

## **INTERNAL MONITORING REPORT**

Policy: **1.1 Schooling**  
Policy Category: **Ends**  
Period Monitored: **2021-22 School Year**

This is my monitoring report on the Board of Education's Ends Policy 1.1 Schooling. This report is presented in accordance with the Board's monitoring schedule. I certify that the information is true and complete.

Chris Gdowski, Superintendent  
November 10, 2022

## **POLICY WORDING:**

*Students enrolled in Adams 12 Five Star Schools shall have the knowledge, learning and life skills necessary to prepare them for further learning in the next grade level or life transition.*

- a. Students shall build and demonstrate strong content knowledge in their required and selected courses.*
- b. Students will have the ability to communicate their knowledge through:*
  - writing and speaking*
  - the use of technical and non-technical means*
  - and in response to varying demands of audience, task, purpose and discipline*
- c. Students will have the opportunity and expectation to demonstrate comprehension and critical analysis skills.*
- d. Students in all subgroups will show appropriate academic growth each year.*

### ***Life Skills***

*Students shall have opportunities to develop and demonstrate independence, self-directed learning, creativity, problem-solving, adaptability, critical thinking, perseverance, global and cultural understanding and effective communication skills in order to successfully achieve their college, career and life aspirations*

## INTERPRETATION:

I interpret the following language:

*a. Students shall build and demonstrate strong content knowledge in their required and selected courses.*

to mean:

Evidence shall be presented to demonstrate that students demonstrate increased achievement over time on available State summative and/or District interim assessments.

## CONTEXT RELATED TO ACHIEVEMENT AND GROWTH DATA REPORTED:

Due to the cancellation of state and district testing in the spring of 2020, no data are available for that year. Caution should be used when interpreting state assessment data from the spring of 2021 because fewer grade levels were tested and parent opt out rates were substantially higher than in the spring of 2019 or the spring of 2022.

## ACHIEVEMENT DATA:

### Percentage of Students Scoring Above the 50<sup>th</sup> Percentile on NWEA MAP Assessments

School Level	Content Area	Spring 2019	Spring 2021	Spring 2022	Change 2019 to 2022
Elementary	Reading	48.4%	47.7%	51.7%	3.3%
	Math	46.7%	41.4%	49.1%	2.4%
Middle	Reading	51.7%	54.1%	49.4%	-2.3%
	Math	48.2%	50.9%	44.6%	-3.6%

### Percentage of Students Scoring Met and Exceeded on CMAS Assessments

School Level	Content Area	Spring 2019	Spring 2021*	Spring 2022	Change 2019 to 2022
Elementary	English language arts	44.8%	40.6%	41.3%	-3.5%
	Math	34.7%	29.4%	33.7%	-1.0%
Middle	English language arts	44.6%	42.7%	39.8%	-4.8%
	Math	35.3%	28.7%	27.6%	-7.7%

\*Only half the normal number of grade levels were tested and opt outs were much higher than in previous years

### Percentage of Students Meeting College Readiness Benchmarks (%CR) on PSAT and SAT

Test	Content Area	Spring 2019	Spring 2021	Spring 2022	Change 2019 to 2022
PSAT 9	Evidence-based Reading & Writing	66.2%	65.3%	63.3%	-2.9%
	Math	53.0%	44.4%	44.5%	-8.5%
PSAT 10	Evidence-based Reading & Writing	62.7%	65.5%	67.4%	4.7%
	Math	41.1%	38.8%	45.0%	3.9%
SAT	Evidence-based Reading & Writing	54.1%	56.3%	54.7%	0.6%
	Math	36.9%	36.0%	37.3%	0.4%

**Percentage of Students Scoring Below the Significant Reading Deficiency (SRD) Cut - Fall-Spring**

Grade Level	Fall 18-19	Spring 18-19	Change 18-19	Fall 20-21	Spring 20-21	Change 20-21	Fall 21-22	Spring 21-22	Change 21-22
K	28.0%	14.8%	-13.2%	29.7%	20.5%	-9.2%	25.6%	16.6%	-9.1%
1	18.7%	23.4%	4.7%	23.7%	27.9%	4.2%	30.6%	24.9%	-5.8%
2	33.3%	24.9%	-8.4%	38.1%	29.5%	-8.6%	36.4%	25.2%	-11.2%
3	35.2%	25.9%	-9.3%	38.0%	29.8%	-8.2%	32.3%	26.9%	-5.4%
<b>K-3</b>	<b>28.9%</b>	<b>22.4%</b>	<b>-6.5%</b>	<b>32.5%</b>	<b>27.2%</b>	<b>-5.3%</b>	<b>31.3%</b>	<b>23.4%</b>	<b>-7.9%</b>

**COMPLIANCE STATEMENT:**

The District's performance during the monitoring period has partially complied with the standard. While a number of achievement metrics have not returned to their pre-pandemic levels, more than half the achievement metrics increased compared to the 2020-21 school year. It is anticipated that the District's performance will comply with the standard for the 2022-23 school year given ongoing UIP improvement efforts and a return to more typical in-person instruction.

**INTERPRETATION:**

I interpret the following language:

*b. Students will have the ability to communicate their knowledge through:*

- *writing and speaking*
- *the use of technical and non-technical means*
- *and in response to varying demands of audience, task, purpose and discipline*

*c. Students will have the opportunity and expectation to demonstrate comprehension and critical analysis skills.*

to mean:

Evidence shall be presented to demonstrate that the scope and sequence of the Adams 12 Guaranteed and Viable Curriculum (GVC) in all core content areas requires that students demonstrate the ability to communicate their knowledge through writing and speaking, the use of technical and non-technical means, and in response to varying demands of audience, task, purpose and discipline as well as to demonstrate comprehension and critical analysis skills.

**GVC DATA REPORTED:**

The Colorado Department of Education (CDE) adopted the Colorado Academic Standards (CAS), which provide a road map to help ensure students are successful in college, careers, and life. The Adams 12 Learning Services Department developed a Guaranteed and Viable Curriculum (GVC) for each content area aligned to the CAS. The GVC provides a well-articulated structure for teachers to follow to enable them to provide aligned, rigorous instruction to all students. Each GVC includes standards that require cognitively complex content designed to prepare students for postsecondary success. The following are examples of content standards, links to the GVC, and cognitively demanding tasks required of Adams 12 students.

**STANDARDS ANALYSIS DATA REPORTED:**

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CAS. The GVC provides a well-articulated structure for teachers to follow to enable them to provide aligned, rigorous instruction to all students. Each GVC includes standards that require cognitively complex content designed to prepare students for postsecondary success. The following are examples of content standards, links to the GVC, and cognitively demanding tasks required of Adams 12 students.

### Reading – Reading Informational Text – Standard RI.2

Grade Level	Standard	Unit(s) of Study
K	With prompting and support, identify the main topic and retell key details of a text.	Benchmark Advance c2022: Unit1, Unit 7, Unit 8, Unit 9
3	Determine the main idea of text; recount the key details and explain how they support the main idea.	Benchmark Advance c2022: Unit 1, Unit 3, Unit 5
5	Determine two or more main ideas of a text and explain how they are supported by the key details.	Benchmark Advance c2022: Unit 1, Unit 3, Unit 7, Unit 8, Unit 9, Unit 10
6	Determine a central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments.	Unit 2: Becoming Critical Consumers of Information
9	Determine a central idea of a text and analyze its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text.	Unit 4: Analysis of Seminal Documents
12	Determine two or more central ideas of a text and analyze their development over the course of the text, including how they interact and build on one another to provide a complex analysis; provide an objective summary of the text.	Unit 3: Critical Analysis

### Grade 5

**Standard RI 5.2** Determine two or more main ideas of a text and explain how they are supported by the key details.

#### KUCs

- Readers use context clues to determine the meaning of key vocabulary words.
- Readers determine two or more main ideas of a text by identifying important details from a section of text and then considering what the details tell about the topic.
- Readers explain how key details support the main ideas by comparing the key details and determining how their similarities lead to a main idea about the topic.
- Readers summarize by restating key details from a text.

Sample 5<sup>th</sup> grade prompt: (From *Apply Understanding* within mini lesson in BA resource)

How did the key details and graphic features in the text help you determine one or more central ideas? Write a short paragraph explaining your answer.

## Grade 6

**RI.6.2** Determine a central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments.

KUCs

- Readers summarize text before interpretation or analysis in order to ensure an accurate, literal understanding.
- Readers provide a summary of text by restating the main points of a text without including personal opinions.
- Readers determine a central idea by considering how parts of the text interact to create a dominant impression.
- Readers determine how a central idea of a text is conveyed by selecting key details that establish and develop the dominant message of the text.

Sample 6<sup>th</sup> grade prompt: Read [“The Alaska Start 111”](#) by Robert Groves. Then, write a response to this reading that answers the following question:

What is the central idea of this text, and how is it conveyed through particular details? Cite evidence from the text to support your interpretation.

## Grade 9

**RI.9.2** Determine a central idea of a text and analyze its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text.

- Readers summarize text before interpretation or analysis in order to ensure an accurate, literal understanding.
- Readers provide an objective summary of a text by restating the main points of a text without including personal opinions.
- Readers begin to determine a central idea of literary nonfiction by considering the interaction between individuals, events, ideas, use of language, and/or purpose and selecting a word or phrase that describes the dominant message or topic.
- Readers analyze how the central idea emerges by finding the earliest details related to the primary focus and providing an interpretation of these details.
- Readers analyze how a central idea is shaped and refined by tracing details related to the primary focus and interpreting how the treatment of the dominant message evolves over the course of the text.

Sample 9<sup>th</sup> grade prompt: Based on your close reading of [“True Crime”](#) and your work on the Evidence Collection Tool, write a well-crafted, multi-paragraph response to the following prompt:

How does Mosley shape and develop his claim that “Humans are fascinated with true and fictional crime stories”?

## Writing – Standard 1 – Argumentative Writing

Grade Level	Standard	Unit(s) of Study
K	Use a combination of drawing, dictating, and writing to compose opinion pieces in which they tell a reader the topic or the name of the book they are writing about and state an opinion or preference about the topic or book.	Unit 4a: Reading for Opinion Writing  Unit 4b: Opinion Writing: Book Reviews
3	Write opinion pieces on topics or texts, supporting a point of view with reasons. <ul style="list-style-type: none"> <li>• Introduce the topic or text they are writing about, state an opinion, and create an organizational structure that lists reasons.</li> <li>• Provide reasons that support the opinion.</li> <li>• Use linking words and phrases.</li> <li>• Provide a concluding statement or section.</li> </ul>	Unit 3: Opinion  Unit 6: Opinion Writing using Textual Evidence
5	Write opinion pieces on topics or texts, supporting a point of view with reasons and information. <ul style="list-style-type: none"> <li>• Introduce a topic or text clearly, state an opinion, and create an organizational structure in which ideas are logically grouped to support the writer's purpose.</li> <li>• Provide logically ordered reasons that are supported by facts and details.</li> <li>• Link opinion and reasons using words, phrases, and clauses.</li> <li>• Provide a concluding statement or section related to the opinion presented.</li> </ul>	Unit 3: Opinion  Unit 6: Opinion Writing using Textual Evidence
6	Write arguments to support claims with clear reasons and relevant evidence. <ul style="list-style-type: none"> <li>• Introduce claim(s) and organize the reasons and evidence clearly.</li> <li>• Support claim(s) with clear reasons and relevant evidence, using credible sources and demonstrating an understanding of the topic or text.</li> <li>• Use words, phrases, and clauses to clarify the relationships among claim(s) and reasons.</li> <li>• Establish and maintain a formal style.</li> <li>• Provide a concluding statement or section that follows from the argument presented.</li> </ul>	Unit 3: The Power of Arguments  Unit 6: Presenting Arguments- Integrating Media

9	<p>Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.</p> <ul style="list-style-type: none"> <li>• Introduce precise claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that establishes clear relationships among claim(s), counterclaims, reasons, and evidence.</li> <li>• Develop claim(s) and counterclaims fairly, supplying evidence for each while pointing out the strengths and limitations of both in a manner that anticipates the audience's knowledge level and concerns.</li> <li>• Use words, phrases, and clauses to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.</li> <li>• Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing.</li> <li>• Provide a concluding statement or section that follows from and supports the argument presented.</li> <li>• Use precise language and domain-specific vocabulary to manage the complexity of the topic.</li> </ul>	<p>Unit 4: Analysis of Seminal Documents</p> <p>Unit 6: Analyzing &amp; Presenting Arguments</p>
12	<p>Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.</p> <ul style="list-style-type: none"> <li>• Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences claim(s), counterclaims, reasons, and evidence.</li> <li>• Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant evidence for each while pointing out the strengths and limitations of both in a manner that anticipates the audience's knowledge level, concerns, values, and possible biases.</li> <li>• Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.</li> <li>• Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing.</li> <li>• Provide a concluding statement or section that follows from and supports the argument presented.</li> </ul>	<p>Unit 3: Critical Analysis</p> <p>Unit 5: Application &amp; Presentation of Research</p>

## Grade 5

### Standards and substandards with KUCs

***W.5.1 Write opinion pieces on topics or texts, supporting a point of view with reasons and information.***

***W.5.1.a Introduce a topic or text clearly, state an opinion, and create an organizational structure in which ideas are logically grouped to support the writer's purpose.***

- Writers sort information into categories before they write.
- Writers use introductions to establish their topics, opinions, and organizational structures.

***W.5.1.b Provide logically ordered reasons that are supported by facts and details.***

- Writers logically group related information together to support their purpose.
- Writers support their opinions with reasons, facts, and details.



- Writers refer to details and examples from a variety of texts to support their opinions and reasoning.
- Writers provide a list of sources used in their writing to avoid plagiarism.

***W.5.1.c Link opinion and reasons using words, phrases, and clauses (e.g., consequently, specifically).***

- Writers use linking words to help readers understand how opinions and reasons are related.

***W.5.1.d Provide a concluding statement or section related to the opinion presented.***

- Writers use conclusions to bring a sense of closure to a piece of writing.

Sample 5<sup>th</sup> grade prompt:

In your opinion, is Esperanza from the book *Esperanza Rising* correct in her view of America? State Esperanza's view and your opinion clearly and support it with reasons and evidence from the text.

[Sample of student work for writing:](#) This is a response from a 5<sup>th</sup> grade student meeting expectations from *Achieve the Core* resources.

## Grade 6

### **W.6.1 Write arguments to support claims with clear reasons and relevant evidence.**

**W.6.1.a Introduce claim(s) and organize the reasons and evidence clearly.**

- Writers introduce arguments by indicating the significance of the topic and establishing a position.
- Writers select and use organizational strategies to convey the significance of a topic by determining what would best support the purpose of the writing.

**W.6.1.b Support claim(s) with clear reasons and relevant evidence, using credible sources and demonstrating an understanding of the topic or text.**

- Writers select relevant evidence from multiple sources by determining what information most directly connects to their claims.
- Writers evaluate the credibility of sources by considering currency, accuracy, bias, and depth of coverage.
- Writers demonstrate understanding of their topic by presenting the most pertinent evidence in their writing.

**W.6.1.c Use words, phrases, and clauses to clarify the relationships among claim(s) and reasons.**

- Writers clarify the relationships between their claim(s) and reasons by choosing transitional words, phrases and clauses that best support readers in seeing connections and/or distinctions between ideas and concepts.

**W.6.1.d Establish and maintain a formal style.**

- Writers establish and maintain a formal style by using academic, domain-specific vocabulary and an objective, authoritative tone.

**W.6.1.e Provide a concluding statement or section that follows from the argument presented.**

- Writers conclude their arguments by synthesizing and/or reflecting on the significance and impact of the ideas presented in the text.
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Sample 6<sup>th</sup> grade prompt:

Do students get enough exercise during the school day? Write an essay arguing for or against the requirement of physical education classes for all students. Your essay must be based on ideas and information from the passages linked below:

- [Report: More PE, activity programs need in schools](#)
- [Should physical education be required?](#)

Sample of Grade 6 Arguments: These argumentative essays are from 6th grade students meeting expectations from the Adams 12 units of study.

- [ELA Grade 6 Unit 3 Researched Argument: Soda](#) (*Adams 12 student*)
- [ELA Grade 6 Unit 3 Researched Argument: Dakota Access Pipeline](#) (*Adams 12 student*)
- [ELA Grade 6 AtC Argument Writing Sample](#) (*Achieve the Core*)

## Grade 12

**W.12.1 Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.**

**W.12.1.a Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences claim(s), counterclaims, reasons, and evidence.**

- writers introduce precise, knowledgeable claims by taking an unambiguous stance clearly relevant to the topic.
- writers establish the significance of their claims by providing contextual information to indicate why their position is worth considering.
- writers distinguish their claims from alternate or opposing claims by contrasting their use of reasons and/or evidence with that of other arguments on the same topic.
- writers logically sequence claims, counterclaims, reasons, and evidence by establishing an organizational pattern that their writing will follow and connecting information in a manner that best supports and advances their position.

**W.12.1.b Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant evidence for each while pointing out the strengths and limitations of both in a manner that anticipates the audience's knowledge level, concerns, values, and possible biases.**

- writers develop claims and counterclaims fairly and thoroughly by selecting enough information from credible, reliable sources to show a logical and complete understanding of the issue.
- writers supply the most relevant evidence by analyzing their audience, and then selecting the information that will best establish a credible position.
- writers point out the strength of claims and counterclaims by articulating how the information provided leads to a logical position.
- writers acknowledge limitations of claims and counterclaims by articulating information that is not addressed or where conclusions are ambiguous.
- writers take into account the knowledge level, concerns, values, and biases of their audience by determining a specific audience; researching what those audience members likely already know, believe, feel, or value about the topic; and then addressing specific counterclaims of the audience while maintaining a respectful tone.

**W.12.1.c Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.**

- writers use syntax to link sections of text by determining places in the text where style can be enhanced and relationships can be clarified through manipulation of sentence structures (e.g., repetition of words between paragraphs, parallel structure at the start of paragraphs, intentional breaks in sentence length to encapsulate and punctuate meaning at the end of a section, etc.).
- writers create cohesion and clarify the relationships among claims, counterclaims, reasons, and evidence by considering places in their writing where there are important connections and distinctions between ideas, and then choosing words, phrases, clauses or sentence structures that clarify the relationships.

**W.12.1.d Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing.**

- writers establish and maintain a formal style by using academic and domain-specific vocabulary, and an objective, authoritative tone.
- a writer establishes and maintains an objective tone by avoiding personal pronouns, words that indicate a personal feeling, and emotive words that indicate an opinion on the part of the writer.
- writers attend to the norms and conventions of a discipline by consulting style guides, mentor texts, and other resources.

**W.12.1.e Provide a concluding statement or section that follows from and supports the argument presented.**

- in concluding statements or sections, writers articulate the implications or significance of the topic by explaining the relevance of the argument for the reader.

Sample Grade 12 Arguments: These video commentaries are from 12th grade students meeting expectations from the Adams 12 units of study.

- [Gluten-Free Diets for Everyone? No!](#)
- [Scientist Rebellion Climate Protests](#)
- [Student Loan Debt Should Not Be Forgiven](#)
- [Boomer Driving Action Research Project](#)

## Math - Practice Standard 2 - Reasoning abstractly and quantitatively

Mathematically proficient students make sense of quantities and their relationships in problem situations. They bring two complementary abilities to bear on problems involving quantitative relationships: the ability to decontextualize—to abstract a given situation and represent it symbolically and manipulate the representing symbols as if they have a life of their own, without necessarily attending to their referents—and the ability to contextualize, to pause as needed during the manipulation process in order to probe into the referents for the symbols involved. Quantitative reasoning entails habits of creating a coherent representation of the problem at hand; considering the units involved; attending to the meaning of quantities, not just how to compute them; and knowing and flexibly using different properties of operations and objects.

School Level	Level Specific Language	Units
Elementary	An elementary student creates mathematical representations using numbers, words, pictures, symbols, gestures, tables, graphs, and concrete objects. Makes sense of the representations they and others use. Makes connections between representations.	Math Practice Standard 2 is incorporated into all units of study in alignment with high quality tasks
Middle	A middle school student makes sense of quantities and relationships in problem situations. They represent problem situations using symbols and then manipulate those symbols in search of solutions. Students use quantitative reasoning to know and flexibly use different properties of operations and objects.	
High	A high school student seeks to make sense of quantities and their relationships in problem situations. They abstract a given situation and represent it symbolically, and use quantitative reasoning to create coherent representations of the problem at hand.	

*From Everyday Math:*

### Math Standards of Practice

#### 2 Reason abstractly and quantitatively.

Mathematically proficient students make sense of quantities and their relationships in problem situations. They bring two complementary abilities to bear on problems involving quantitative relationships: the ability to *decontextualize*—to abstract a given situation and represent it symbolically and manipulate the representing symbols as if they have a life of their own, without necessarily attending to their referents—and the ability to *contextualize*, to pause as needed during the manipulation process in order to probe into the referents for the symbols involved. Quantitative reasoning entails habits of creating a coherent representation of the problem at hand; considering the units involved; attending to the meaning of quantities, not just how to compute them; and knowing and flexibly using different properties of operations and objects.

**GMP2.1** Create mathematical representations using numbers, words, pictures, symbols, gestures, tables, graphs, and concrete objects.

**GMP2.2** Make sense of the representations you and others use.

**GMP2.3** Make connections between representations.

### Math Grade 3 [Unit 2: Number Stories and Arrays](#)

In this unit: Students study diagrams and symbols used to model the application of mathematics *through problem solving, perseverance, and the use of abstract and quantitative reasoning*.

Lesson 2.9: Modeling Division: Children solve division number stories and learn about remainders

**Standards and Goals for Mathematical Process and Practice**

**MP1** Make sense of problems and persevere in solving them.  
GMP1.8. Compare the strategies you and others use.

**MP2** Reason abstractly and quantitatively.  
GMP2.1. Create mathematical representations using numbers, words, pictures, symbols, gestures, tables, graphs, and concrete objects.

**MP3** Construct viable arguments and critique the reasoning of others.  
GMP3.2. Make sense of others' mathematical thinking.

## 1 Warm Up 5 min

**Mental Math and Fluency**

Pose number stories for children to solve on slates. *Leveled exercises:*

- You have 16 stickers to share equally between yourself and a friend. How many stickers will you each get? **8 stickers**
- You have a string that is 40 cm long, and you cut it into pieces 10 cm long. How many pieces do you have? **4 pieces**
- You have 10 papers to hand out to 5 groups in your class. How many papers will each group receive? **2 papers**

## 2 Focus 40–50 min

**Math Message**

4 friends equally share 6 granola bars. How many granola bars will each friend get? Use sketches to show your thinking. **GMP2.1**

**Exploring Sharing Problems**

**WHOLE CLASS** **SMALL GROUP** **PARTNER** **INDEPENDENT**

**Math Message Follow-Up** Look for sharing strategies, such as those pictured below and on the next page. Children may record a variety of combinations of whole, half, and quarter granola bars because there are many ways to share them equally. **GMP2.1** Some children may share wholes and divide the remaining granola bars into halves or fourths to share. Others may divide all the bars into halves or fourths to share. Encourage children to compare and make sense of the different representations using questions such as: **GMP1.8, GMP2.2** *Answers vary.*

- How did this child share the granola bars?
- Does that method work? How do you know?
- What is the same and what is different about this strategy and your strategy?

Sketch A: First distributing the largest piece of granola bar possible to each friend, and then the next largest piece.

Sketch B: Dividing each granola bar in half and sharing the halves.

Sketch C: Dividing each granola bar into 4 pieces and giving one piece of each bar to one friend. Repeat the process for the other friends.

Display or provide a strategy similar to Sketch A, and ask children to interpret it. Help the class recognize that whole granola bars must be broken apart to share all 6 bars equally. Show examples of dividing the remaining 2 granola bars into halves and fourths so those pieces could be shared equally. Explain that this is an example of a division problem. They divided whole granola bars and could also share the leftovers, or remainders.

Tell children they will continue to solve division number stories involving equal shares and groups, and they will learn what to do with leftovers that cannot be shared.

**Modeling with Division**

**WHOLE CLASS** **SMALL GROUP** **PARTNER** **INDEPENDENT**

Ask children to imagine sharing 6 pennies, instead of granola bars, with 4 friends. How would it be different? What would your answer be? **Sample answer:** You cannot split a penny, so each friend would get 1 penny. There would be 2 pennies left over. Explain that these leftovers are called the **remainder**. The remainder is the quantity left over when a set of objects is shared equally or separated into equal groups. Point out that in the previous problem the remainder would have been 2 granola bars, but they could be divided into smaller pieces and shared equally. We cannot do that with pennies. Each friend receives 1 penny and the remainder is 2 pennies.

Model writing the division number model with a remainder:  $6 \div 4 \rightarrow 1$  remainder 2, or  $1R2$ . Explain that we use an arrow instead of the equal sign when there is a remainder. This arrow is read as *leads to*, gives, results in, or a similar expression.

**Academic Language Development**

Build on children's understanding of everyday terms to teach the meaning of the term **remainder**. Use sentences such as: *Show me what is left over.* *Show me what remains after you have shared equally.* *Show me the remainder.* Have partnerships create a vocabulary card for the term **remainder** using the 4-Square Graphic Organizer (Math Masters, page 1A20) with the headings *Definition*, *Visual Representation*, *Picture*, *Non-Example*, and *Example*.

**Common Misconception**

**Distinction:** Some children may struggle to make sense of the remainder and simply cross out the extra items to be shared. It may help to provide these children with actual counters and a blank sheet of paper on which they can label a "remainder" pile so they have a specific place to put these extra items.

128 Unit 2 | Number Stories and Arrays

Lesson 2-9 129

## Math Grade 7 [Unit 5: Ratios and Proportions](#)

### Math Standards of Practice

In this unit:

- Reason quantitatively with rates and their units in proportional relationships (MP2: Reason abstractly and quantitatively).

**EXPLORATION 1****Representing Relationships Graphically**

Work with a partner. The tables represent two different ways that red and blue food coloring are mixed.

Mixture 1

Drops of Blue, $x$	Drops of Red, $y$
1	2
2	4
3	6
4	8

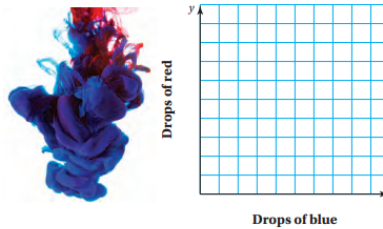
Mixture 2

Drops of Blue, $x$	Drops of Red, $y$
0	2
2	4
4	6
6	8

- a. Represent each table in the same coordinate plane. Which graph represents a proportional relationship? How do you know?

**Math Practice****Use a Graph**

How is the graph of the proportional relationship different from the other graph?



- b. Find the unit rate of the proportional relationship. How is the unit rate shown on the graph?
- c. What is the multiplicative relationship between  $x$  and  $y$  for the proportional relationship? How can you use this value to write an equation that relates  $y$  and  $x$ ?

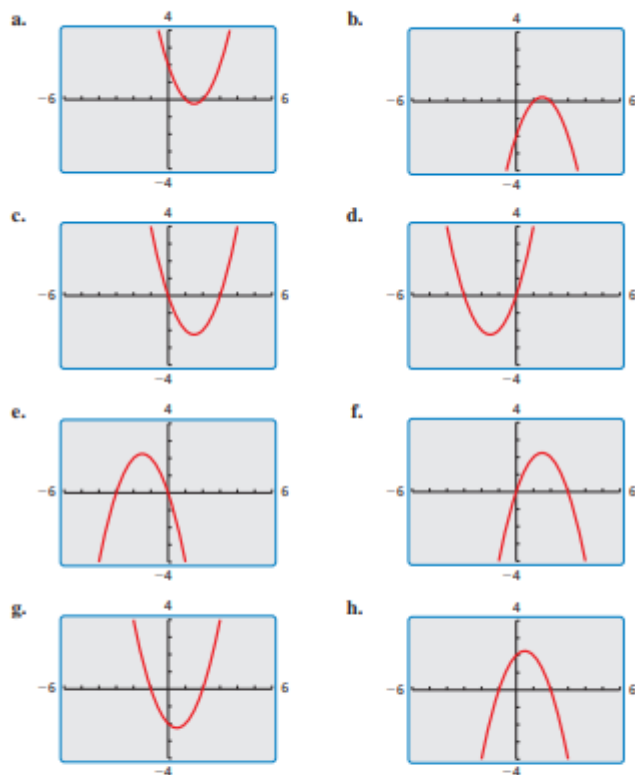
## Integrated Math 2: Graphing Quadratic Functions - Focus on intercept form $f(x) = a(x - p)(x - q)$

**Exploration 1**

- Students can determine the  $x$ - and  $y$ -intercepts of each graph. Assure students that this is sufficient information in order to write the equations in the form  $f(x) = (x - p)(x - q)$  or  $f(x) = -(x - p)(x - q)$ .
- Students should check their equations using a graphing calculator.
- Reason Abstractly and Quantitatively:** Listen for correct reasoning as to why their equations make sense.

**EXPLORATION 1 Using Zeros to Write Functions**

**Work with a partner.** Each graph represents a function of the form  $f(x) = (x - p)(x - q)$  or  $f(x) = -(x - p)(x - q)$ . Write the function represented by each graph. Explain your reasoning.

**Communicate Your Answer**

2. What are some of the characteristics of the graph of  $f(x) = a(x - p)(x - q)$ ?
3. Consider the graph of  $f(x) = a(x - p)(x - q)$ .
  - a. Does changing the sign of  $a$  change the  $x$ -intercepts? Does changing the sign of  $a$  change the  $y$ -intercept? Explain your reasoning.
  - b. Does changing the value of  $p$  change the  $x$ -intercepts? Does changing the value of  $p$  change the  $y$ -intercept? Explain your reasoning.



## STANDARDS ANALYSIS DATA REPORTED:

The Colorado Department of Education (CDE) adopted the Colorado Academic Standards (CAS), which provide a road map to help ensure students are successful in college, careers, and life. The Adams 12 Learning Services Department developed a Guaranteed and Viable Curriculum (GVC) for each content area aligned to the CAS. The GVC provides a well-articulated structure for teachers to follow to enable them to provide aligned, rigorous instruction to all students. Each GVC includes standards that require cognitively complex content designed to prepare students for postsecondary success. The following are examples of content standards, links to the GVC, and cognitively demanding tasks required of Adams 12 students.

### Science - NGSS Science and Engineering Practices - Developing and Using Models

General Description: A practice of both science and engineering is to use and construct models as helpful tools for representing ideas and explanations. These tools include diagrams, drawings, physical replicas, mathematical representations, analogies, and computer simulations.

Grade Level	Level Specific Language	Units
K-2 Practices	Modeling in K–2 builds on prior experiences and progresses to include using and developing models (i.e., diagram, drawing, physical replica, diorama, dramatization, or storyboard) that represent concrete events or design solutions.	The science practice standard of developing and using models is integrated into all of the units of study.
3-5 Practices	Modeling in 3–5 builds on K–2 experiences and progresses to building and revising simple models and using models to represent events and design solutions.	
6-8 Practices	Modeling in 6–8 builds on K–5 experiences and progresses to developing, using, and revising models to describe, test, and predict more abstract phenomena and design systems.	
9-12 Practices	Modeling in 9–12 builds on K–8 experiences and progresses to using, synthesizing, and developing models to predict and show relationships among variables between systems and their components in the natural and designed world(s).	


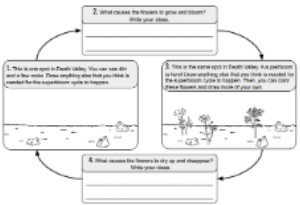


## Elementary Tasks Aligned with Developing and Using Models


### Link to Science Units of Study: Grade 2: Unit 1 - Biodiversity and Ecosystems

**Unit Overview:** A study of the needs of plants, of how structures of specific animals help plants disperse their seeds, and of the diversity of life in different habitats.

The unit begins with students engaging in the phenomenon of Superbloom events in Death Valley. Students use cause and effect relationships to create an initial model of the cycle of flower blooms. They return to this model throughout the unit to add to and revise their initial thinking.

Essential Question	What We Do and Figure Out	How We Investigate It and/or Represent It
<b>LESSON 1</b>  How can huge fields of flowers suddenly grow in one of the hottest, driest places on Earth?  <b>1-2 DAYS</b>	We observe that Death Valley is a hot, dry desert with very little life. We generate questions and create an initial model of why and how desert superblooms occur.  We figure out: <ul style="list-style-type: none"> <li>Death Valley is typically a hot, dry place.</li> <li>Superblooms are events when large numbers of flowers appear for short periods of time in desert locations</li> <li>Superblooms don't happen regularly, there are often many years in between these events.</li> <li>Making close observations about a phenomenon help us to ask productive questions</li> </ul>	 

In Lesson 2, students receive explicit instruction on the purpose of models before engaging in a modeling activity where they test the effectiveness of a variety of structures in moving seeds. A lesson overview is below, followed by the lesson in its entirety.

<b>Navigation to Next Lesson:</b> It seems as though flowers appear out of nowhere during a superbloom, and we wonder where the flowers come from.		
<b>LESSON 2</b>  How did a tree travel halfway around the world?  <b>2-3 DAYS</b>	We observe how plants produce different types of seeds in the process of reproduction, and how these seeds require wind, water, or animals to disperse (move) them. We make and test models of seeds, and discuss how models can be helpful in science.  We figure out: <ul style="list-style-type: none"> <li>Plants create a variety of seeds that disperse in different ways</li> <li>Models can provide visual representations of the real world, and are useful tools for predicting and communicating ideas.</li> </ul>	
<b>Navigation to Next Lesson:</b> We used a model to investigate how plants use wind to move seeds, now we want to know how else seeds are dispersed.		

**Brief Lesson Description:** In this lesson, we observe how different types of plants produce different types of seeds in the process of reproduction. We learn how seeds must get away from their parent plant in order to survive. We create a model seed from paper. Then, we release the paper seeds to model how they disperse and observe if any seeds are able to escape the parent plant's "Zone of Darkness" and survive. In your kit there is a copy of the book *Who Will Plant a Tree?*, which can be read aloud at any point during lesson 2, 3, or 4 to reinforce learning.

**Essential Question:** How did a tree travel halfway around the world?

**Sentence Frames:**

- Plants rely on \_\_\_\_\_ to disperse/move their seeds
- A model is helpful because \_\_\_\_\_
- \_\_\_\_\_ represents \_\_\_\_\_ in the real world.

**Lesson Plan**

**Engage:**

- Follow the [Mystery Science Lesson: How Did a Tree Travel Halfway Around the World?](#) Exploration section ONLY. Pause the lesson after you reveal the answer to how the Koa seed was carried to Reunion Island..

**Explore/Explain:**

- NOTE: This is a supplement to the Mystery Science lesson to support student thinking and discourse around the [science practice of modeling](#).
- Explain to students that in order to better understand how seeds work, we are going to make models of seeds. Before we do that, we are going to explore what models are, and how they are useful tools.
- Display Slide 1 of the [What is a Model? Slide Deck](#) and ask students to think about what they know about models or where they have heard the word before. Explain that a model is a representation or “version” of the real world. Sometimes the real world is too big (like the solar system), too rare (like diamonds), or too challenging (like a dinosaur) to study the real version, so we use models instead.
- Move to Slide 2 and tell students that these are 2 examples of scientific models. Guide students through a discussion of the purpose of models. Some sample questions could include:
  - How are these models different from a real caribou? (*a real caribou is alive and breathes, eats, and grows; these models are made of materials that are not alive*)
  - Why might a scientist use these models? (*to learn about the habitat of a caribou or its parts*)
  - Why do scientists use different types of models? (*One of these shows where a caribou lives, which helps us understand its habitat and what it eats. The other shows the parts of its body*)
- Explain that sometimes models look a little different from the real thing, but they are still useful tools. We are going to use 3 different paper models to represent how seeds can move. Before we test the seeds, let’s make predictions about which model each real seed will be best represented by. We may want to think about the structure (shape) of each seed, as well as how we think they might move. Use Slides 3-5 to guide students in partner/group discussions about which model best represents each real seed. Accept all answers at this point, the purpose is to have students think about how materials can be used to model the real world.

**Explore:**

- Return to the [Mystery Science Lesson: How Did a Tree Travel Halfway Around the World?](#) You can click directly on the “Hands on Activity” section to return to the next part of the lesson.
- During the Hands-On Activity, students will select which type of seed they want to model from [Glider](#), [Rotocopter](#), OR [Spinner](#). Note that a student (or teacher) will also model a tree that will drop the seeds.
- Stop on the wrap up slide and discuss the three questions. Close out the Mystery Science lesson. (Teacher Note: we will return to the anchor connection at the end of the next lesson)

**Elaborate:**

- In this activity, students investigated three different models of seeds to investigate how they disperse. While no model is a perfect representation of the real thing, some models are better than others. You may (optionally) revisit slides 3-5 to see if students changed their minds on which model best represented each seed. (Students may note that none of the models really represented the floating movement of the dandelion seed)

- Display [Slide 6](#). Mystery Doug mentioned that the glider “glides the vine seed we saw earlier.” Let’s look a little closer at how the glider is a good model of the vine seed. (*The wide paper wings are like the shiny part of the seed because they help the seed glide slowly like a plane. The paperclip represents the seed because it is a little heavier and is positioned near the “nose” of the glider.*)


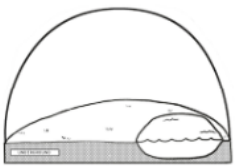
#### Evaluate:

- Tell students that when we create models, we should think about how materials can be helpful in modeling the structure (shape) and how something behaves or acts in the real world. Tomorrow they will get to select materials to create their own model.
- Have students answer the exit ticket on [slide 7](#), either written or verbally with a partner or table team.
- Look for evidence that students are using reasoning to justify their thinking. While a bowling ball is a similar size, it does sink, which would make it challenging to move around in a body of water. It is also smooth and perfectly round, which may affect how it moves in water.


























### Link to Science Units of Study: Grade 5: Unit 4 - Energy and Matter in Ecosystems

**Unit Overview:** A study of the interaction and interdependence between and among living and nonliving components of ecosystems including similarities and differences between living things

The Unit begins with students creating an initial model of how life could exist in an enclosed system, similar to Biosphere 2. Students return to this model throughout the unit to add to and revise their initial thinking.

Focus Question	What we do and figure out	How We Investigate It and/or Represent It
<p><a href="#">LESSON 1</a></p> <p>How do we create a closed system where energy and matter cycle?</p> <p><b>1 DAY</b></p>	<p>We connect to our study of chemistry, space, and Earth’s interacting spheres to create an initial model of life on another planet. We observe examples of life under glass domes on Earth. We identify organisms that could sustain human life.</p> <p>We figure out:</p> <ul style="list-style-type: none"> <li>• What we know and need to know about life in an enclosed system</li> <li>• We can learn from other examples of functioning ecosystems</li> </ul>	  <p>Students observe Biosphere 2 as an example of life in a dome before they create their own initial models.</p>

In Lesson 4 (among others), students receive explicit instruction on modeling the cycling of matter using a food web in order to apply new information to their initial model. A lesson overview is below, followed by the lesson in its entirety.

<p><b>LESSON 4</b></p> <p>How does matter flow in an ecosystem?</p> <p><b>2 DAYS</b></p>	<p>We dissect owl pellets to determine the prey species of an owl. We use data findings from this investigation, as well as research, to model the movement of matter using a food web.</p> <p>We figure out:</p> <ul style="list-style-type: none"><li>• Animals eat food that provides them with the materials they need for growth and body repair and the energy they need for movement and generating body warmth.</li><li>• A single organisms can get its energy from multiple other organisms</li><li>• We can model the cycling of matter using a food web</li></ul>	<table><tr><th colspan="4">Owl Pellet Bone Chart</th></tr><tr><th></th><th>Rodent</th><th>Shrew</th><th>Mole</th><th>Bird</th></tr><tr><td>Skull</td><td></td><td></td><td></td><td></td></tr><tr><td>Jaw</td><td></td><td></td><td></td><td></td></tr></table> <p><i>Owl pellets help us understand where the materials an owl needs for growth and body repair come from.</i></p> 	Owl Pellet Bone Chart					Rodent	Shrew	Mole	Bird	Skull					Jaw				
Owl Pellet Bone Chart																					
	Rodent	Shrew	Mole	Bird																	
Skull																					
Jaw																					

**Brief Lesson Description:** In this lesson, students will learn about the flow of matter in an ecosystem by forensically dissecting an owl pellet to re-create a food web from which matter flow can be modeled.

**Focus Question:** How does matter move through organisms in an ecosystem?

**Specific Learning Intentions:** Students will be able to use a model to explain the flow of matter in an ecosystem.

**Sentence Stems:**

- An owl might eat \_\_\_\_\_
- An owl obtains matter from \_\_\_\_\_, which gets matter from \_\_\_\_\_.

**Lesson Plan:**

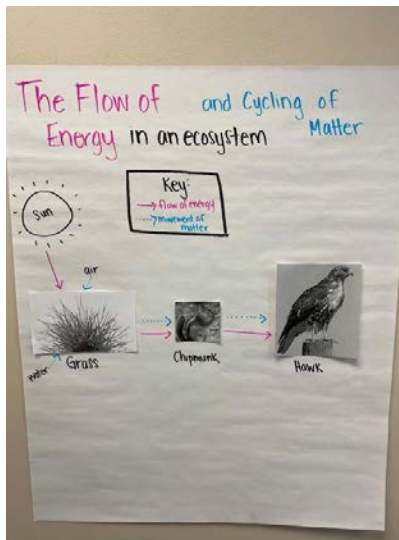
**Engage:**

- Say “Yesterday, we talked about what plants need in order to grow. I bet a lot of us have a bird (like a turkey or chicken) among the animals we’d want to have in our domes. While you might not have chosen an owl specifically, today we are going to look at owls to help us understand how animals get the materials they need in order to grow and do other things. We’ll also be thinking about matter in ecosystems as a whole.”
- Have students watch [All About Owls video](#)
- As they watch, ask students to think about what owls might eat. Make a class list of organisms students expect to find in an owl pellet (mice, small mammals, other birds, etc..)

**Explore:**

- Introduce the Learning Intention and Focus Question.
- Owl Pellet Dissection (For teacher background information on owl pellets, you can watch [this video](#))
  - Explain that students will be science detectives, using evidence to discover what an owl ate - and what its prey ate - in order to reconstruct the owl’s real-life food web.
  - Pass out the [Owl Pellet Bone Chart](#), one owl pellet, a paper bowl, a hand lens, and tweezers to each team of students.
  - Direct students to dissect the owl pellet, compare contents to the bone chart, and determine what species the owl ate.
  - Give each student a copy of the [Investigation Guide](#) to record their findings.
  - For Question #4, you may wish to create a table with each group’s findings, or allow groups to compare with each other.
  - Question #5 provides space to create a rough draft for the next section of the lesson.

- Using a list of findings from the owl pellets, have students research the prey animals found in the owl pellet and determine the diet of that prey.
  - Website for research/field guides on owl prey: <https://nature.mdc.mo.gov/discover-nature/field-guide/search>
  - Students can type specific animals right in the search bar
  - Students should look for the food (or source of matter) for each organism in their food web
- Have students work in their teams to reconstruct the owl's food chain or web to the producer (plant) level with sun as the energy source on a piece of chart paper.
- Have the class engage in a gallery walk to view each team's reconstruction. Allow student to challenge each other respectfully



### Explain:

- After students have had the chance to explore the flow of energy in the owl's food web, introduce the idea of the movement of matter.
- Use a new symbol (a dashed/dotted line or a different color) to draw arrows that show the movement of matter between the organisms. (Teacher note: remember that we learned that plant's matter comes from the air!)
- Ask students what they notice about the movement of energy and matter.
  - Possible answers:
    - They appear to move in a similar pattern
    - Energy comes from the sun, but matter does not

### Evaluate:

- Have students return to their dome and check that their model includes a food source for every organism and arrows that show the movement of matter through their system.
- Be sure to encourage students to use labels, keys, and colors to make their models clear. They might be revising or they might need to start fresh in order to keep track of everything. Optional [Dome Revision Directions \(Slide 4\)](#)



## Building Molecules Models

**OBJECTIVE** Create models of molecules using marshmallows.

**MATERIALS** (per pair of students)

- marshmallows (to represent atoms)
  - Large Marshmallow Atoms: Carbon (C), Nitrogen (N), and Oxygen (O)
  - Small Marshmallow Atoms: Hydrogen (H) and Chlorine (Cl)
- toothpicks (to represent bonds)

### PROCEDURE

- Using your marshmallows and toothpicks, create at least three of your own molecule models.
- Study the ATOM RULES below. Make at least one model for each atom listed below with the correct number of bonds.
- Using the ATOM RULES, **build** each molecule below. **Draw** a picture of each molecule. **Label** the atoms using their atomic symbol.

### Results:

$H_2$ (hydrogen gas)          How many atoms are in this molecule? _____	$H_2O$ (water)          How many atoms are in this molecule? _____
$NH_3$ (ammonia)          How many atoms are in this molecule? _____	$O_2$ (oxygen gas)          How many atoms are in this molecule? _____

CH <sub>3</sub> OH (methanol)	CH <sub>4</sub> (methane)
How many atoms are in this molecule? _____	How many atoms are in this molecule? _____
C <sub>2</sub> H <sub>6</sub> (ethane)	C <sub>3</sub> H <sub>8</sub> (propane)
How many atoms are in this molecule? _____	How many atoms are in this molecule? _____

**Extension 1:** Do you notice a pattern with the hydrocarbon atoms you have built? (Hydrocarbons are molecules that are made out of carbon and hydrogen atoms - CH<sub>4</sub>, C<sub>2</sub>H<sub>6</sub>, C<sub>3</sub>H<sub>8</sub>...) What would be the next molecule in this series? The next? Draw bigger and bigger hydrocarbons on another piece of paper. Look up and record the names of the hydrocarbons you have created.

**Extension 2:** Research each of the molecules in the data table above and explain how it is used or where it is found in nature. Be sure to use complete sentences.

### Conclusion:

Describe how the molecular models you assembled are **similar** to real molecules.

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Describe how the molecular models you assembled are **different** from real

molecules. \_\_\_\_\_

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Describe how molecular models might be helpful to


scientists. \_\_\_\_\_

### High School Tasks Aligned with Developing and Using Models

#### **Chemistry: Half-Life of M&M's**

**Objective:** To simulate the transformation of a radioactive isotope over time, to graph the data, and relate it to the concepts of radioactive decay and half-life.

In your notebook: Copy the data table below. (You will need to add more trials, it will vary from person to person how many trials you will need)

Shake Number	Number of M's face up	Number of M's face down	
0		0	
1			
2			
3			

#### **Procedure:**

1. **For shake number 0**, count all of your M&M's. Put that number as the number of M's face up in the data table. Write **0 (zero)** for the number of M's face down.
2. Put all of the M&M's in the cup. Shake and dump out on a piece of paper towel or Kleenex. For **shake number 1**, record the number of M&M's where the M is face up and the number of M&M's that are face down.
3. Put any M&M where the M is face up back in the cup. Leave the M&M's that are M face down on the paper towel or Kleenex.
4. Shake the cup and dump again. Record the total number of M&M's that are face up and face down (include the face down ones from the previous trial(s)) and record for shake number 2.
5. Continue steps 3 and 4 until there are no more M&M's with the M side face up. This will be a different number of trials for each student.
6. Show your teacher your data table. If he or she agree with your data, you can eat the M&M's.



**Graph:**

1. On a graph plot the Shake Number and Number of M's face up.
  - a) X-axis will be # of shakes
  - b) Y-axis will be # of M's
  - c) Make sure to make an appropriate scale for your graph
2. Use a different color to plot the Shake Number and Number of M's face down on the **same graph**.

**Questions:**

1. Why is the # of shakes on the x-axis?
2. Examine your graph. Are the lines linear or exponential? Explain how you know.
3. The two graphs should be mirror images of each other. Explain why.
4. Why do you think the number of face up M&M's goes down by approximately half each trial?
5. A half-life is the **time** required for one half of the radioactive **parent** atoms to break apart into more stable **daughter** atoms. Which side of the M&M, face up or face down was supposed to represent a **parent** element that is radioactive? Explain why you think this.

Which point on the graph shows where **HALF** of the M&M's were face up? How do you know?

## Colorado History Strand

History prepares students to develop critical thinking skills in an effort to explain the human experience through events of the past. History develops an understanding of perspectives, defines identity and creates insight into how social, political, and economic factors can change, while building inquiry, judgment and decision-making skills. History enhances the ability to read varied sources and develop the skills necessary to analyze, interpret, evaluate, and communicate.

## Narrative

We are excited to share with you all the results of incredible learning and work led by a dedicated and passionate group of Adams 12 educators last semester and into this summer. Teaching with Primary Sources and the Library of Congress funded our Raising Voices project during the 2021-22 school year. We also partnered with History Colorado and St. Vrain Valley School District on this project. The funding and partnership from these organizations enabled us to bring a group of elementary, middle, and high school educators together five times to engage in learning about diverse historical perspectives/experiences and the value of representation in curriculum and to use Library of Congress, History Colorado, Latino History Project, and many other resources to build annotated resource sets for use in our classrooms.

All together, the cohort created 22 annotated resource sets to support our 4th, 5th, 8th, and HS (Government & US History) curricula! These resources will also be shared with our partners in St. Vrain, CDE, History Colorado, and, of course, the TPS Teachers Network. The sets are organized around unifying themes and serve to put more diverse and representative primary sources in the hands of all of our educators; specifically focusing on those groups named in Colorado House Bill 19-1192. They are not intended to be used only for DBQ-type assignments, though some certainly could serve this purpose, but rather to bring more diverse sources into our classrooms throughout the year. Educators might choose to use one or two sources from a single set in context with their students. There are questions and strategies included in the sets, as well, to support their use in our classrooms.

Grade Level	Standard	Unit(s)
1	H2 The diverse perspectives and traditions of families from many cultures have shaped the United States. H2b Discuss common and unique characteristics of different cultures using multiple sources of information.	Unit 2 My Family <a href="#">Unit Overview Page</a> <i>A study of chronology and culture of one's family.</i>
4	H1 Analyze primary and secondary sources from multiple points of view to develop an understanding of the history of Colorado.	Unit 5: <a href="#">Native Peoples</a> <i>A study of the native cultures within Colorado and how they adapted to Colorado geography.</i> Unit 8: <a href="#">Trappers Traders and Miners</a> <i>A study of the early economic pull factors that led people to settle in Colorado.</i> Unit 9: <a href="#">Settlements Leading to Statehood</a> <i>A study of the early Colorado settlements and resulting cultural conflicts.</i> Unit 11: <a href="#">Modern History of Colorado</a>

		<p><i>A study of the historical connections between national events and Colorado events.</i></p> <p><i>Unit</i></p>
<b>5</b>	<p>H1 Analyze primary and secondary sources from multiple points of view to develop an understanding of early United States history.</p>	<p>Unit 3: <a href="#">European Exploration of North America</a>  <i>A study of interactions between European explorers and native peoples in the New World.</i></p> <p>Unit 4: <a href="#">British American Colonies</a>  <i>A study of early settlements and their impacts in three distinct colonial regions.</i></p> <p>Unit 5: <a href="#">Forming An Identity</a>  <i>A study of the growing tensions between the 13 Colonies and Great Britain.</i></p> <p>Unit 6: <a href="#">Revolutionary War</a>  <i>A study of the significant events of the Revolutionary War.</i></p>
<b>8</b>	<p>H1a: Use and interpret documents and other relevant primary and secondary sources pertaining to United States history from multiple perspectives.</p>	<p><b>Unit 5:</b> <a href="#">Westward Expansion</a>  <i>The study of challenges and successes of a growing country from multiple perspectives.</i></p> <p><b>Unit 6:</b> <a href="#">Pre-Civil War</a>  <i>The study of the economic, social, and political factors that led up to the conflict between the Union and the Confederacy.</i></p>
<b>HS</b>	<p>H1: Use the historical method of inquiry to formulate compelling questions, evaluate primary and secondary sources, analyze and interpret data, and argue for an interpretation defended by textual evidence.</p> <p>b. Gather and analyze historical information to address questions from a range of primary and secondary sources containing a variety of perspectives.</p> <p>d. Construct and defend a historical argument that evaluates interpretations by analyzing, critiquing, and synthesizing evidence from the full range of relevant historical sources.</p>	<p><b>Unit 1:</b> <a href="#">Post-Civil War America</a>  <i>A regional examination of the South and West in the United States after the Civil War.</i></p> <p><b>Unit 7:</b> <a href="#">Civil Rights, Vietnam, and Counterculture</a>  <i>The study of the the modern civil rights movement, Vietnam war, and counterculture.</i></p>

## First Grade Lesson Example: Lesson 1 Unit 2

### Background Information for the Teacher for lesson 1:

Different groups of people have ways in which they go about living. They have particular ways they dress, both for men and women. Stories are told and, of course, festivals are celebrated. When comparing groups of people, it is common to see similarities and differences in the way these things manifest themselves in people's lives.

Festivals are often related to a cultural practice of a particular group of people. Again, over time and generations, some parts of cultural practices remain the same and others change. For example, American Indian ceremonies, which were once done for religious purposes, are done now for demonstration purposes to showcase the practices of earlier generations.

The way people dress is sometimes dictated by trends in popular culture. However, historical dress may have been passed down for many generations. Many people use clothing similar to clothing from their cultural backgrounds for special occasions. For example, many Indian people dress in suits for work and blue jeans and T-shirts for the weekend. However, when a wedding or other cultural event takes place within the Indian community, they wear traditional clothing such as saris (long garments that are worn similar to dresses) or sherwanis (a men's long shirt and pants).

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### Lesson 1:

Project the slide of [primary sources](#) for the class. Using [Time Pair Share](#), partners discuss what they notice about the two pictures. If students do not recognize the colors of the pictures, point out that one picture is black and white and the other picture is in color. Explain that pictures from our past are in black and white or color. Historians use primary sources to understand the past. Historians also use timelines to measure time in the past, present and future. Timelines are like calendars because they help us understand when events have happened.

Distribute copies of [Comparing Cultures](#) to small groups of students. Using the Round Robin structure, students describe the families in the photographs.

*I see... this makes me think...*

Next, as a whole group have a class discussion about the differences between the two families. Point out that image one is a Ute family and image two is a Hmong family. Use the background information to add to the discussion.

Next, talk about how the families are dressed in each picture. In picture one, they are dressed for a normal day. In picture two they are dressed for a celebration. Using Timed Pair Share students share how they dress on a daily basis versus a celebration.

Finally read [Culture and Life](#) as a shared reading and discuss the words culture and festivals, generation and traditions.

## 4th, 5th, 8th, & HS US History and Civics

### Raising Voices Primary Sets

Raising Voices Annotated Resource Sets			
<p><i>Raising Voices cohort members, educators from Adams 12 Five Star Schools and St. Vrain Valley Schools in Colorado, completed Annotated Resource Sets for use in the classroom. The goal of this project was to elevate the voices of individuals and groups who have been historically underrepresented; specifically those named for inclusion in the Colorado HB 19-1192 legislation. These are a wonderful resource for teachers to use as part of their lesson planning. Providing primary sources, secondary sources, inquiry questions, and background knowledge will give you everything you need to start a wonderful lesson that pushes students to find their own answers and explore! Many of these documents can be adapted to your grade level needs as well, so you are encouraged to explore the primary sources used by educators from different grade levels.</i></p>			
Inquiry Kit Title	Essential Question(s)	Grade Level	Link to Inquiry Kit
Native Perspectives	<p>How did the advancements of technology and resources affect the Native American Culture?</p> <p>What impacts did Native Americans have on Colorado?</p>	ES (4)	<a href="#">Inquiry Kit Link</a>
Trappers, Traders, & Miners	<p>What are some effects of the interactions between different culture groups? What were some of the causes of people coming to Colorado during this time?</p> <p>What was the impact of the events presented in the images?</p> <p>How are those impacts present today? How are the concepts presented in the image/source similar or different to your life today? How does the image/source add to your understanding of _____?</p>	ES (4)	<a href="#">Inquiry Kit Link</a>
Settlement to Statehood	<p>How did the settlement of Colorado affect culturally marginalized groups?</p> <p>What effect does the settlement of Colorado have on different populations?</p>	ES (4)	<a href="#">Inquiry Kit Link</a>
Modern History of Colorado	<p>How have under-represented groups changed modern Colorado?</p> <p>How do the civil rights movements in Colorado mirror the civil rights movement in the United States?</p> <p>How do the events occurring in Colorado connect to events happening in the U.S./world?</p>	ES (4)	<a href="#">Inquiry Kit Link</a>
Activism in Colorado History	<p>How do diverse opinions enrich a community? How does an individual's experience and background influence perception of an issue? How does my experience and background influence my perception of these issues? How do the perspectives of the minority groups compare to that of others' perspectives of the events?</p>	ES (4)	<a href="#">Inquiry Kit Link</a>
Land That Shapes People	<p>Regional Indigenous Life in North America: How is culture shaped by our natural landscapes and resources?</p>	ES (5)	<a href="#">Inquiry Kit Link</a>

European Influence on the Americas	Interactions between European colonizers and Indigenous peoples in the “New World”	ES (5)	<a href="#">Inquiry Kit Link</a>
Fierce Femmes: Women and the American Revolution	Women who played an important role in the American Revolution.	ES (5)	<a href="#">Inquiry Kit Link</a>
A “Model” Nation?	Formation of government systems, American values, and the ideas of which our nation was modeled after.	ES (5)	<a href="#">Inquiry Kit Link</a>
Confluence of Hispanic, Indigenous, and Anglo Populations in the 1800’s	How did the interactions of people, scientific innovation, and the environment shape the United States and Colorado in the 1800s?	MS	<a href="#">Inquiry Kit Link</a>
The Stampede: Ranching, Trails, and the Cowboys of the American West	How did ranching, trails, and cowboys help to shape the culture, economy, and landscapes of the American West?	MS	<a href="#">Inquiry Kit Link</a>
Behind the Smoke: Diverse Stories of the Civil War	How did minority groups contribute to Union and Confederate armies during the American Civil War era?	MS	<a href="#">Inquiry Kit Link</a>
The Strength Behind the Men: Women in the Revolutionary War	In what ways did women contribute to the American Revolution?	MS	<a href="#">Inquiry Kit Link</a>
Full Steam Ahead!- The Tracks of Transformation	How did railroads, and the people that built and worked them, contribute to the development of Denver as the Queen City of the Plains?	MS	<a href="#">Inquiry Kit Link</a>
Foundations of and Influences on American Democracy	What are the contributions of Indigenous nations and Indigenous people on the founding of the United States?  How is tribal sovereignty a fundamental part of understanding the United States government?	HS	<a href="#">Inquiry Kit Link</a>
Competition of Democratic Values in Education	How do interpretation, application, and beliefs about core values of American Democracy change on a case by case basis?  How do we as a society determine which values take precedent on issues or cases where they come into conflict?  How does perspective impact the interpretation of values?	HS	<a href="#">Inquiry Kit Link</a>
Participatory Democracy	How can individuals and groups effectively check governmental practices? How can individuals and groups shape policy using the structure and functions of government?  How effective are specific interest groups and/or social movements as avenues for people to civically participate and influence the government?	HS	<a href="#">Inquiry Kit Link</a>
Policy: Land Sovereignty	How can members of a civil society impact public policy local, state, tribal, national, or international issues?	HS	<a href="#">Inquiry Kit Link</a>

	How can individuals and groups shape policy using the structure and functions of government?		
Indigenous Peoples' Service in WWI/WWII	Why are the oppressed willing to serve?  How did Indigenous peoples contribute to American war efforts?	HS	<a href="#">Inquiry Kit Link</a>
Chicano Student Activism	How does the Chicano student movement in Colorado mirror the larger Civil Rights movement during the 60s and 70s?  What are different strategies used to attempt to affect change? And how would you determine if these strategies are successful?  How do activists change their tactics and strategies based on how they are received by the people in power?  Why did educational rights become a pillar in the Chicano movement and the broader Civil Rights movements?	HS	<a href="#">Inquiry Kit Link</a>
Equal Protection - LGBTQ+ Rights in the 20th Century	How has the shifting interpretation of the 14th amendment impacted the fight for LGBTQ+ rights?  What significant shifts in public sentiment were necessary in moving the LGBTQ+ movement forward? How were these achieved?  What can the LGBTQ+ movement teach us about how movements gain momentum and achieve victories?	HS	<a href="#">Inquiry Kit Link</a>
Power, Laws, & Land in Westward Expansion	How does political power determine who has access to and ownership of land?  What was the experience of Chinese immigrants in the expansion of the United States into the American West?  What was the experience of Mexicans and Mexican-Americans in the expansion of the United States into the American West?	HS	<a href="#">Inquiry Kit Link</a>

### COMPLIANCE STATEMENT:

The District's performance during the monitoring period complied with the standard as the GVC data provide evidence of a rigorous, well-articulated curriculum and the opportunity to demonstrate and communicate complex reasoning across all grade levels.

### INTERPRETATION:

I interpret the following language:

*d. Students in all subgroups will show appropriate academic growth each year.*

to mean:

Evidence shall be presented to demonstrate that students, overall and by subgroup, demonstrate growth at or above average compared to peers either across Colorado or across the nation.

## GROWTH DATA:

### Median Growth Percentile (MGP) on CMAS by Level

School Level	Content Area	Spring 2019	Spring 2022	Change 2019 to 2022
Elementary	ELA	52	53	1
	Math	53	57	4
Middle	ELA	53	47	-6
	Math	60	50	-10

### Fall-Spring Median Conditional Growth Percentile (MCGP) on NWEA MAP by Level

School Level	Content Area	Spring 2019	Spring 2021	Spring 2022	Change 2019 to 2022
Elementary	Reading	52	39	51	-1
	Math	53	38	57	4
Middle	Reading	53	46	47	-6
	Math	60	45	56	-4

### MGP on CMAS by Disaggregated Group

Content Area	Subgroup	Spring 2019	Spring 2022	Change 2019 to 2022
ELA	Asian	59	60.5	1.5
	Black	47	50	3
	Hispanic	49	46	-3
	Native American	53	N/A	N/A
	Two or More Races	52	54	2
	White	52	50	-2
	ELL	51	48	-3
	Free/Reduced Lunch	48	44	-4
	Gifted & Talented	56	58	2
	Students with IEPs	44	32	-12
Math	Asian	63	64	1
	Black	53.5	50.5	-3
	Hispanic	52	49	-3
	Native American	49	N/A	N/A
	Two or More Races	54	59	5
	White	56	56	0
	ELL	56	49.5	-6.5
	Free/Reduced Lunch	52	48	-4
	Gifted & Talented	61	59	-2
	Students with IEPs	46.5	41	-5.5



### Fall-Spring MCGP on NWEA MAP by Disaggregated Group

Content Area	Subgroup	Spring 2019	Spring 2021	Spring 2022	Change 2019 to 2022
Reading	Asian	56	42	54	-2
	Black	51	39	52.5	1.5
	Hispanic	50	36	46	-4
	Native American	47.5	38	46.5	-1
	Two or More Races	55	45	51	-4
	White	55	46	52	-3
	ELL	46	27	45	-1
	Free/Reduced Lunch	50	35	45	-5
	Gifted & Talented	54	47	55	1
	Students with IEPs	39	28	36	-3
Math	Asian	60	43	63	3
	Black	47	30	53.5	6.5
	Hispanic	51	31	52	1
	Native American	45	29.5	60	15
	Two or More Races	55	45	60	5
	White	58	46	59	1
	ELL	50	26	54	4
	Free/Reduced Lunch	51	31	53	2
	Gifted & Talented	60	49	64	4
	Students with IEPs	40	31	44	4

### MGP on PSAT/SAT

School Level	Content Area	Spring 2019	Spring 2022	Change 2019 to 2022
High	Evidence-based Reading & Writing	47	50	3
	Math	54	52	-2

### MGP on PSAT/SAT by Disaggregated Group

Content Area	Subgroup	Spring 2019	Spring 2022	Change 2019 to 2022
Evidence-based Reading & Writing	Asian	53	58	5
	Black	45	50	5
	Hispanic	40	44	4
	Native American	51	56	5
	Two or More Races	50	52.5	2.5
	White	51	54	3
	ELL	37	38	1
	Free/Reduced Lunch	42	44	2
	Gifted & Talented	57	61	4
	Students with IEPs	36	38	2
Math	Asian	64	58	-6
	Black	57	55.5	-1.5
	Hispanic	48	44	-4
	Native American	55	57.5	2.5
	Two or More Races	45	57.5	12.5
	White	57	55	-2

	ELL	45	37	-8
	Free/Reduced Lunch	48	42	-6
	Gifted & Talented	57	61	4
	Students with IEPs	48	35	-13

#### COMPLIANCE STATEMENT:

The District's performance during the monitoring period has substantially complied with the standard as 64.7% of groups and subgroups demonstrated growth at or above average compared to peers either across Colorado or across the nation. It is anticipated that the District's performance will comply with the standard for the 2022-23 school year given ongoing UIP improvement efforts and a return to more typical in-person instruction.

#### INTERPRETATION:

I interpret the following language:

##### *Life Skills*

*Students shall have opportunities to develop and demonstrate independence, self-directed learning, creativity, problem-solving, adaptability, critical thinking, perseverance, global and cultural understanding and effective communication skills in order to successfully achieve their college, career and life aspirations*

to mean:

Evidence shall be presented to demonstrate that students across all district schools are provided with opportunities to engage in complex demonstrations of learning aligned to multiple life skills including independence, self-directed learning, creativity, problem-solving, adaptability, critical thinking, perseverance, global and cultural understanding and effective communication skills. Those examples can be found in **Attachment A – Complex Demonstrations of Learning for 2022-23**.

#### COMPLIANCE STATEMENTS:

The District's performance during the monitoring period complied with the standard as the complex demonstrations in Attachment A provide evidence of the opportunity for students to demonstrate life skills at schools of all levels throughout the district.

**The Board acknowledged receipt of a monitoring report as of November 16, 2022, for the period July 1, 2021 through June 30, 2022, of the Superintendent concerning Board Policy 1.1 Schooling and found the superintendent's interpretations were reasonable and supported by data that was relevant, justified and complete.**