



RCSA Elementary Summer Project – 4th Grade

Student Name: _____

PROJECT DUE DATE: Monday, August 15th

**Projects should be submitted to student's homeroom teachers.*

**Your student is required to complete the tasks indicated on the Choice Board pages.*

Grade Level Expectations (Upcoming 4th Graders should be able to...)

ELA/SS/Writing	Math
<ul style="list-style-type: none">•Fluently read 161 words per minuteDetermine the main idea and details in a story•Compare and contrast information in multiple texts and learn how to use organizational methods (Venn diagrams, maps, webs)•Recall and retell events from a story in order•Tell how the author uses details to support their story or text• Read a map (key/legend, cardinal directions)• Conduct research using online and printed material•Use linking words (because, since, therefore, for example)•Know how to write a story with a beginning, middle, and an end.•Know how to write multiple paragraphs and cite evidence•Know proper punctuation	<ul style="list-style-type: none">• Understand multiplication and division• Memorize 0-12 multiplication facts• Use addition, subtraction, multiplication, and division to solve word problems involving more than one step• Understand the concept of area and how it relates to multiplication• Understand and identify fractions as numbers that can be placed on a number line; compare two fractions (like knowing that $\frac{2}{3}$ is bigger than $\frac{3}{5}$)

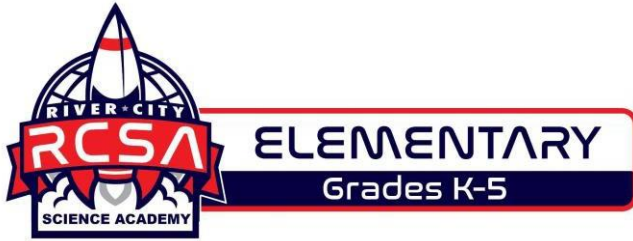


STEM

- Create, test, and solve a scientific question
- Collect and analyze data
- Classify flowering and nonflowering plants into major groups such as those that produce seeds, or those like ferns and mosses that produce spores, according to their characteristics
- Identify the Sun as a star that emits energy; some of it in the form of light
- Recognize that the Sun appears large and bright because it is the closest star to Earth
- Define gravity as being a force that pulls us towards the Earth
- Demonstrate that radiant energy from the Sun can heat objects and when the Sun is not present, heat may be lost

Social Emotional Skills

- Work independently
- Interact with peers and explore concepts
- Work cooperatively in a group
- Follow directions and participate in group activities
- Share and communicate appropriately with other students & respect their peers



Recommended Reading List

Title	Author
<i>Abraham Lincoln: A Life of Honesty</i>	Leslie, Tonya
<i>Charlotte's Web</i>	White, E.B.
<i>Flight</i>	Burleigh, Robert
<i>Frederick Douglass Fights for Freedom</i>	Davidson, Margaret
<i>Honest Abe Lincoln</i>	Adler, David A.
<i>If You Traveled on the Underground Railroad</i>	Levine, Ellen
<i>Matilda</i>	Dahl, Roald
<i>Miracle on 133rd Street</i>	Manzano, Sonia
<i>Moonshot: The Flight of Apollo 11</i>	Floca, Brian
<i>Pablo Neruda: Poet of the People</i>	Brown, Monica
<i>Pippi Longstocking</i>	Lindgren, Astrid
<i>Revolutionary Friends: General George Washington and the Marquis de Lafayette</i>	Castrovilla, Selene
<i>Rosa Parks</i>	Greenfield, Eloise
<i>Sarah, Plain and Tall</i>	MacLachlan, Patricia
<i>Stuart Little</i>	White, E.B.
<i>The Boxcar Children</i>	Warner, Gertrude Chandler
<i>The Children's Book of Virtues</i>	Bennett, William
<i>The Little Prince</i>	de Saint-Exupery, Antoine
<i>The Real McCoy: The Life of an African-American Inventor</i>	Towle, Wendy
<i>The Whipping Boy</i>	Fleischman, Sid
<i>The Wonderful Wizard of Oz</i>	Baum, Frank
<i>To the Moon and Back</i>	Aldrin, Buzz
<i>Who was Betsy Ross?</i>	Buckley, James Jr.



ELA CHOICE BOARD

Complete the tasks indicated in each column. Each task should be put on a separate sheet of paper with the subject and number as the header. (i.e. ELA: Reading Task #2)

Foundations	Reading	Communication (Writing)	Vocabulary
<p>1. Decode- Choose 10 root words add a suffix to the word. Ex: Root word- observe Suffix- observation Use the word in a sentence.</p>	<p>1. 3-2-1- Write down 3 things you learned, 2 questions you still have, and 1 opinion you have about what you read.</p>	<p>1. Many children and teenagers spend hours playing video games. Write a made-up story about getting trapped in a video game. (minimum of 3 paragraphs – beginning, middle, and end)</p>	<p>1. The Same and Opposite- Choose 8-10 vocabulary words from your book. Predict the word meaning and then look up the definition.</p>
<p>2. Synonym and Antonym- Choose 10 words from a book you are reading. Write a synonym and antonym for each word and use one of them (synonym or antonym) in a sentence.</p>	<p>2. Main Idea & Details- Identify the main idea of the book. Then identify 5 details that support the main idea.</p>	<p>2. Think about the best field trip you have ever had. Writing about this day. (4 paragraphs (5-8 sentences); reason and details)</p>	<p>2. Sort your parts of Speech- Create a list of 5 words for each of the following categories: nouns, verbs, adverbs, adjectives, and pronouns.</p>
<p>3. Homophone and Homonym- Choose 5 homophones and 5 homonyms. Define the words and use them each in a sentence.</p>	<p>3. Letter to the Author- Write a letter to the author. Tell them what you liked or disliked about the book with text evidence. Let them know what you thought of the characters and the story. This should be a minimum of 2 paragraphs.</p>	<p>3. If I could only see one color for the rest of my life it would be _____. (5 paragraphs, Introduction, 3 body paragraphs (5-8 sentences each), conclusion; reasons why, support your choice)</p>	<p>3. Quiz- Create a 10-question quiz to test someone else's vocabulary knowledge. You must have an answer key to go along with your quiz.</p>



MATH CHOICE BOARD

Complete the tasks indicated in each column. Each task should be put on a separate sheet of paper with the subject and number as the header. (i.e., MATH: Measurement Task #2)

Number Sense & Operations	Algebraic Reasoning	Measurement	Geometric Reasoning	Data Analysis & Probability	Fractions
<p>1. Create a worksheet with 20 multidigit addition and subtraction problems that require regrouping. Be sure to include an answer key with explanations.</p>	<p>1. Draw arrays to represent the following multiplication problems. Then solve the problem. $3 \times 7 =$ $4 \times 4 =$ $5 \times 3 =$ $2 \times 6 =$ $6 \times 4 =$</p> <p>Complete the multiplication chart. Do it daily for 10 days.</p>	<p>1. Create 10 flash cards in conversion units, such as cm-m, h-min, yard-feet etc. Ex. One trip is 1h 20 min. Another way to say this is 80 min.</p>	<p>1. Create a vocabulary book (20 words) in Geometry. It will include three columns. 1. Name 2. Definition 3. Drawing/shape (Vocabulary words: 2D shapes, lines, types of angles, types of triangles, symmetry, etc.)</p>	<p>1. Make a survey of 20 people for their favored drink. Show your data on a picture or bar graph. Also, create 5 questions about the graph, include the answer key.</p>	<p>1. *Draw a model to show each fraction. Label the models. $1/2$ $3/4$ $4/6$ $5/8$</p> <p>* Where do you see fractions in real life? Give 10 examples of fractions in real life.</p>
<p>2. Create a worksheet with 10 multidigit addition and subtraction problems that require regrouping. Be sure to include an answer key with explanations. Also, create a worksheet with 10 multiplication and (2 digit by 1 digit) and division (2 digit by 1 digit) questions. Be sure to include the answer key.</p>	<p>2. Set a timer for 2 minutes. See how many multiplication and division facts you can solve before the timer goes off. Do it daily for 2 weeks to see if you can break your record.</p>	<p>2. Create 10-word problems involving measurement units such as kilogram- gram, liter, milliliter, meter, centimeter etc. Be sure to include the answer key.</p>	<p>2. Create a quiz with 20 questions including geometry shapes, lines, types of angles, types of triangles, symmetry, 2D dimensional shapes etc. Be sure to include the answer key.</p>	<p>2. Make a survey on 20 people about their sleeping time daily. Show your data on both a bar graph and stem-leaf diagram. Create 5 questions about the graph.</p>	<p>2. Write a letter to a friend explaining how to find equivalent fractions and compare fractions. Make sure you give examples and explain the rules & strategies in steps as well.</p>



ELEMENTARY
Grades K-5



<p>3. Create a quiz (20 questions) including addition (regrouping) subtraction (borrowing), multiplication and division (2,3 digit by 1) Half of the quiz should be word problems.</p> <p>Be sure to include the answer key.</p>	<p>3. * Explain the concept of division. Write your answer with equations, models, and words.</p> <p>*Create 5 flash cards on factors/factor pairs. One side will have the numbers, the other side factors/factor pairs of the number. Create 5 flash cards on multiples. Follow the same format for factors/factor pairs.</p>	<p>3. Create 10 flash cards for vocabulary. On one side put the word and on the other side put the definition (Flash cards must be made for area, perimeter, and measurement)</p> <p>Also, create 5- word problems involving area and perimeter, 5- word problems involving measurement.</p> <p>Attach your answer key to your work.</p>	<p>3. *Create your own geometric monster. It must include a minimum of 2 rectangles, 2 squares, and 2 triangles. You may add more shapes/lines if you would like/need.</p> <p>After you make it, make a color code for each shape and color your monster.</p> <p>*Name the polygons based on their sides.</p> <p>*Also, use a Venn diagram for compare-contrast of the following vocabulary.</p> <ul style="list-style-type: none"> -Rhombus-square -Rectangle-square -Parallelogram-rectangle -Parallelogram-rhombus 	<p>3. Create a survey on 20 people about their sleeping time daily. Show your data on</p> <ol style="list-style-type: none"> 1. a bar graph 2. stem-leaf diagram 3. line plot <p>Create 5 questions about the graph. Create the answer key including explanation and solution.</p>	<p>3. Create a quiz involving 5 equivalent fractions, 5 compare fractions, 5 convert fractions & decimals, 5 compare decimals. Be sure you create an answer key (including explanation of rules), as well.</p>
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SCIENCE CHOICE BOARD

Complete the tasks indicated in each column. Each task should be put on a separate sheet of paper with the subject and number as the header. (i.e. Science: Nature of Science Task #1)

Life Science	Physical Science	Earth & Space Science
<p>1. Life Cycle Diagram Research and create a diagram on an incomplete and complete metamorphosis. Be sure to draw out and label each part of the lifecycle. What conclusion can you draw about the similarities and differences between the two lifecycles. Conclusion = 3 sentences)</p>	<p>1. Forms of Energy Foldable Create a foldable on the different types of energy. What is important to know about each type of energy? You must have at least 6 parts to your foldable. Include real world examples, key vocabulary words, pictures and graphics, and real-world connections</p>	<p>1. Rock Cycle Scavenger Hunt Collect 10 different rocks from around your neighborhood. Classify the rocks based on one of the following properties: texture, color, size, or luster. Create a bar graph to display your results. Do not forget to label your axes, title, and have equal intervals on your scale.</p>
<p>2. Food Chain Diorama Create a 2-dimensional model on food chains. Include different organisms in the food chain and label them. Show and explain how they relate and depend on each other. What conclusion can you draw about the similarities and differences between producers and consumers. (conclusion = 3 sentences)</p>	<p>2. Gravity Experiment Gather 2 objects of similar mass. Produce a testable question (How does...affect...) about what will happen when they are dropped from the same height at the same time. Create a hypothesis to match your testable question. The hypothesis must match an "If...then.... because" statement. Complete 3 trials and create a graph to organize your data.</p>	<p>2. Moon Data Collection Observe the moon each day for one month. For each observation, record the date and time and illustrate how the moon looks each day in a table format. Your table should be organized and easy to read.</p>
<p>3. Adaptations Computer Project Design a 15-question quiz on adaptations. What are some of the adaptations that plants and animals need to help them survive? Include an answer key! Include pictures, graphics, and key vocabulary words. What conclusions can you draw about the similarities and differences between plant and animal adaptations. (conclusion = 3 sentences)</p>	<p>3. States of Matter Experiment Part 1 - Get a cup of water and cover it with plastic wrap. Create a testable question (How does....affect...) about what will happen to the water when it is placed on a windowsill for 5 days. Part 2 – Freeze a cup of water. After a day place the cup from the freezer in the refrigerator with a coin on top of the frozen water. Create a hypothesis about what will happen after 2 days. It must be an "If...then...because" statement. Complete 3 trials and create a graph to organize your data. Write a paragraph analyzing your results (6 sentences).</p>	<p>3. Weather Graph Record the weather in Jacksonville, FL for 1 week. Then compare our weather to a city on a different continent. Make a line graph to display your data. Do not forget to have a title, label your axes, and have equal intervals on your scale. Write a short paragraph (5 sentences) analyzing your data.</p>

