Larimore Elementary School 2022 Summer School Program

Cameron Coleman, Principal

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Program Dates	June 13, 2022-July 14, 2022
Times	8:50-1:00 pm
Lunch	Breakfast will be provided. Early snacks and lunch will be provided daily. (<u>www.omgbff.org</u>) and Sisters of Lavender Rose
Course Offerings	 STEAM with Lego Education Grades K-5 Storybook STEM Grades K-2 Students will help their favorite storybook characters solve some of their problems through engineering design. The district provides materials. Mathical Grades K-5 Materials already purchased through title funds Building Futures Grades K-5 Already board approved an MOU issued Choose Your Own Adventure Grades 4-5 What might it be like to move to a new country? In this course, through researching and creating a story that follows immigrants' experiences in the United States during the 100's, students will explore the role of the immigrant in the United States. The district provides materials STEAM Farm Visits to CAASTL (walking field trips) Library grades K-5 Math intervention grades K-5

STEAM with Lego Education

LEGO Education is based on a hands-on learning approach that actively involves students in their own learning process. LEGO students use LEGO bricks and digital tools to solve problems creatively and to excel at working with others and thinking critically. We have created this course to teach Math, Science, and ELA standards identified by HSD to address learning loss in a fun and engaging way. Growth and progress monitoring of the essential standards in Reading and Math will be tracked through assessments. Additionally, individualized instructional needs will be identified and addressed through reading and math interventions.

Grade	ELA Standards	Math Standards	Description	Materials
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K-1	Use technology such as simple gears and wheels in appropriate ways Ask and answer questions about science and technology-related concepts Experiment/test "what would happen if" questions Observe and describe what happens Role-play using figures to Make predictions, and inferences Record data using graphs Respond to the art of others Identify cause and effect relationships	Sort and categorize objects K.DS.A.1 Classify objects into given categories, count the number of objects in each category Identify numbers, and count quantities K.NS.A.4 Read and write numerals and represent a number of objects 0-20 K.NS.A.1 Count to 100 by ones and tens 1.RA.A.1 Use addition and subtraction within 20 to solve problems. 1.NS.A.1 Count to 120 starting at any number. 1.NBT.A.3 Compare two digit numbers using >,<, or = Pretend that the figures are performing an art, such as dance, music, or drama Create two- and three-dimensional art that expresses their ideas K.GM.C.9: Draw or model simple two dimensional shapes	We will address unfinished learning in a fun and innovative way through Lego Education. STEAM Park builds on every child's natural curiosity and desire to create, explore, and investigate the world of early science, technology, engineering, art, and math (STEAM) through creative play. The possibilities are endless, as you work with them to construct a STEAM Park full of dynamic moving rides, fun games, and scenes using the special selection of LEGO® DUPLO® bricks. With every trip to STEAM Park, children grow their understanding of gears, motion, measurement, and solving problems together in a fun and engaging way. Students will construct a STEAM Park full of moving rides, games and scenes using the LEGO DUPLO bricks. Key learning areas: • Cause and effect • Spatial awareness • Observing and describing • Problem solving • Role play and collaboration Throughout the lessons, students will explore the world around them as they use functional elements to build interactive models. Using the Teacher Guide, teachers can teach lessons in which students learn to think like scientists as they build models, and experiment and test ideas to answer questions. *11 Lessons-would have to be modified and adapted to meet K and 1 standards	STEAM Park by LEGO® Education \$1,000 for 5 kits of 6 (30 kids) Link for ordering: <u>https://education.l</u> ego.com/en- us/products/stea m-park-by-lego- education/45024# steam-park Link to teachers guide: <u>https://education.l</u> ego.com/en- us/product- resources/steam- park/teacher- resources/teache r-guide-pdfs
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2-5	Speaking and Listening Motion and Stability-Force and Motion Engineer Design Process	Measurement & Data » Solve problems involving measurement and estimation.	To determine how to address unfinished learning, you'll need to prioritize the most important content knowledge and skills from previous years that students need to be successful in their current grade. This unit will develop students' understanding of forces and motion as they engage in and conduct investigations about the effects of balanced and unbalanced forces. They'll investigate the patterns in an object's motion, developing and sharpening their ability to predict future motion. Along the way, they'll develop their collaborative conversation skills as they effectively engage in a range of discussions.	Winning with Science Brick Motion Lego Kits <u>https://education.l</u> <u>ego.com/en- us/lessons/bricq- motion-winning-</u> <u>with-science</u>
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Building Futures-Project-Based Learning

Through this partnership with Washington University, Project-Based Learning (PBL) is used as a teaching method in which students learn by actively engaging in real-world and personally meaningful projects. Projects will reinforce the relevance and rigor of standards identified by HSD as essential in order to address gaps in learning.

Grade	Math Standards	Description	Materials
K-5	 .Kplace, and justify the solution. GM.C.7 Describe the relative positions of objects in space. K.GM.C.7 Describe the relative positions of objects in space. K.NS.A.1 Count to 100 by ones and tens. 	The Building Futures curriculum engages the entire student. There are Activity/Project-Based Guided Learning, Play Space Learning, and Design/Build experiences supported by research- based best practices for student learning. Building Futures cultivates learning by integrating Howard Gardner's multiple intelligences and the program's academic foundation and learning approach. In that students learn differently and have different natural talents to contribute to their learning, the incorporation of this academic foundation allows for a diverse group of	Building Futures Student materials Kits included in contract and provided by BF Lesson Modules

 1.RA.A.1 Use addition and subtraction within 20 to solve problems. 1.RA.A.4 Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. 1.NS.A.2 Read and write numerals and represent a number of objects with a written numeral. 	learners to benefit from the programs. Students who are challenged or failing in school will have an innovative and creative way to find success. The innovation learns 2D and 3D problem-solving skills by designing projects which begin at architectural model scale and continue to build at full scale. Project-based learning, focusing on STEAM goals, focused on addressing academic standards and increasing rigor and relevance. To determine how to address unfinished learning, you'll need to prioritize the most important content knowledge and skills from previous years that students need to be successful in their current grades.	
2.GM.D.12 Find the value of combinations of dollar bills, quarters, dimes, nickels and pennies, using \$ and ϕ appropriately.		
2.NBT.C.11 Write and solve problems involving addition and subtraction within 100.		
3.RA.A.3 Describe in words or drawings a problem that illustrates a multiplication or division situation.		
3.RA.A.4 Use multiplication and division within 100 to solve problems.		
3.RA.A.3 Describe in words or drawings a problem that		

illustrates a multiplication or division situation.	
4.NF.A.3 Compare two fractions using the symbols >, = or <, and justify the solution.	
4.NBT.A.5 Demonstrate fluency with addition and subtraction of whole numbers.	
5.NBT.A.6 Add and subtract multi-digit whole numbers and decimals to the thousandths	
5.NBT.A.7 Multiply multi-digit whole numbers and decimals to the hundredths place, and justify the solution.	

Mathical Books Cross-Curricular Course Options

Arranged by grade level and book title

Mathical books are a special selection of titles that encourage a love of math and literature through a series of engaging and interactive activities and lessons that accompany each title. The Mathical Book Prize is awarded by the Mathematical Sciences Research Institute in Berkley, CA. The prize is awarded to book titles that showcase the importance of math in ways that make it more accessible to students than ever before. *"The Mathical Book Prize aims to inspire a love of mathematics in the everyday world in children of all ages."* We have created this course to focus on the essential Math and ELA standards identified by HSD to fill gaps and learning loss.

In this course, the teacher will be provided with two Mathical books per week. The teacher will be able to select books to teach an ELA and math standard within the same

<mark>book.</mark>

 ELA Standards	Math Standards	Description	Materials
K.R.1.A.b asking and responding to questions about texts read aloud KW.1.A.a Using pictures, oral language or written letters, and/or words K.W.2.B.a Use a combination of drawings and writing to name and inform about a topic or text. K.R.1.A.d Connecting the information and events of a text to experience K.R.3.C.c. Name the main topic and recall key details of the text K.R.2.A.a Identify elements of a story including setting, characters, and key details K.R.3.A.b Use title and	K.NS.B.e Demonstrate that a number can be used to represent "how many" are in a set. K.RA.1.a Represent addition and 1.RA.1.a Use addition and subtraction within 20 to solve problems. K.GM.1.a Describe several measurable attributes of objects. K.GM.1.b Compare the measurable attributes of two objects 1.GM.1.a Distinguish between defining attributes; build and draw shapes that possess defining attributes. 1.GM.2.a Order three or more objects by length.	Nothing Stopped Sophie is the story of Sophie Germain, a woman who went off to University to study math at a time when women weren't allowed at University. She won prizes for her work and became a famous mathematician. This book can teach students about gender inequality over the years but also teach students that math can be used to solve important practical problems, like measuring the size of the earth. Some of the math concepts taught in this book are a measurement of lengths, tallying (add up), patterns of vibration, calculations, balance, and mathematical equations. Students will have the opportunity to discuss the application of math in real-world situations. There are many ways to build ELA skills from <i>Nothing Stopped Sophie</i> as well. Students will have discussions about equality and fairness as well as make text to self connections between themselves and the main character Sophie. Writing prompts can focus on overcoming a personal challenge.	Primary writing notebooks for each student Pencils Crayons Access to book room/leveled texts Mathical Book or engaging age appropriate chapter book of choice? Suggestions Mathical books: Pigeon Math by Asia Citro Nothing Stopped Sophie: The Story of Unshakable Mathematician Sophie Germain by Cheryl Bardoe Sheep Sheep Won't Sleep: Counting by 2s, 5s, and 10s by Judy Cox Absolutely One Thing: Featuring Charlie and Lola by Lauren Child Max's Math by Kate Bank One Big Pair of Underwear by Laura Geh

	illustrations to make predictions about text	1.GM.2.c Demonstrate the ability to measure length or distance using objects.		Mathical Book or engaging age- appropriate chapter book of choice? Suggestions <u>Bookroom</u> : Mr. Putter & Tabby Ramona & Beezus Cam Jensen <u>African American</u> main character: Nikki & Deja series by Karen English <u>Other</u> :
2-3	1.RF.3.A.g reading irregularly spelled words 1.RF.3.A.j reading high- frequency words 1.RF.3.A.k demonstrating decoding skills when reading 1.RF.4.A.a use context to confirm or self- correct word recognition and understanding, rereading as necessary 2.R.1.A.a using text features to make and confirm predictions,	 1.NBT.B.a Use place value understanding to add and subtract within 100 2.NBT.B.a Demonstrate fluency with addition and subtraction within 100. 2.NBT.C.a Write and solve problems involving addition and subtraction within 100. 	Mathical books are a special selection of titles that encourage a love of math and literature through a series of engaging and interactive activities and lessons that accompany each title. The Mathical Book Prize is awarded by the Mathematical Sciences Research Institute in Berkley, CA. The prize is awarded to book titles that showcase the importance of math in ways that make it more accessible to students than ever before. <i>"The Mathical Book Prize aims to inspire a love of mathematics in the everyday world in children of all ages."</i> Counting on Katherine is a picture book about Katherine Johnson, an African-American mathematician who worked for NASA during the space race of the 1950's. This is the same woman who was featured in the popular movie <i>Hidden Figures</i> . The book focuses on Katherine as a child and her already budding love for math and numbers. The learning opportunities presented in	Writing notebooks for each student Pencils Crayons Access to book room/leveled texts Books: Counting on Katherine Mathical books: Counting on Katherine: How Katherine: How Katherine: How Katherine Johnson Saved Apollo 13 by Helaine Becker Count on Me by Miguel Tanco The Girl With a Mind for Math: The Story of Raye Montague by Julia Finley Mosca When Sophie Thinks She Can't by Molly Bang

c 2 a r r q 2 s c u ir fa a s a e te 2 L d w n te 3 d c s te 3 s s b n d c n le 3 d ic n c p	explain why not confirm 2.R.1.A.b asking and esponding to elevant questions 2.R.1.A.c seeking clarification and using nformation acts and details about texts and supporting answers with evidence from ext. 2.RF.3.A.j Demonstrating decoding skills when reading new words in a ext 3.R.1.A.b: drawing conclusions and support with extual evidence 3.R.1.A.c: summarizing a story's beginning, middle, and end determining its central message, esson, or moral 3.R.1.B.a. decoding and dentifying the meaning of common prefixes and suffixes and	this book are vast. Social studies and history opportunities exist in the elements of racial injustice in the 1950's. Science learning can be had through activities and discussions about NASA, space and planets, and rocket ships launching into space. Many ELA opportunities exist in discussions of character traits, the main idea, using facts from the text to answer questions. Sight words and vocabulary building are also built-in. The math elements of the book go into counting and computing numbers, as well as valuations in relation to physics and how math concepts apply to real- world scenarios and careers.	Zero the Hero by Joan Holub3x4 by Ivan BrunettiEdgar Allan Poe's Pie: Math Puzzlers in Classic Poems by J. Patrick LewisNumbed! by David LubarThe Rookie Bookie by L. Jon Wertheim and Tobias MoskowitzBookroom: Flat Stanley Ellray Jake is NOT a Chicken Magic Tree House A Dyamonde Daniel Book SeriesAfrican American main character: Jada Jones Rockstar Kena Ford Clean Getaway by Nic StoneOthers: Amelia Bedelia Junie B Jones
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	meaning of root words. 3.R.1.B.b. using sentence level context to determine the relevant meaning of unfamiliar words or distinguish among multiple meaning words 3.R.1.C.b-text to world (text ideas regarding experiences in the world) 3.R.1.C.a: text to text (ideas and information in various fiction and nonfiction works, using compare and contrast) 3.R.2.A.a. summarize and sequence the events/plot and explain how past events impact future events			
4-5	4&5.R.1.A.a: drawing conclusions and inferring by referencing textual evidence of what the text says explicitly as well as inferences drawn from the text	 4&5.RA.A.a Use the four operations with whole numbers to solve problems. 4&5.RA.B.a Work with factors and multiples. Write and interpret numerical expressions. 	Mathical books are a special selection of titles that encourage a love of math and literature through a series of engaging and interactive activities and lessons that accompany each title. The Mathical Book Prize is awarded by the Mathematical Sciences Research Institute in Berkley, CA. The prize is awarded to book titles that showcase the importance of math in ways that make it more accessible to students than ever before. <i>"The Mathical Book</i>	Writing notebooks for each student Pencils Highlighters Access to book room/leveled texts Chromebooks Mathical Book or engaging age- appropriate chapter book of choice? suggestions below

4&5.R.1.A.b:		Prize aims to inspire a love of	
drawing	5.RA.C.aUse the	mathematics in the everyday world in	Bookroom:
conclusions by	four operations to	children of all ages."	Ramona the Pest
providing	represent and		
textual evidence	solve problems	Solving for M is a chapter book about	African American
of what the text		Mika, a fifth-grader who has never	main character:
		been a "math person". When her new	One Crazy Summer
says explicitly(as well		math teacher tells the class they must	by Rita Williams
as inferences			Garcia
		keep a journal, Mika is caught off	Garcia
drawn from the		guard. She doesn't understand how a	Durawaya Girl
text)		journal will help in mathuntil	Brown Girl
4&5.R.1.C.a:		eventually, it does. The relatable	Dreaming by
text to text		nature of this enduring story is already	Jacqueline
(ideas and		a great jumping-off point for students.	Woodson
information in		It will allow them to see that it is ok to	
various fiction		struggle with math and that asking for	The Boy Who
and nonfiction		help is the best way forward.	Harnessed the
works, using			Wind
compare and		The academic opportunities in Solving	
contrast)		for M are strong in the math and ELA	
4.R.1.C.b: text		areas. The math "journal entries" that	Mathical books:
to world (text		Mika must write in her journal are	Animals by the
ideas regarding		actual math problems that can be	Numbers: A Book
experiences in		worked out in a lesson, there are 25	of Infographics by
the world by		journal entries, all are complex story	Steve Jenkins
demonstrating		problems. As the book is so relatable	
an awareness		to the target audience, book	Bedtime Math:
that literature		discussions and writing prompts will	This Time It's
reflects a		provide many opportunities to	Personal by Laura
cultural and		strengthen ELA comprehension skills.	Overdeck
historical time		5 1	
frame)			Blockhead: The
4&5.R.3.B.b:			Life of Fibonacci
analyze, make			by Joseph
inferences, and			D'Agnese
draw			
conclusions			By the Numbers
about the			3.14: 110.01 Cool
persuasive text;			Infographics
use evidence			Packed with
from the text to			STATS and
			Figures by National
explain the			
author's			Geographic Kids
purpose;			DK Life Otorioo:
support the			DK Life Stories:
analysis (noting			Katherine
important			Johnson by Ebony

similarities and differences) 4(5).W.1.A Follow a writing process to plan a first draft by: 4.W.1.A.c accessing prior knowledge orJoy WilkinsEat Your Math Homework: Recipes for Hungry Minds by Ann McCallumEat Your Math Homework: Recipes for Hungry Minds by Ann McCallum
4(5).W.1.AEat Your MathFollow aHomework:writingProcess toprocess toHungry Minds byplan a firstAnn McCallumdraft by:Edgar Allan Poe'saccessing priorPie: Math Puzzler
Follow a writing process to plan a first draft by: 4.W.1.A.c accessing priorHomework: Recipes for Hungry Minds by Ann McCallumEdgar Allan Poe's Pie: Math Puzzler
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draft by: 4.W.1.A.c Edgar Allan Poe's accessing prior Pie: Math Puzzler
4.W.1.A.c Edgar Allan Poe's accessing prior Pie: Math Puzzler
accessing prior Pie: Math Puzzler
building by J. Patrick Lewis
background
knowledge Hidden Women:
related to the The African-
topic American Mathematicians of Mathematicians
NASA Who Helpe
America Win the
Space Race by
Rebecca Rissman
Just the Right
Size: Why Big Animals are Big
and Little Animals
are Little by Nicol
Davies
Numbed! by David
Lubar
The Rookie
Bookie by L. Jon
Wertheim and
Tobias Moskowitz