over the course of the year. Emphasis is placed on utilization of the writing process including the use of graphic organizers during pre-writing, and conferencing with instructors during the revising and editing process. Foundational lessons in grammar and spelling support students' growth in the mechanics and language use of written communication.

Writing Objectives:	Reading Objectives:
• Demonstrate an ability to write personal narrative, persuasive essay, poetry, and nonfiction writing. • Identify and apply rules of grammar and conventions. • Apply rules related to capitalization, punctuation, and spelling. • Identify and apply writing strategies according to purpose, with emphasis on narrative, persuasive, and informational pieces. • Utilize the writing process to develop the skills of prewriting, drafting, revising, editing, and publishing. • Demonstrate an ability to write personal narrative, persuasive essay, poetry, and nonfiction writing. • Generate sufficient content and detail in written pieces. • Use complete and varied sentences in written pieces. • Develop effective listening and oral communication skills using text evidence.	• Develop enthusiastic lifelong readers. • Identify and analyze literary genres including informational nonfiction, biographies, historical fiction, realistic fiction, folktales, and poetry. • Identify literary elements, including plot, dialogue, setting, and characterization. • Develop and apply inferencing skills. • Identify and apply reading strategies for learning new information. • Apply decoding strategies. • Demonstrate fluency in oral reading. • Demonstrate ability to select appropriate independent reading texts. • Learn and apply new vocabulary. • Demonstrate literal and inferential comprehension of reading selections. • Respond to literature orally and in written form. • Identify and apply literature response strategies. • Develop effective listening and oral communication skills using text evidence.

Units of Study:	Assessment:
• Self and Others: Personal narratives, character traits. • Immigration: Character's point of view, Using text evidence, Primary and secondary resources. • Poetry: Descriptive Language. • Japan and Japanese Culture: Relationship between story elements and symbolism.	• Writing pieces • Journal entries • Rubrics • Quizzes/ tests • Teacher observation • Participation in classroom discussions • Classwork / homework assignments • Oral reading • Oral presentations • Developmental Reading Assessment (DRA2)

MATHEMATICS

Chapin's mathematics program serves as a core context for developing skills in organizing and analyzing information, thinking critically, communicating logical reasoning, and solving problems. Chapin teaches lifelong strategies for accurate and efficient computation and application of concepts. This is accomplished in a manner that promotes problem-solving independently and collaboratively. Student levels of understanding of core concepts are continually evaluated and differentiation, extension, and challenge is provided as skills demonstrated. Our curriculum is focused on developing the students' ability to move from the concrete to pictorial to abstract stages. Students are taught how to solve complex problems in multiple ways through Model Draw Methods (Bar Modeling). Students focus on developing a pictorial interpretation of a problem to solve multi-step problems, solve for an unknown, demonstrate relative quantities based bar sizes, and write an answer statement that correlates to the question in the problem.

Whole Numbers and Operations:

Place Value:

- Identifies the value of a number according to its place.
- Writes, orders, and compares numbers through millions.
- Rounds and estimates numbers to the nearest million.

Addition:

- Properties: Uses and identifies commutative and associative properties of addition.
- Solves multi-digit addition problems to millions, with and without regrouping.

Subtraction:

- Solves multi-digit subtraction problems, without and regrouping, including across zeroes.

Fractions:

- Converts mixed numbers and improper fractions.
- Finds equivalent fractions.
- Compares and orders fractions.
- Adds and subtracts fractions and mixed numbers with common denominators.
- Finds common denominators to add and subtract fractions with unlike denominators.

Decimals:

- Identifies the value of a decimal according to its place.
- Writes, orders, and compares decimals through thousandths.
- Rounds and estimates decimals to the nearest hundredth.
- Understands the relationship between decimals and fractions.
- Converts fractions and decimals.

<table>
<tr>
<td>Whole Numbers and Operations (continued):

Multiplication:
Properties: Uses and identifies commutative, identity, zero, and associative properties of multiplication.
Multiplies two and three-digit numbers by one and two-digit numbers.
Identifies factors and multiples.
Identifies greatest common factor for two or more numbers.
Identifies least common multiple for two or more numbers.
Division:
Divides two, three, and four-digit dividends by one and two-digit divisors.
Interprets remainders.</td>
<td>Data and Probability:
Creates and interprets a pictograph, bar graph, and line graph.
Solves word problems using information presented in a graph.
Identify and calculate mean, mode, median, and range.
Determines the best way to represent a data set.
Uses math vocabulary to communicate probability.
Measurement:
Calculates elapsed time to the minute.
Understands the relationship of temperature measurement using Celsius and Fahrenheit degrees.
Calculates distance using kilometers and miles.</td>
</tr>
<tr>
<td>Geometry:
Identifies lines, line segments, and rays.
Differentiates between parallel and perpendicular lines.
Measures and names angles.
Identifies two-dimensional polygons.
Finds the area and perimeter of regular quadrilaterals and composite figures.
Recognizes transformations.</td>
<td>Assessment:
Student classwork and homework
Teacher observations
Journals explaining mathematical thinking
Applied math projects
Tests/quizzes</td>
</tr>
</table>

SOCIAL STUDIES

Chapin's fourth grade social studies curriculum incorporates the eight strands of social studies: history, geography, culture, government, citizenship, economics, science and technology. Students learn to identify the strands as they study Colonial America and the American Revolution, Immigration to New York City from Europe and Russia (late 19th to early 20th century), and Japanese history and culture. Throughout these units the students hone map skills, note-taking methods, and critical assessment of information. They research historical topics, compile information in written form, and present their findings to their classmates.

In addition to acquiring factual knowledge, students learn to think critically and evaluate primary and secondary sources. They work to make connections between events of the past and present, and connections among people. Chapin's social studies curriculum promotes the intellectual and social growth of our students and fosters curiosity, respect, and development of multiple perspectives. The program encourages critical-thinking, civil discourse, and effective communication. During this process of learning, the development of opinions supported by evidence is encouraged, as is tolerance for the differing opinions of others.

<table>
<tr>
<td rowspan="2">Objectives:

• Identify and describe each of the 8 strands of Social Studies (geography, economics, culture, citizenship, government, history, science and technology).
• Identify and use primary and secondary sources effectively.
• Read informational text closely to make logical inferences, determine central ideas, analyze how/why ideas develop, and evaluate specific claims made in a text.
• Practice skimming and scanning to locate key information.
• Compare/contrast two or more texts, cultures, places, or time periods.
• Develop the ability to problem solve individually and as part of a group.
• Develop communication skills in discussion and collaborative groups.</td>
<td>Objectives:

• Research and organize information for various types of presentations.
• Demonstrate an understanding of the relationship between humans and the natural environment.
• Understand the meaning of culture and its varied components.
• Develop an appreciation for cultural differences, including basic ideas of major world religions, traditions, political systems, and social structures.
• Develop greater self-awareness, including an individual's responsibility as a member of society.</td>
</tr>
<tr>
<td>Assessment:

• Student participation
• Student classwork and notes
• Teacher observation
• In-class projects with rubrics
• Development of interactive immigration journal
• Group STEAM projects
• Tests/quizzes</td>
</tr>
</table>

ACADEMIC INTEGRATION

Academic Integration (AI) occurs three times a six-day rotation and is led by a fourth grade classroom teacher in collaboration with other fourth grade curricular, co-curricular teachers, and the Academic Technologist. In AI, students develop strategies and apply tools to support their learning in other content areas. Through participation in varied and diverse activities, students develop skills in organization, test preparation, problem-solving, collaboration, and design-thinking. After a brief introduction on the theory of Multiple Intelligences as outlined by Howard Gardner, students complete a self-assessment to identify modalities most compatible with their learning style. Through the completion of an assessment survey, students identify those modalities (e.g. Visual, Bodily Kinesthetic). In subsequent lessons, student identify corresponding study strategies according to areas of relative strength. Subsequent lessons support students' utilization of software applications (e.g. PicCollage, Book Creator) to creatively demonstrate their understanding of presented and researched content across multiple subject areas. Hands-on, design projects are also integral to the AI program. Through application of the design-thinking process (Ask, Imagine, Plan, Create, Improve, Present), students work in small teams to complete specified design challenges (e.g. building a tower to support a load) and report upon their findings.

Organization and Study Skills

- Identify and apply strategies for organizing school materials, time, and test preparation.
- Identify and apply routines for successful completion of homework.
- Identify and apply strategies for effective use of a rubric.
- Identify areas of relative strength with respect to multiple intelligences.
- Identify and utilize study strategies according to individual's learning modalities.
- Develop and demonstrate skills in note taking and test taking.
- Develop and demonstrate skills in the analysis and completion of analogies.
- Identify and apply strategies for conducting research on a topic including:
    - identification of appropriate reference sources
    - identification of primary vs. secondary sources
    - application of procedures related to citation of a source
- Develop and demonstrate oral presentation skills.

Technology Integration Skills

- Develop and apply skills in collaboration and design-thinking process.
- Utilize "Core Apps" and software application to demonstrate understanding of content.
- Utilize software applications including PicCollage and Book Creator to present on a topic.
- Apply the design-thinking process to complete select tasks including constructing a musical instrument out of recyclable materials and constructing a shadow theater.

Assessment

- Teacher observation
- Self-evaluation
- Application of skills across classes
- Student work
- In-class projects / Rubrics

SCIENCE

In a world filled with scientific achievements and rapid technological developments, science and scientific thinking play a vital role in the lives of students. Students need to be fully aware of and skilled in science and in related fields in order to succeed in their further endeavors in education, careers, and everyday life. Additionally, scientific reasoning remains the backbone of critical-thinking and analysis in many diverse areas of study besides science and applied science such as economics, sociology, and even in some forms of philosophy. The study of science contributes to a student's understanding of the diversity of all that exists and an appreciation of the balance and value of that diversity. To these ends, a program emphasizing scientific inquiry, STEAM (Science, Technology, Engineering, Art, and Mathematics) and design-thinking is at the core of the school's science curriculum. The implementation of STEAM and design-thinking across the curriculum supports critical-thinking and problem-solving. The design process asks students to ask, imagine, plan, create, and improve a solution to a problem, whether it is an everyday problem or an invention. Students are then asked to reflect on their designs, celebrating what went well and discussing areas of improvement. This is where true learning occurs.

Chapin School's science curriculum has five major goals that encompass the program from 4-year-olds through eighth grade. The first is to introduce the scientific method and have students effectively implement it in investigations that they carry out themselves. The second is to foster curiosity and inquiry, which help to facilitate the active engagement of students in the subject matter. The third is to stimulate an interest in and excitement about science, specifically the areas of earth science, life science, and physical science. The fourth is to expose students to technology and scientific equipment and to train them in the appropriate use of these. The fifth is to promote an awareness of new developments in science, technology, math and other related fields.

Objectives:

- Provide opportunities for students to use the scientific method.
- Encourage the development of process skills through careful observation, inquiry, inferring, predicting, and testing.
- Understand and use science tools with skill and knowledgeable application.
- To use critical-thinking skills in hypothesizing, analyzing, and drawing conclusions based on evidence and data sets.
- Develop the ability to create experiments and control for variables.
- Practice with measurement, classification, and applied math concepts.
- Develop the ability to collect and record quality data, and analyze and interpret data.
- Gather and present information in multiple ways.
- Promote a positive attitude and respect scientific process and evidence-based thinking.

Units based on Next Generation Science Standards (NGSS):

- Scientific Method and Tools
- Measurement
- Speed, Sound, and Energy
- Astronomy
- Magnetism and Electricity
- Ideas and Inventions
- Variables
- Plant and Animal Structures
- Nervous System
- Fossils, Weathering and Erosion
- Maps
- Energy Resources

Assessments:

- Teacher observations
- Performance assessments and in-class projects
- Lab write-ups, quizzes