

# 5<sup>th</sup>

Version 3



**Thematic Scope and Sequence**  
English Pathway



# 5<sup>th</sup>

Version 3

**Thematic Scope and Sequence**  
English Pathway





## Health and Well-Being

Fifth Grade

### **Magnetik® Understanding:**

Making decisions influenced by social pressure can affect health negatively.

### **Magnetik® Question:**

How can social pressure affect our health?

### **Global Issue:**

Addictions and eating disorders

### **Action Question:**

How can I avoid addictions and eating disorders?



Knotion® supports the **Sustainable Development Goals**





 Exploring Living Things

Knotion® Subject	Topic	Learning Outcome	Content
<p> Exploring Living Things</p>	<p>• Health</p>	<ul style="list-style-type: none"> <li>• Explains what is needed to keep the main body systems healthy.</li> </ul>	<ul style="list-style-type: none"> <li>• Health risks related to drug, tobacco, and alcohol use and abuse</li> </ul>
		<ul style="list-style-type: none"> <li>• Evaluates effects of the use of tobacco, alcohol, and other addictive substances.</li> </ul>	<ul style="list-style-type: none"> <li>• Goals and healthy choices regarding use of tobacco, alcohol, and other addictive substances</li> </ul>
		<ul style="list-style-type: none"> <li>• Evaluates healthy and unhealthy eating patterns.</li> </ul>	<ul style="list-style-type: none"> <li>• Eating patterns and healthy diet</li> </ul>
		<ul style="list-style-type: none"> <li>• Identifies practices to keep the endocrine and nervous systems healthy.</li> </ul>	<ul style="list-style-type: none"> <li>• Healthy habits such as good hygiene, healthy diet, rest, and exercise</li> </ul>





Knotion® Subject	Topic	Learning Outcome	Content
 Civic Awareness	<ul style="list-style-type: none"> <li>• Civic Ideals, Cultural Principles, and Ethics</li> </ul>	<ul style="list-style-type: none"> <li>• Recognizes emotions and how they affect themselves and others.</li> </ul>	<ul style="list-style-type: none"> <li>• Different types of emotions</li> </ul>
		<ul style="list-style-type: none"> <li>• Identifies social factors that have significant impact on the risk of addiction for the general population.</li> </ul>	<ul style="list-style-type: none"> <li>• Different social factors related to addictions and substance abuse</li> </ul>
		<ul style="list-style-type: none"> <li>• Analyzes social connections and relationships and relates them to addictions and eating disorders.</li> </ul>	<ul style="list-style-type: none"> <li>• Causes and consequences of addictions and eating disorders</li> </ul>
 Historical Awareness	<ul style="list-style-type: none"> <li>• Historical Chronology</li> </ul>	<ul style="list-style-type: none"> <li>• Explores how the treatments for substance abuse, alcohol abuse, and eating disorders have changed over time.</li> </ul>	<ul style="list-style-type: none"> <li>• Evolution of treatments for addictions and eating disorders</li> </ul>





Language Mastery

Knotion® Subject	Topic	Learning Outcome	Content
	• Word Knowledge	• Acquires new grade-level vocabulary in a variety of contexts.	• High-frequency words
		• Acquires new vocabulary related to the challenge.	• Challenge words
	• Phonics	• Relates short vowel sounds to spelling patterns and develops decoding skills in context.	• Short vowels a /æ/, e /ɛ/, i /ɪ/, o /ɒ/, u /ʌ/
		• Relates long vowel sounds to spelling patterns and develops decoding skills in context.	• Long vowels a /eɪ/, e /i:/, i /aɪ/, o /oʊ/, u /u/ /ju/
		• Relates r-controlled sounds with spelling patterns and develops decoding skills in context.	• R-controlled vowels er, ir, ur, or /ɜr/, or /ɔr/, ar /ar/
		• Relates the sounds of digraphs with spelling patterns and develops decoding skills in context.	• Digraphs th /θ/ /ð/, sh /ʃ/, ch /tʃ/, ph /f/, wh /w/
	• Structure and Function	• Identifies a simple sentence.	• Sentences
		• Differentiates between subjects and predicates in sentences.	• Subjects and predicates
		• Describes the purpose of compound sentences.	• Compound sentences and conjunctions
			• Punctuation in compound sentences

Knotion® Subject	Topic	Learning Outcome	Content
 <b>Reading Skills</b>	<ul style="list-style-type: none"> <li>Integration of Knowledge and Ideas</li> </ul>	<ul style="list-style-type: none"> <li>Demonstrates understanding that persuasive texts are a type of nonfiction used to convince the reader about an issue.</li> </ul>	<ul style="list-style-type: none"> <li>Persuasive article</li> </ul>
	<ul style="list-style-type: none"> <li>Craft and Structure</li> </ul>	<ul style="list-style-type: none"> <li>Describes how a narrator's or speaker's point of view influences how events are described.</li> </ul>	<ul style="list-style-type: none"> <li>Author's point of view</li> </ul>
		<ul style="list-style-type: none"> <li>Asks and answers questions about how an author uses reasons and evidence to support particular points in a text.</li> </ul>	<ul style="list-style-type: none"> <li>Asking and answering questions</li> </ul>
	<ul style="list-style-type: none"> <li>Key Ideas and Details</li> </ul>	<ul style="list-style-type: none"> <li>Summarizes a text using main ideas and details.</li> </ul>	<ul style="list-style-type: none"> <li>Summarizing</li> </ul>
		<ul style="list-style-type: none"> <li>Determines the main idea of a story or a text and provides details that support it.</li> </ul>	<ul style="list-style-type: none"> <li>Main idea and supporting details</li> </ul>
 <b>Written Expression</b>	<ul style="list-style-type: none"> <li>Writing Strategy</li> </ul>	<ul style="list-style-type: none"> <li>Organizes ideas and information using a clear topic sentence, details, explanation, and concluding sentence, and supports opinions with relevant reasons.</li> </ul>	<ul style="list-style-type: none"> <li>Persuasive writing</li> </ul>



**Oral Expression**

• Oral Communication

Knotion® Subject	Topic	Learning Outcome	Content
<p><b>Oral Expression</b></p>	<p>• Oral Communication</p>	<ul style="list-style-type: none"> <li>• Follows interactions between third parties in group discussions and in debates about different topics.</li> </ul>	<ul style="list-style-type: none"> <li>• Panel discussion</li> </ul>
		<ul style="list-style-type: none"> <li>• Engages effectively in a range of collaborative discussions (one-on-one, in teams, and teacher-led) with diverse partners about fifth-grade topics and texts, building on others' ideas and expressing their own ideas clearly.</li> </ul>	<ul style="list-style-type: none"> <li>• Social interaction and balanced participation in conversation</li> </ul>
		<ul style="list-style-type: none"> <li>• Adapts language according to purpose: to persuade, explain and provide information, or express an opinion.</li> </ul>	<ul style="list-style-type: none"> <li>• Effective communication of ideas</li> </ul>
		<ul style="list-style-type: none"> <li>• Exchanges expressions to organize meetings.</li> </ul>	<ul style="list-style-type: none"> <li>• Expressions</li> </ul>
		<ul style="list-style-type: none"> <li>• Assumes the role of speaker during an exchange.</li> </ul>	<ul style="list-style-type: none"> <li>• Role of speaker</li> </ul>
		<ul style="list-style-type: none"> <li>• Responds to spoken language by demonstrating understanding of the main idea, specific information, and details.</li> </ul>	<ul style="list-style-type: none"> <li>• Listening for gist, specific information, and details</li> </ul>

# 5<sup>th</sup>

Version 3

Challenge 2



**Thematic Scope and Sequence**  
English Pathway





## Biomes and Ecosystems

Fifth Grade

### Magnetik® Understanding:

The richness of an ecosystem manifests itself as biological diversity.

### Magnetik® Question:

Why should we care about biodiversity?

### Global Issue:

Biodiversity loss

### Action Question:

What can I do to protect biodiversity and maintain the ecological balance?



Knotion® supports the Sustainable Development Goals



Knotion® Subject	Topic	Learning Outcome	Content
 <b>Exploring Living Things</b>	<ul style="list-style-type: none"> <li>• Ecology</li> </ul>	<ul style="list-style-type: none"> <li>• Recognizes that edge effects occur naturally and increase biodiversity at many ecosystem boundaries.</li> </ul>	<ul style="list-style-type: none"> <li>• Edge effect</li> </ul>
		<ul style="list-style-type: none"> <li>• Evaluates the factors that cause the loss of biodiversity and proposes solutions.</li> </ul>	<ul style="list-style-type: none"> <li>• Habitat fragmentation, habitat loss, habitat degradation</li> </ul>
		<ul style="list-style-type: none"> <li>• Demonstrates understanding that habitat loss or fragmentation is frequently caused by human activity.</li> </ul>	<ul style="list-style-type: none"> <li>• Human activities, such as agriculture, rural development, urbanization, and the creation of hydroelectric reservoirs, that have caused habitat loss or fragmentation</li> </ul>
		<ul style="list-style-type: none"> <li>• Analyzes and evaluates the current rate of decrease in global diversity.</li> </ul>	<ul style="list-style-type: none"> <li>• A decline in species-specific habitat related to changes in food availability or climate that reduces rates of survival and reproduction in a population</li> </ul>
 <b>Exploring the Earth and the Universe</b>	<ul style="list-style-type: none"> <li>• Earth's Systems</li> </ul>	<ul style="list-style-type: none"> <li>• Explains how fossils provide important evidence of how environmental conditions on Earth have changed over time.</li> </ul>	<ul style="list-style-type: none"> <li>• Changes in atmospheric composition and movement of lithospheric plates</li> </ul>



Knotion® Subject	Topic	Learning Outcome	Content
 <b>Environmental Awareness</b>	<ul style="list-style-type: none"> <li>Human Interaction With the Environment</li> </ul>	<ul style="list-style-type: none"> <li>Demonstrates understanding that human actions are becoming major drivers of ecosystem change.</li> </ul>	<ul style="list-style-type: none"> <li>Indirect and direct drivers of ecosystem change</li> </ul>
		<ul style="list-style-type: none"> <li>Analyzes and compares the relationship between wildlife and human activity in an ecosystem.</li> </ul>	<ul style="list-style-type: none"> <li>Wildlife and human activities</li> </ul>
		<ul style="list-style-type: none"> <li>Recognizes that wildlife conservation indirectly plays a role in and contributes to the sustainability of the planet.</li> </ul>	<ul style="list-style-type: none"> <li>Wildlife conservation</li> </ul>
 <b>Historical Awareness</b>	<ul style="list-style-type: none"> <li>Historical Chronology</li> </ul>	<ul style="list-style-type: none"> <li>Describes how ecosystems have changed over time.</li> </ul>	<ul style="list-style-type: none"> <li>Ecosystem changes over time</li> </ul>



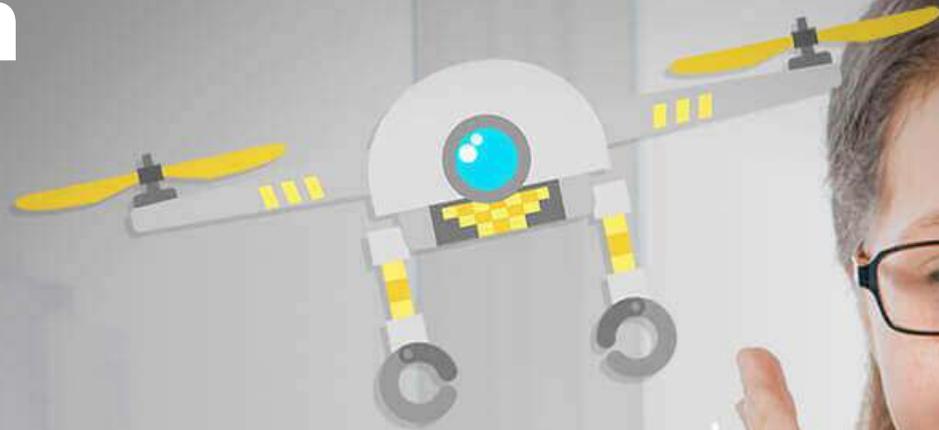
Knotion® Subject	Topic	Learning Outcome	Content	
 <b>Language Mastery</b>	<ul style="list-style-type: none"> <li>Word Knowledge</li> </ul>	<ul style="list-style-type: none"> <li>Acquires new grade-level vocabulary in a variety of contexts.</li> </ul>	<ul style="list-style-type: none"> <li>High-frequency words</li> </ul>	
		<ul style="list-style-type: none"> <li>Acquires new vocabulary related to the challenge.</li> </ul>	<ul style="list-style-type: none"> <li>Challenge words</li> </ul>	
	<ul style="list-style-type: none"> <li>Phonics</li> </ul>	<ul style="list-style-type: none"> <li>Relates sounds of diphthongs to spelling patterns and develops decoding skills in context.</li> </ul>	<ul style="list-style-type: none"> <li>Diphthongs /ɔɪ/ and /oʊ/</li> </ul>	
		<ul style="list-style-type: none"> <li>Relates the sounds of inflectional endings to spelling patterns and develops decoding skills in context.</li> </ul>	<ul style="list-style-type: none"> <li>Inflectional endings -s, -ing and -ed</li> </ul>	
		<ul style="list-style-type: none"> <li>Relates the ending sounds of plural nouns to spelling patterns and develops decoding skills in context</li> </ul>	<ul style="list-style-type: none"> <li>Plural nouns</li> </ul>	
		<ul style="list-style-type: none"> <li>Relates voiced and unvoiced sounds to spelling patterns and develops decoding skills in context.</li> </ul>	<ul style="list-style-type: none"> <li>Words with /z/ and /s/ sounds</li> </ul>	
	<ul style="list-style-type: none"> <li>Structure and Function</li> </ul>	<ul style="list-style-type: none"> <li>Creates comparisons using comparatives of equality.</li> </ul>	<ul style="list-style-type: none"> <li>Comparatives of equality</li> </ul>	
		<ul style="list-style-type: none"> <li>Understands and uses adjectives as words that modify and provide characteristics of nouns.</li> </ul>	<ul style="list-style-type: none"> <li>Adjectives</li> </ul>	
		<ul style="list-style-type: none"> <li>Uses adjectives that compare.</li> </ul>	<ul style="list-style-type: none"> <li>Adjectives that compare</li> </ul>	
		<ul style="list-style-type: none"> <li>Uses adjectives that compare and their irregular forms.</li> </ul>	<ul style="list-style-type: none"> <li>Comparing adjectives with irregular forms</li> </ul>	
	 <b>Reading Skills</b>	<ul style="list-style-type: none"> <li>Integration of Knowledge and Ideas</li> </ul>	<ul style="list-style-type: none"> <li>Demonstrates understanding that realistic fiction is about specific characters and some events in their lives.</li> </ul>	<ul style="list-style-type: none"> <li>Realistic fiction</li> </ul>
		<ul style="list-style-type: none"> <li>Key Ideas and Details</li> </ul>	<ul style="list-style-type: none"> <li>Describes story elements including setting, characters, and plot.</li> </ul>	<ul style="list-style-type: none"> <li>Characters, setting, and plot</li> </ul>
<ul style="list-style-type: none"> <li>Summarizes a story using the most important events and supporting details.</li> </ul>			<ul style="list-style-type: none"> <li>Summarizing</li> </ul>	
<ul style="list-style-type: none"> <li>Craft and Structure</li> </ul>		<ul style="list-style-type: none"> <li>Retells important events in sequential order.</li> </ul>	<ul style="list-style-type: none"> <li>Theme</li> </ul>	

Knotion® Subject	Topic	Learning Outcome	Content
 <b>Written Expression</b>	<ul style="list-style-type: none"> <li>• Writing Strategy</li> </ul>	<ul style="list-style-type: none"> <li>• Writes a research report that defines the topic, gathers information, determines credibility, and reports findings.</li> </ul>	<ul style="list-style-type: none"> <li>• Research writing</li> </ul>
 <b>Oral Expression</b>	<ul style="list-style-type: none"> <li>• Oral Communication</li> </ul>	<ul style="list-style-type: none"> <li>• Delivers information by supporting spoken ideas with details and examples.</li> </ul>	<ul style="list-style-type: none"> <li>• Informational speech</li> </ul>
		<ul style="list-style-type: none"> <li>• Reports on a topic or text or presents an opinion.</li> </ul>	<ul style="list-style-type: none"> <li>• Oral presentation and class participation</li> </ul>
		<ul style="list-style-type: none"> <li>• Sequences ideas logically and uses appropriate facts and relevant, descriptive details to support main ideas or themes.</li> </ul>	
		<ul style="list-style-type: none"> <li>• Adapts language according to purpose: to persuade, explain and provide information, or express an opinion.</li> </ul>	<ul style="list-style-type: none"> <li>• Effective communication of ideas</li> </ul>
		<ul style="list-style-type: none"> <li>• Responds to spoken language by demonstrating understanding of the main idea, specific information, and details.</li> </ul>	<ul style="list-style-type: none"> <li>• Listening for gist, specific information, and details</li> </ul>

# 5<sup>th</sup>

Version 3

Challenge 3



**Thematic Scope and Sequence**  
English Pathway





## Science, Technology, and Innovation

Fifth Grade

### Magnetik® Understanding:

Using information and communication technologies responsibly keeps us safe.

### Magnetik® Question:

How can we use information and communication technologies safely?

### Global Issue:

Social network risks

### Action Question:

What can I do to avoid the dangers associated with social networks?

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knowledge in action



Knotion® supports the **Sustainable Development Goals**



 **Exploring Energy and Matter**

Knotion® Subject	Topic	Learning Outcome	Content
<p> <b>Exploring Energy and Matter</b></p>	<ul style="list-style-type: none"> <li>• Motion, Forces, and Interactions</li> </ul>	<ul style="list-style-type: none"> <li>• Identifies and explains the properties of magnets.</li> </ul>	<ul style="list-style-type: none"> <li>• Properties of magnets</li> </ul>
		<ul style="list-style-type: none"> <li>• Experiments with magnets to make things move without touching them.</li> </ul>	<ul style="list-style-type: none"> <li>• Magnetic poles</li> </ul>
	<ul style="list-style-type: none"> <li>• Energy</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrates understanding of how matter becomes charged.</li> </ul>	<ul style="list-style-type: none"> <li>• Atoms and their three kinds of particles; particles having a positive charge, a negative charge, or no charge</li> </ul>
		<ul style="list-style-type: none"> <li>• Demonstrates understanding that energy has different forms and provides examples.</li> </ul>	<ul style="list-style-type: none"> <li>• Forms of energy (examples: potential, kinetic)</li> </ul>
		<ul style="list-style-type: none"> <li>• Compares ways the temperature of an object can be changed.</li> </ul>	<ul style="list-style-type: none"> <li>• Temperature changes through rubbing, heating, bending of metal</li> </ul>
		<ul style="list-style-type: none"> <li>• Describes a simple open or closed electrical circuit.</li> </ul>	<ul style="list-style-type: none"> <li>• Electrical circuit (example: battery or generator, wire, a complete loop through which the electrical current can pass)</li> </ul>
		<ul style="list-style-type: none"> <li>• Distinguishes parallel and series circuits.</li> </ul>	<ul style="list-style-type: none"> <li>• Representation of a parallel or series circuit</li> </ul>
		<ul style="list-style-type: none"> <li>• Demonstrates understanding of how energy can be transformed.</li> </ul>	<ul style="list-style-type: none"> <li>• Electricity to light, light to heat, mechanical to heat</li> </ul>
		<ul style="list-style-type: none"> <li>• Demonstrates understanding that there is a relationship between electric currents and magnetic fields.</li> </ul>	<ul style="list-style-type: none"> <li>• Relationship between electric currents and magnetic fields</li> </ul>
		<ul style="list-style-type: none"> <li>• Recognizes the uses of electromagnets.</li> </ul>	<ul style="list-style-type: none"> <li>• Electromagnets</li> </ul>



## Civic Awareness

• Civic Ideals, Cultural Principles, and Ethics

## Knotion® Subject

## Topic

## Learning Outcome

## Content

- Demonstrates understanding that some new technologies pose a risk to individual privacy and recognizes online information that can and cannot be shared.

- Digital responsibility and risks to privacy, security, and copyrights

- Demonstrates understanding that online communication is the exchange of information to interact effectively in order to collaborate appropriately.

- Digital responsibility and information exchange and collaboration

- Demonstrates understanding of how to manage passwords and when to ask for help, thus protecting themselves from others and protecting devices.

- Digital responsibility and managing passwords and personal information

- Identifies rights and responsibilities and acts in a responsible, legal, and ethical manner while using and sharing content online.

- Digital responsibility and legal procedures to share content online

- Demonstrates understanding of how to deal with unwanted or aggressive attention online and how to respond and prevent it.

- Digital responsibility and inappropriate online interaction

- Demonstrates understanding of the rights and responsibilities of a digital citizen.

- Digital responsibility and users' rights and responsibilities

Knotion® Subject	Topic	Learning Outcome	Content	
 <b>Language Mastery</b>	<ul style="list-style-type: none"> <li>Word Knowledge</li> </ul>	<ul style="list-style-type: none"> <li>Acquires new grade-level vocabulary in a variety of contexts.</li> </ul>	<ul style="list-style-type: none"> <li>High-frequency words</li> </ul>	
		<ul style="list-style-type: none"> <li>Acquires new vocabulary related to the challenge.</li> </ul>	<ul style="list-style-type: none"> <li>Challenge words</li> </ul>	
	<ul style="list-style-type: none"> <li>Phonics</li> </ul>	<ul style="list-style-type: none"> <li>Separates words into syllables and identifies the closed syllables.</li> </ul>	<ul style="list-style-type: none"> <li>Closed syllables</li> </ul>	
		<ul style="list-style-type: none"> <li>Separates words into syllables and identifies the open syllables.</li> </ul>	<ul style="list-style-type: none"> <li>Open syllables</li> </ul>	
		<ul style="list-style-type: none"> <li>Separates words into syllables and decodes them correctly.</li> </ul>	<ul style="list-style-type: none"> <li>Open syllables (v/v)</li> </ul>	
		<ul style="list-style-type: none"> <li>Relates specific sounds to spelling patterns and develops decoding skills in context.</li> </ul>	<ul style="list-style-type: none"> <li>Consonant +le syllable /əl/</li> </ul>	
	<ul style="list-style-type: none"> <li>Structure and Function</li> </ul>	<ul style="list-style-type: none"> <li>Uses present perfect tense accurately.</li> </ul>	<ul style="list-style-type: none"> <li>Present perfect tense with contractions</li> </ul>	
		<ul style="list-style-type: none"> <li>Uses auxiliary verb with the present perfect tense.</li> </ul>	<ul style="list-style-type: none"> <li>Auxiliary verb have with the present perfect tense</li> </ul>	
		<ul style="list-style-type: none"> <li>Distinguishes between when to use the present perfect and when to use the past simple tenses.</li> </ul>	<ul style="list-style-type: none"> <li>Present perfect and past simple tenses</li> </ul>	
		<ul style="list-style-type: none"> <li>Uses adverbs accurately, especially those that accompany the present perfect tense.</li> </ul>	<ul style="list-style-type: none"> <li>Adverbs: ever, never, already, yet, and just</li> </ul>	
	 <b>Reading Skills</b>	<ul style="list-style-type: none"> <li>Integration of Knowledge and ideas</li> </ul>	<ul style="list-style-type: none"> <li>Demonstrates understanding that the purpose of expository nonfiction is to teach readers about specific topics in an interesting way.</li> </ul>	<ul style="list-style-type: none"> <li>Expository text</li> </ul>
			<ul style="list-style-type: none"> <li>Identifies the author's purpose in a text, for example, to inform, entertain, explain, or persuade.</li> </ul>	<ul style="list-style-type: none"> <li>Author's purpose</li> </ul>
<ul style="list-style-type: none"> <li>Key Ideas and Details</li> </ul>		<ul style="list-style-type: none"> <li>Asks before, during, and after reading questions to enhance reading comprehension.</li> </ul>	<ul style="list-style-type: none"> <li>Asking and answering questions</li> </ul>	
		<ul style="list-style-type: none"> <li>Determines the main idea of a text and explains how it is supported by details.</li> </ul>	<ul style="list-style-type: none"> <li>Main idea and supporting details</li> </ul>	
<ul style="list-style-type: none"> <li>Craft and Structure</li> </ul>		<ul style="list-style-type: none"> <li>Distinguishes between statements that show cause and those that show effect in text structure.</li> </ul>	<ul style="list-style-type: none"> <li>Cause and effect</li> </ul>	

Knotion® Subject	Topic	Learning Outcome	Content
 <b>Written Expression</b>	<ul style="list-style-type: none"> <li>• Writing Strategy</li> </ul>	<ul style="list-style-type: none"> <li>• Writes a series of steps to follow in order to make or do something.</li> </ul>	<ul style="list-style-type: none"> <li>• Instructive writing</li> </ul>
 <b>Oral Expression</b>	<ul style="list-style-type: none"> <li>• Oral Communication</li> </ul>	<ul style="list-style-type: none"> <li>• Speaks clearly, accurately, and fluently to describe a series of steps to follow in order to make or do something.</li> </ul>	<ul style="list-style-type: none"> <li>• How-to demonstration</li> </ul>
		<ul style="list-style-type: none"> <li>• Interprets information for following steps.</li> </ul>	<ul style="list-style-type: none"> <li>• Following steps</li> </ul>
		<ul style="list-style-type: none"> <li>• Reports on a topic or text or presents an opinion.</li> </ul>	<ul style="list-style-type: none"> <li>• Oral presentation and class participation</li> </ul>
		<ul style="list-style-type: none"> <li>• Sequences ideas logically and uses appropriate facts and relevant, descriptive details to support main ideas or themes.</li> </ul>	<ul style="list-style-type: none"> <li>• Listening for gist, specific information, and details</li> </ul>
		<ul style="list-style-type: none"> <li>• Responds to spoken language by demonstrating understanding of the main idea, specific information, and details.</li> </ul>	

# 5<sup>th</sup>

Version 3

Challenge 4



**Thematic Scope and Sequence**  
English Pathway





## Origins and Cultural Diversity

Fifth Grade

### Magnetik® Understanding:

Cultural heritage is often expressed through art.

### Magnetik® Question:

How does art reflect culture?

### Global Issue:

Censorship

### Action Question:

How can I express my culture through art?

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knowledge in action



Knotion® supports the **Sustainable Development Goals**





Knotion® Subject	Topic	Learning Outcome	Content
 <b>Exploring Energy and Matter</b>	<ul style="list-style-type: none"> <li>• Matter and Its Interactions</li> </ul>	<ul style="list-style-type: none"> <li>• Knows that materials may be made of parts too small to be seen without magnification.</li> </ul>	<ul style="list-style-type: none"> <li>• The atom as the smallest particle of an element</li> </ul>
		<ul style="list-style-type: none"> <li>• Demonstrates knowledge of how atoms interact.</li> </ul>	<ul style="list-style-type: none"> <li>• Chemical compounds</li> </ul>
		<ul style="list-style-type: none"> <li>• Identifies mixtures and separates some of them into their component parts.</li> </ul>	<ul style="list-style-type: none"> <li>• Mixing and separating through filtering and evaporation</li> </ul>
		<ul style="list-style-type: none"> <li>• Describes qualitatively the concentration of a solution.</li> </ul>	<ul style="list-style-type: none"> <li>• Types of solutions: saturated, unsaturated</li> </ul>





Knotion® Subject	Topic	Learning Outcome	Content
 <b>Civic Awareness</b>	<ul style="list-style-type: none"> <li>• Civic Ideals, Cultural Principles, and Ethics</li> </ul>	<ul style="list-style-type: none"> <li>• Identifies and explores different art forms.</li> </ul>	<ul style="list-style-type: none"> <li>• Different art forms</li> </ul>
		<ul style="list-style-type: none"> <li>• Analyzes how art impacts personal choices.</li> </ul>	<ul style="list-style-type: none"> <li>• Artistic expressions of people and society</li> </ul>
		<ul style="list-style-type: none"> <li>• Evaluates the importance of art in expressing ideas and feelings.</li> </ul>	<ul style="list-style-type: none"> <li>• Expressing ideas and feelings through art</li> </ul>
		<ul style="list-style-type: none"> <li>• Recognizes artworks that express controversial points of view.</li> </ul>	<ul style="list-style-type: none"> <li>• Artistic expressions with different points of view</li> </ul>
 <b>Historical Awareness</b>	<ul style="list-style-type: none"> <li>• Causes and Consequences of Historical Events</li> </ul>	<ul style="list-style-type: none"> <li>• Examines historical events when artworks were destroyed or prohibited.</li> </ul>	<ul style="list-style-type: none"> <li>• Art censorship in history</li> </ul>

 **Language Mastery**

Knotion® Subject	Topic	Learning Outcome	Content	
 <b>Language Mastery</b>	<ul style="list-style-type: none"> <li>Word Knowledge</li> </ul>	<ul style="list-style-type: none"> <li>Acquires new grade-level vocabulary in a variety of contexts.</li> </ul>	<ul style="list-style-type: none"> <li>High-frequency words</li> </ul>	
		<ul style="list-style-type: none"> <li>Acquires new vocabulary related to the challenge.</li> </ul>	<ul style="list-style-type: none"> <li>Challenge words</li> </ul>	
	<ul style="list-style-type: none"> <li>Phonics</li> </ul>	<ul style="list-style-type: none"> <li>Relates sounds of vowel teams to spelling patterns and develops decoding skills in context.</li> </ul>	<ul style="list-style-type: none"> <li>Vowel team syllables</li> </ul>	
		<ul style="list-style-type: none"> <li>Relates specific sounds to spelling patterns and develops decoding skills in context.</li> </ul>	<ul style="list-style-type: none"> <li>Final syllables /ən/ and /əl/</li> </ul>	
		<ul style="list-style-type: none"> <li>Demonstrates understanding that many words in English come from other languages and have unusual spellings.</li> </ul>	<ul style="list-style-type: none"> <li>Words from other cultures</li> </ul>	
		<ul style="list-style-type: none"> <li>Relates consonant sounds to spelling patterns and develops decoding skills in context.</li> </ul>	<ul style="list-style-type: none"> <li>Consonant sounds /dʒ/, /ks/, /sk/, /s/</li> </ul>	
	<ul style="list-style-type: none"> <li>Structure and Function</li> </ul>	<ul style="list-style-type: none"> <li>Understands and uses the passive voice in simple present and past tenses.</li> </ul>	<ul style="list-style-type: none"> <li>Passive voice</li> </ul>	
		<ul style="list-style-type: none"> <li>Uses modal verbs to express obligation.</li> </ul>	<ul style="list-style-type: none"> <li>Modal verbs: must and have to</li> </ul>	
		<ul style="list-style-type: none"> <li>Uses modal verbs to make polite requests and ask for permission.</li> </ul>	<ul style="list-style-type: none"> <li>Modal verbs: could and would</li> </ul>	
		<ul style="list-style-type: none"> <li>Uses and combines the future simple, intentional future, and present progressive tenses.</li> </ul>	<ul style="list-style-type: none"> <li>Future simple, intentional future, and present progressive tenses</li> </ul>	
	 <b>Reading Skills</b>	<ul style="list-style-type: none"> <li>Integration of Knowledge and Ideas</li> </ul>	<ul style="list-style-type: none"> <li>Demonstrates understanding of the features of free verse poetry.</li> </ul>	<ul style="list-style-type: none"> <li>Free verse</li> </ul>
			<ul style="list-style-type: none"> <li>Creates mental images while reading to improve reading comprehension.</li> </ul>	<ul style="list-style-type: none"> <li>Visualization</li> </ul>
<ul style="list-style-type: none"> <li>Key Ideas and Details</li> </ul>		<ul style="list-style-type: none"> <li>Determines the theme of a story, drama, or poem from the schema and clues in the text.</li> </ul>	<ul style="list-style-type: none"> <li>Theme</li> </ul>	
<ul style="list-style-type: none"> <li>Craft and Structure</li> </ul>		<ul style="list-style-type: none"> <li>Compares and contrasts different points of view from which stories and poems are narrated, including first-person and third-person.</li> </ul>	<ul style="list-style-type: none"> <li>Author's point of view</li> </ul>	
		<ul style="list-style-type: none"> <li>Monitors and adjusts comprehension, for example, by using background knowledge, creating sensory images, or re-reading a portion aloud.</li> </ul>	<ul style="list-style-type: none"> <li>Rereading</li> </ul>	

Knotion® Subject	Topic	Learning Outcome	Content
 <b>Written Expression</b>	<ul style="list-style-type: none"> <li>• Writing Strategy</li> </ul>	<ul style="list-style-type: none"> <li>• Writes with descriptive words to make stories clearer and more interesting.</li> </ul>	<ul style="list-style-type: none"> <li>• Creative writing</li> </ul>
		<ul style="list-style-type: none"> <li>• Writes statements using descriptions and comparisons.</li> </ul>	<ul style="list-style-type: none"> <li>• Statements and descriptions</li> </ul>
 <b>Oral Expression</b>	<ul style="list-style-type: none"> <li>• Oral Communication</li> </ul>	<ul style="list-style-type: none"> <li>• Interacts with and responds to a variety of print and nonprint media to analyze art.</li> </ul>	<ul style="list-style-type: none"> <li>• Analyzing art</li> </ul>
		<ul style="list-style-type: none"> <li>• Distinguishes cultural expressions of Mexico from those of other countries and identifies similarities and differences.</li> </ul>	<ul style="list-style-type: none"> <li>• Cultural expressions and natural features</li> </ul>
		<ul style="list-style-type: none"> <li>• Adapts language according to purpose: to persuade, explain and provide information, or express an opinion.</li> </ul>	<ul style="list-style-type: none"> <li>• Effective communication of ideas</li> </ul>
		<ul style="list-style-type: none"> <li>• Responds to spoken language by demonstrating understanding of the main idea, specific information, and details.</li> </ul>	<ul style="list-style-type: none"> <li>• Listening for gist, specific information, and details</li> </ul>



# 5<sup>th</sup>

Version 3

Challenge 5



$1+2=$



**Thematic Scope and Sequence**  
English Pathway





## Productivity and Economy

Fifth Grade

### Magnetik® Understanding:

The ways people plan budgets impacts their lifestyles.

### Magnetik® Question:

Why is it important to have a personal budget?

### Global Issue:

Overspending

### Action Question:

How can I organize my personal finances?



Knotion® supports the Sustainable Development Goals





 **Exploring Energy and Matter**

Knotion® Subject	Topic	Learning Outcome	Content
<p><b>Exploring Energy and Matter</b></p>	<ul style="list-style-type: none"> <li>• Energy</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrates understanding that energy is a natural resource that has many forms and can be transformed, transferred, and stored.</li> </ul>	<ul style="list-style-type: none"> <li>• Renewable energy: solar power, wind power, hydropower, micro-hydropower, biomass, and biofuels for transportation</li> </ul>
		<ul style="list-style-type: none"> <li>• Explains that the energy found in nonrenewable resources such as fossil fuels originally came from the Sun and may renew slowly over millions of years.</li> </ul>	<ul style="list-style-type: none"> <li>• Nonrenewable resources: oil, coal, natural gas</li> </ul>
		<ul style="list-style-type: none"> <li>• Explains that energy derived from renewable resources such as wind and water is assumed to be available indefinitely.</li> </ul>	<ul style="list-style-type: none"> <li>• Renewable resources</li> </ul>
		<ul style="list-style-type: none"> <li>• Describes how renewable and nonrenewable energy resources can be managed.</li> </ul>	<ul style="list-style-type: none"> <li>• Management of energy: fossil fuels, trees, water</li> </ul>



Productive Awareness

Knotion® Subject	Topic	Learning Outcome	Content
<ul style="list-style-type: none"> <li>• Economic Concepts and Activities</li> </ul>		<ul style="list-style-type: none"> <li>• Relates the components of a simple spending plan with managing income, expenses, and savings.</li> </ul>	<ul style="list-style-type: none"> <li>• Managing income, expenses, and savings</li> </ul>
		<ul style="list-style-type: none"> <li>• Explains the responsibilities associated with managing personal finances.</li> </ul>	<ul style="list-style-type: none"> <li>• Savings, checking, credit, and noncash systems</li> </ul>
		<ul style="list-style-type: none"> <li>• Evaluates the costs and benefits of spending, borrowing, and saving.</li> </ul>	<ul style="list-style-type: none"> <li>• Spending, borrowing, and saving</li> </ul>
		<ul style="list-style-type: none"> <li>• Explains the importance of developing a basic budget for spending and saving.</li> </ul>	<ul style="list-style-type: none"> <li>• Creating and managing a personal budget</li> </ul>
		<ul style="list-style-type: none"> <li>• Compares spending and saving opportunities.</li> </ul>	<ul style="list-style-type: none"> <li>• Spending versus saving</li> </ul>
	<ul style="list-style-type: none"> <li>• Economic Issues</li> </ul>	<ul style="list-style-type: none"> <li>• Identifies and explains consumerism.</li> </ul>	<ul style="list-style-type: none"> <li>• Problems produced by consumerism</li> </ul>



 Language Mastery

Knotion® Subject	Topic	Learning Outcome	Content
	<ul style="list-style-type: none"> <li>Word Knowledge</li> </ul>	<ul style="list-style-type: none"> <li>Acquires new grade-level vocabulary in a variety of contexts.</li> </ul>	<ul style="list-style-type: none"> <li>High-frequency words</li> </ul>
		<ul style="list-style-type: none"> <li>Acquires new vocabulary related to the challenge.</li> </ul>	<ul style="list-style-type: none"> <li>Challenge words</li> </ul>
	<ul style="list-style-type: none"> <li>Phonics</li> </ul>	<ul style="list-style-type: none"> <li>Relates specific sounds to spelling patterns and develops decoding skills in context.</li> </ul>	<ul style="list-style-type: none"> <li>The schwa sound /ə/</li> </ul>
		<ul style="list-style-type: none"> <li>Uses affixes to determine word meanings and develops decoding skills in context.</li> </ul>	<ul style="list-style-type: none"> <li>Final syllables -ant, -ent, -ance, -ence</li> </ul>
		<ul style="list-style-type: none"> <li>Uses affixes to determine word meanings and develops decoding skills in context.</li> </ul>	<ul style="list-style-type: none"> <li>Prefixes un-, de-, dis-</li> </ul>
		<ul style="list-style-type: none"> <li>Relates vowel sounds to spelling patterns and develops decoding skills in context.</li> </ul>	<ul style="list-style-type: none"> <li>Words with ei and ie, /eɪ/ and /i/</li> </ul>
	<ul style="list-style-type: none"> <li>Structure and Function</li> </ul>	<ul style="list-style-type: none"> <li>Differentiates between the four different types of sentences and writes them.</li> </ul>	<ul style="list-style-type: none"> <li>Four kinds of sentences</li> </ul>
		<ul style="list-style-type: none"> <li>Differentiates between independent and dependent clauses.</li> </ul>	<ul style="list-style-type: none"> <li>Independent and dependent clauses</li> </ul>
		<ul style="list-style-type: none"> <li>Identifies and creates complex sentences.</li> </ul>	<ul style="list-style-type: none"> <li>Complex sentences</li> </ul>
		<ul style="list-style-type: none"> <li>Punctuates different types of sentences appropriately.</li> </ul>	<ul style="list-style-type: none"> <li>Punctuation in different kinds of sentences</li> </ul>

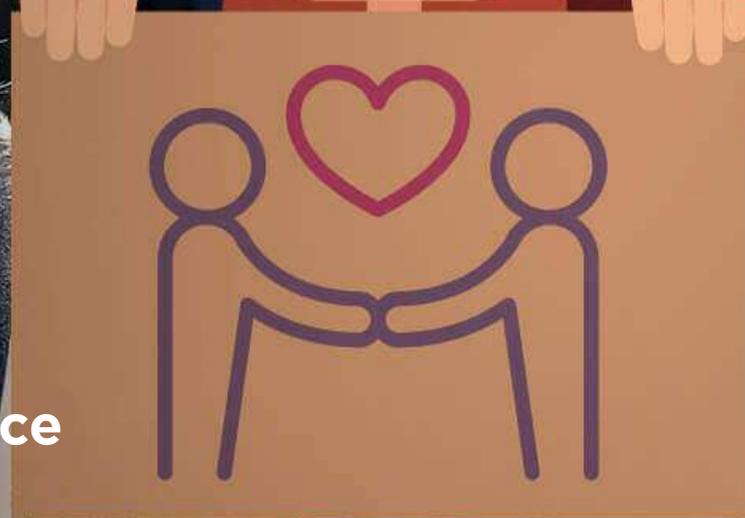


Knotion® Subject	Topic	Learning Outcome	Content
 <b>Reading Skills</b>	<ul style="list-style-type: none"> <li>• Key Ideas and Details</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrates understanding that a biography is a sequence of true events in a person's life.</li> </ul>	<ul style="list-style-type: none"> <li>• Biography</li> </ul>
		<ul style="list-style-type: none"> <li>• Asks questions for different purposes: to clarify text, make predictions, identify author's purpose/style, navigate the text, find information, or focus reading.</li> </ul>	<ul style="list-style-type: none"> <li>• Asking and answering questions</li> </ul>
		<ul style="list-style-type: none"> <li>• Summarizes and synthesizes information or ideas from a text to demonstrate understanding the reading.</li> </ul>	<ul style="list-style-type: none"> <li>• Summarizing</li> </ul>
	<ul style="list-style-type: none"> <li>• Craft and Structure</li> </ul>	<ul style="list-style-type: none"> <li>• Describes how a narrator's or speaker's point of view influences how events are described.</li> </ul>	<ul style="list-style-type: none"> <li>• Author's point of view</li> </ul>
	<ul style="list-style-type: none"> <li>• Retells important events in sequential order using specific words that shape meaning.</li> </ul>	<ul style="list-style-type: none"> <li>• Sequence</li> </ul>	
 <b>Written Expression</b>	<ul style="list-style-type: none"> <li>• Writing Strategy</li> </ul>	<ul style="list-style-type: none"> <li>• Creates a personal narrative that tells a story focusing on a significant event.</li> </ul>	<ul style="list-style-type: none"> <li>• Personal writing</li> </ul>
 <b>Oral Expression</b>	<ul style="list-style-type: none"> <li>• Oral Communication</li> </ul>	<ul style="list-style-type: none"> <li>• Follows rules for a discussion, including listening to others, speaking when recognized, and making appropriate contributions to solve problems.</li> </ul>	<ul style="list-style-type: none"> <li>• Solving problems using rules for discussion</li> </ul>
		<ul style="list-style-type: none"> <li>• Reports on a topic or text or presents an opinion.</li> </ul>	<ul style="list-style-type: none"> <li>• Oral presentation and class participation</li> </ul>
		<ul style="list-style-type: none"> <li>• Sequences ideas logically and uses appropriate facts and relevant, descriptive details to support main ideas or themes.</li> </ul>	
		<ul style="list-style-type: none"> <li>• Expresses a personal anecdote orally.</li> </ul>	<ul style="list-style-type: none"> <li>• Personal anecdote</li> </ul>
		<ul style="list-style-type: none"> <li>• Responds to spoken language by demonstrating understanding of the main idea, specific information, and details.</li> </ul>	<ul style="list-style-type: none"> <li>• Listening for gist, specific information, and details</li> </ul>

# 5<sup>th</sup>

Version 3

Challenge 6



**Thematic Scope and Sequence**  
English Pathway





## Power, Authority, and Civil Ideals

Fifth Grade

### Magnetik® Understanding:

In a democratic society, the constitution is the supreme law that recognizes human rights.

### Magnetik® Question:

How does the constitution guarantee the observance of our rights?

### Global Issue:

Lack of observance of human rights

### Action Question:

What can I do to guarantee that human rights are respected in my community?



Knotion® supports the Sustainable Development Goals





Knotion® Subject	Topic	Learning Outcome	Content
 <b>Exploring Energy and Matter</b>	<ul style="list-style-type: none"> <li>• Energy</li> </ul>	<ul style="list-style-type: none"> <li>• Recognizes that sound is a form of energy that travels in waves.</li> </ul>	<ul style="list-style-type: none"> <li>• Sound waves</li> </ul>
		<ul style="list-style-type: none"> <li>• Demonstrates understanding that sound waves can travel through different mediums.</li> </ul>	<ul style="list-style-type: none"> <li>• Sound travels through solids, liquids, and gases</li> </ul>
		<ul style="list-style-type: none"> <li>• Recognizes the generation of sound waves in communication devices.</li> </ul>	<ul style="list-style-type: none"> <li>• Sound waves in telephones, telegraphs, sonars, or radio devices</li> </ul>
		<ul style="list-style-type: none"> <li>• Describes that changing the rate of vibration can vary the pitch of a sound.</li> </ul>	<ul style="list-style-type: none"> <li>• Frequency as the pitch of a sound</li> </ul>





 Civic Awareness

Knotion® Subject	Topic	Learning Outcome	Content
<p> Civic Awareness</p>	<ul style="list-style-type: none"> <li>Government Organization, Laws, and Political Systems</li> </ul>	<ul style="list-style-type: none"> <li>Recognizes that citizens' rights and responsibilities are outlined in a constitution.</li> </ul>	<ul style="list-style-type: none"> <li>How a constitution guarantees citizens' rights and establishes responsibilities</li> </ul>
		<ul style="list-style-type: none"> <li>Analyzes and evaluates different types of government.</li> </ul>	<ul style="list-style-type: none"> <li>Types of government: monarchy, democracy, etc</li> </ul>
	<ul style="list-style-type: none"> <li>Civic Involvement</li> </ul>	<ul style="list-style-type: none"> <li>Demonstrates understanding that citizens have an obligation to uphold their constitution by obeying laws, paying taxes, and respecting the rights of others.</li> </ul>	<ul style="list-style-type: none"> <li>Citizens' responsibilities in a democratic government</li> </ul>
		<ul style="list-style-type: none"> <li>Identifies and explains citizens' rights and responsibilities in a democratic government.</li> </ul>	<ul style="list-style-type: none"> <li>Citizens' rights and responsibilities in a democratic government</li> </ul>



 **Language Mastery**

Knotion® Subject	Topic	Learning Outcome	Content
	<ul style="list-style-type: none"> <li>Word Knowledge</li> </ul>	<ul style="list-style-type: none"> <li>Acquires new grade-level vocabulary in a variety of contexts.</li> </ul>	<ul style="list-style-type: none"> <li>High-frequency words</li> </ul>
		<ul style="list-style-type: none"> <li>Acquires new vocabulary related to the challenge.</li> </ul>	<ul style="list-style-type: none"> <li>Challenge words</li> </ul>
	<ul style="list-style-type: none"> <li>Phonics</li> </ul>	<ul style="list-style-type: none"> <li>Relates r-controlled sounds to spelling patterns and develops decoding skills in context.</li> </ul>	<ul style="list-style-type: none"> <li>Final syllables -er, -ar, -or: /ɜr/ /ər/ /ar/ /ɔr/</li> </ul>
		<ul style="list-style-type: none"> <li>Identifies multiple-meaning words.</li> </ul>	<ul style="list-style-type: none"> <li>Homographs</li> </ul>
		<ul style="list-style-type: none"> <li>Uses affixes to determine word meanings and develops decoding skills in context.</li> </ul>	<ul style="list-style-type: none"> <li>Suffixes -ible, -able</li> </ul>
			<ul style="list-style-type: none"> <li>Prefixes over-, under-, sub-, super-, out-</li> </ul>
	<ul style="list-style-type: none"> <li>Structure and Function</li> </ul>	<ul style="list-style-type: none"> <li>Defines pronouns and antecedents and understands that they must agree in number and gender.</li> </ul>	<ul style="list-style-type: none"> <li>Pronouns and antecedents</li> </ul>
		<ul style="list-style-type: none"> <li>Identifies and uses singular indefinite pronouns.</li> </ul>	<ul style="list-style-type: none"> <li>Singular indefinite pronouns</li> </ul>
		<ul style="list-style-type: none"> <li>Identifies and uses plural indefinite pronouns.</li> </ul>	<ul style="list-style-type: none"> <li>Plural indefinite pronouns</li> </ul>
		<ul style="list-style-type: none"> <li>Identifies and uses possessive pronouns.</li> </ul>	<ul style="list-style-type: none"> <li>Possessive pronouns</li> </ul>

Knotion® Subject	Topic	Learning Outcome	Content
 <b>Reading Skills</b>	<ul style="list-style-type: none"> <li>Integration of Knowledge and Ideas</li> </ul>	<ul style="list-style-type: none"> <li>Demonstrates understanding that historical fiction is based on real historical events and includes characters who are not real and minor events that may not be realistic.</li> </ul>	<ul style="list-style-type: none"> <li>Historical fiction</li> </ul>
	<ul style="list-style-type: none"> <li>Key Ideas and Details</li> </ul>	<ul style="list-style-type: none"> <li>Uses text and prior knowledge to make, confirm, or revise inferences and predictions.</li> </ul>	<ul style="list-style-type: none"> <li>Making, confirming, and revising predictions</li> </ul>
		<ul style="list-style-type: none"> <li>Describes story elements in detail, including setting, characters, plot, and theme.</li> </ul>	<ul style="list-style-type: none"> <li>Characters, setting, and plot</li> </ul>
		<ul style="list-style-type: none"> <li>Compares and contrasts the similarities and differences between two or more things (example: characters, ideas, issues, concepts, topics, events, places).</li> </ul>	<ul style="list-style-type: none"> <li>Comparing and contrasting</li> </ul>
		<ul style="list-style-type: none"> <li>Summarizes a story using the most important events and supporting details.</li> </ul>	<ul style="list-style-type: none"> <li>Summarizing</li> </ul>
 <b>Written Expression</b>	<ul style="list-style-type: none"> <li>Writing Strategy</li> </ul>	<ul style="list-style-type: none"> <li>Writes narratives to develop real or imagined experiences or events using effective techniques, well-chosen details, and well-structured sequences of events.</li> </ul>	<ul style="list-style-type: none"> <li>Narrative writing</li> </ul>
 <b>Oral Expression</b>	<ul style="list-style-type: none"> <li>Oral Communication</li> </ul>	<ul style="list-style-type: none"> <li>Presents clear descriptions in a style appropriate to the context and with a logical structure.</li> </ul>	<ul style="list-style-type: none"> <li>Description</li> </ul>
		<ul style="list-style-type: none"> <li>Reports on a topic or text or presents an opinion.</li> </ul>	<ul style="list-style-type: none"> <li>Oral presentation and class participation</li> </ul>
		<ul style="list-style-type: none"> <li>Sequences ideas logically and uses appropriate facts and relevant, descriptive details to support main ideas or themes.</li> </ul>	
		<ul style="list-style-type: none"> <li>Responds to spoken language by demonstrating understanding of the main idea, specific information, and details.</li> </ul>	<ul style="list-style-type: none"> <li>Listening for gist, specific information, and details</li> </ul>

# 5<sup>th</sup>

Version 3

Challenge 7

**Thematic Scope and Sequence**  
English Pathway





## Crisis and Conflict Resolution

Fifth Grade

### Magnetik® Understanding:

Armed conflicts and natural disasters intensify social inequalities and vulnerabilities.

### Magnetik® Question:

How do natural disasters and armed conflicts affect us?

### Global Issue:

Socioeconomic inequality

### Action Question:

How can I become actively involved to reduce social inequality?

knotion®  
knowledge in action

SUSTAINABLE  
DEVELOPMENT  
GOALS

Knotion® supports the Sustainable Development Goals





Knotion® Subject	Topic	Learning Outcome	Content
 Exploring the Earth and the Universe	<ul style="list-style-type: none"> <li>• Earth's Systems</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrates knowledge of the interaction of Earth's major systems: the geosphere, the hydrosphere, the atmosphere, and the biosphere.</li> </ul>	<ul style="list-style-type: none"> <li>• Geosphere, biosphere, hydrosphere, and atmosphere</li> </ul>
		<ul style="list-style-type: none"> <li>• Explains how water and wind change the Earth's surface.</li> </ul>	<ul style="list-style-type: none"> <li>• Erosion caused by water and wind</li> </ul>
		<ul style="list-style-type: none"> <li>• Evaluates risk drivers and how hazards can cause disasters.</li> </ul>	<ul style="list-style-type: none"> <li>• Natural disasters</li> </ul>
		<ul style="list-style-type: none"> <li>• Explores impacts of natural hazards and climate change on past civilizations.</li> </ul>	<ul style="list-style-type: none"> <li>• Earth history, natural hazards, and climate change in the past</li> </ul>





Knotion® Subject	Topic	Learning Outcome	Content
 Civic Awareness	<ul style="list-style-type: none"> <li>Civic Ideals, Cultural Principles, and Ethics</li> </ul>	<ul style="list-style-type: none"> <li>Evaluates different impacts of natural disasters on urban and rural communities.</li> </ul>	<ul style="list-style-type: none"> <li>Vulnerable social groups and natural disasters</li> </ul>
		<ul style="list-style-type: none"> <li>Recognizes the relationship between human rights and human needs during and after natural disasters.</li> </ul>	<ul style="list-style-type: none"> <li>Human rights and human needs during and after natural disasters</li> </ul>
 Historical Awareness	<ul style="list-style-type: none"> <li>Historical Awareness</li> </ul>	<ul style="list-style-type: none"> <li>Identifies major national and community disasters from the past and good practices.</li> </ul>	<ul style="list-style-type: none"> <li>Natural disasters over time</li> </ul>



 Language Mastery

Knotion® Subject	Topic	Learning Outcome	Content
	• Word Knowledge	• Acquires new grade-level vocabulary in a variety of contexts.	• High-frequency words
		• Acquires new vocabulary related to the challenge.	• Challenge words
	• Phonics	• Uses affixes to determine word meanings and develops decoding skills in context.	• Number prefixes uni-, bi-, tri-, centi-
		• Relates specific sounds to spelling patterns and develops decoding skills in context.	• Final syllables -le, -el, -il, -al, /əl/
		• Identifies words with Greek roots and develops decoding skills in context.	• Words with Greek roots: mech, meter, onym
		• Relates specific sounds to spelling patterns and develops decoding skills in context.	• Words with /tʃr/ and /zr/ sounds
	• Structure and Function	• Identifies and forms comparative and superlative adverbs in sentences.	• Adverbs that compare
		• Compares the use of regular and irregular comparative and superlative forms of adverbs in sentences.	• Using good and well, more and most, -er and -est
		• Combines similar elements, such as subjects or verbs in sentences.	• Combining elements in sentences
		• Recognizes double negatives in sentences and uses negatives correctly.	• Negatives

Knotion® Subject	Topic	Learning Outcome	Content
 <b>Reading Skills</b>	<ul style="list-style-type: none"> <li>Integration of Knowledge and Ideas</li> </ul>	<ul style="list-style-type: none"> <li>Demonstrates understanding of the unique characteristics of mystery stories, and analyzes mystery events and characters to determine how mysteries are constructed.</li> </ul>	<ul style="list-style-type: none"> <li>Mystery genre</li> </ul>
		<ul style="list-style-type: none"> <li>Creates mental images that occur while reading to improve reading comprehension.</li> </ul>	<ul style="list-style-type: none"> <li>Visualization</li> </ul>
	<ul style="list-style-type: none"> <li>Key Ideas and Details</li> </ul>	<ul style="list-style-type: none"> <li>Determines the theme of a story, drama, or poem from the schema and clues in the text.</li> </ul>	<ul style="list-style-type: none"> <li>Theme</li> </ul>
		<ul style="list-style-type: none"> <li>Determines key ideas and details in order to summarize a fictional text.</li> </ul>	<ul style="list-style-type: none"> <li>Summarizing</li> </ul>
	<ul style="list-style-type: none"> <li>Craft and Structure</li> </ul>	<ul style="list-style-type: none"> <li>Compares and contrasts different points of view from which stories are narrated, including first- and third-person.</li> </ul>	<ul style="list-style-type: none"> <li>Author's point of view</li> </ul>
 <b>Written Expression</b>	<ul style="list-style-type: none"> <li>Writing Strategy</li> </ul>	<ul style="list-style-type: none"> <li>Develops sequenced pieces of writing using descriptive language.</li> </ul>	<ul style="list-style-type: none"> <li>Descriptive writing</li> </ul>
 <b>Oral Expression</b>	<ul style="list-style-type: none"> <li>Oral Communication</li> </ul>	<ul style="list-style-type: none"> <li>Narrates important events in logical sequence with a beginning, middle, and end.</li> </ul>	<ul style="list-style-type: none"> <li>Narrating in sequence</li> </ul>
		<ul style="list-style-type: none"> <li>Reports on a topic or text or presents an opinion.</li> </ul>	<ul style="list-style-type: none"> <li>Oral presentation and class participation</li> </ul>
		<ul style="list-style-type: none"> <li>Sequences ideas logically and uses appropriate facts and relevant, descriptive details to support main ideas or themes.</li> </ul>	
		<ul style="list-style-type: none"> <li>Describes the immediate surroundings as a reference point for moving around.</li> </ul>	<ul style="list-style-type: none"> <li>Meeting place in case of a disaster</li> </ul>
		<ul style="list-style-type: none"> <li>Responds to spoken language by demonstrating understanding of the main idea, specific information, and details.</li> </ul>	<ul style="list-style-type: none"> <li>Listening for gist, specific information, and details</li> </ul>

# 5<sup>th</sup>

Version 3

Challenge 8

**Thematic Scope and Sequence**  
English Pathway





## Environment and Sustainability

Fifth Grade

### Magnetik® Understanding:

A clean and sustainable environment is everyone's responsibility.

### Magnetik® Question:

How does human interference affect the environment?

### Global Issue:

Unsustainable human activities

### Action Question:

How can I make people in my community understand the importance of sustainability?



Knotion® supports the Sustainable Development Goals





Knotion® Subject	Topic	Learning Outcome	Content
 <b>Exploring the Earth and the Universe</b>	<ul style="list-style-type: none"> <li>• Earth and Human Activity</li> </ul>	<ul style="list-style-type: none"> <li>• Analyzes and evaluates information about how individual communities use science to protect the Earth's resources and environment.</li> </ul>	<ul style="list-style-type: none"> <li>• Individual and community actions to help protect Earth's resources and environments</li> </ul>





Knotion® Subject	Topic	Learning Outcome	Content
 <b>Productive Awareness</b>	<ul style="list-style-type: none"> <li>• Earth and Human Activity</li> </ul>	<ul style="list-style-type: none"> <li>• Recognizes that as human consumption of natural resources is increasing, so is its negative impact on the planet.</li> </ul>	<ul style="list-style-type: none"> <li>• How increases in population and per capita consumption of natural resources impact Earth's systems</li> </ul>
		<ul style="list-style-type: none"> <li>• Investigates and evaluates sustainable programs that support responsible management of natural resources.</li> </ul>	<ul style="list-style-type: none"> <li>• Sustainability programs</li> </ul>
	<ul style="list-style-type: none"> <li>• Economic issues</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrates understanding of how sustainability impacts the economy.</li> </ul>	<ul style="list-style-type: none"> <li>• Economy and sustainability</li> </ul>
	<ul style="list-style-type: none"> <li>• Human Interaction With the Environment</li> </ul>	<ul style="list-style-type: none"> <li>• Explores conservation and replenishment of natural resources.</li> </ul>	<ul style="list-style-type: none"> <li>• Conservation of natural resources</li> </ul>





 Language Mastery

Knotion® Subject	Topic	Learning Outcome	Content
	<ul style="list-style-type: none"> <li>Word Knowledge</li> </ul>	<ul style="list-style-type: none"> <li>Acquires new grade-level vocabulary in a variety of contexts.</li> </ul>	<ul style="list-style-type: none"> <li>High-frequency words</li> </ul>
		<ul style="list-style-type: none"> <li>Acquires new vocabulary related to the challenge.</li> </ul>	<ul style="list-style-type: none"> <li>Challenge words</li> </ul>
	<ul style="list-style-type: none"> <li>Phonics</li> </ul>	<ul style="list-style-type: none"> <li>Demonstrates understanding of synonyms and antonyms and develops decoding skills in context.</li> </ul>	<ul style="list-style-type: none"> <li>Synonyms and antonyms</li> </ul>
		<ul style="list-style-type: none"> <li>Determines the meanings of Latin roots.</li> </ul>	<ul style="list-style-type: none"> <li>Latin roots aqua, port</li> </ul>
		<ul style="list-style-type: none"> <li>Analyzes how new words form and develops decoding skills in context.</li> </ul>	<ul style="list-style-type: none"> <li>Coined words</li> </ul>
		<ul style="list-style-type: none"> <li>Determines the meaning of confusing words and develops decoding skills in context.</li> </ul>	<ul style="list-style-type: none"> <li>Confusing words</li> </ul>
	<ul style="list-style-type: none"> <li>Structure and Function</li> </ul>	<ul style="list-style-type: none"> <li>Identifies and uses prepositions to add specific information.</li> </ul>	<ul style="list-style-type: none"> <li>Prepositions</li> </ul>
		<ul style="list-style-type: none"> <li>Identifies and forms prepositional phrases.</li> </ul>	<ul style="list-style-type: none"> <li>Prepositional phrases</li> </ul>
		<ul style="list-style-type: none"> <li>Punctuates appropriately when representing direct speech and citations.</li> </ul>	<ul style="list-style-type: none"> <li>Quotations</li> </ul>
		<ul style="list-style-type: none"> <li>Respects subject-verb agreement in present tenses.</li> </ul>	<ul style="list-style-type: none"> <li>Subject-verb agreement</li> </ul>

Knotion® Subject	Topic	Learning Outcome	Content
 <b>Reading Skills</b>	<ul style="list-style-type: none"> <li>Integration of Knowledge and ideas</li> </ul>	<ul style="list-style-type: none"> <li>Demonstrates understanding that narrative nonfiction is a genre in which factual matter is presented in a narrative style using literary techniques.</li> </ul>	<ul style="list-style-type: none"> <li>Narrative nonfiction</li> </ul>
		<ul style="list-style-type: none"> <li>Differentiates between fact and opinion.</li> </ul>	<ul style="list-style-type: none"> <li>Fact and opinion</li> </ul>
	<ul style="list-style-type: none"> <li>Key Ideas and Details</li> </ul>	<ul style="list-style-type: none"> <li>Asks their own factual and inferential questions based on the text and depending on their purpose for reading.</li> </ul>	<ul style="list-style-type: none"> <li>Asking and answering questions</li> </ul>
	<ul style="list-style-type: none"> <li>Craft and Structure</li> </ul>	<ul style="list-style-type: none"> <li>Infers their own interpretation of a text by using prior knowledge and information from the text to determine cause and effect.</li> </ul>	<ul style="list-style-type: none"> <li>Cause and effect</li> </ul>
<ul style="list-style-type: none"> <li>Identifies the author's purpose in a text, for example, to inform, entertain, explain, or persuade.</li> </ul>		<ul style="list-style-type: none"> <li>Author's purpose</li> </ul>	
 <b>Written Expression</b>	<ul style="list-style-type: none"> <li>Writing Strategy</li> </ul>	<ul style="list-style-type: none"> <li>Develops expository writing with facts, definitions, concrete details, quotations, or other information and examples related to the topic.</li> </ul>	<ul style="list-style-type: none"> <li>Informational writing</li> </ul>
 <b>Oral Expression</b>	<ul style="list-style-type: none"> <li>Oral Communication</li> </ul>	<ul style="list-style-type: none"> <li>Communicates and shares ideas and experiences to give advice.</li> </ul>	<ul style="list-style-type: none"> <li>Giving advice</li> </ul>
		<ul style="list-style-type: none"> <li>Exchanges expressions for accepting or rejecting requests.</li> </ul>	<ul style="list-style-type: none"> <li>Requests</li> </ul>
		<ul style="list-style-type: none"> <li>Adapts language according to purpose: to persuade, explain and provide information, or express an opinion.</li> </ul>	<ul style="list-style-type: none"> <li>Effective communication of ideas</li> </ul>
		<ul style="list-style-type: none"> <li>Responds to spoken language by demonstrating understanding of the main idea, specific information, and details.</li> </ul>	<ul style="list-style-type: none"> <li>Listening for gist, specific information, and details</li> </ul>