Madison Public Schools

ESL K-5 Curriculum
Intermediate / Advanced

Written by:
Jessica Blier
Diana Sandoval

Reviewed by:
Daniel J. Ross, Esq.
Director of Curriculum and Instruction

Approval date:

Members of the Board of Education:
Leslie Lajewski, President
Lisa Ellis, Vice President
Johanna Habib
David Irwin
Thomas Piskula
Heather Reddy
Pam Yousey
Abi Singh

Madison Public Schools
359 Woodland Road
Madison, NJ 07940
www.madisonpublicschools.org

Course Overview

Description

The ESL K-12 curriculum traces the development of English language proficiency for learners who are at any of the five WIDA levels of English (1. Entering, 2. Emerging, 3. Developing, 4. Expanding, 5. Bridging). This curriculum will provide a progressive development of language skills that will enable learners to function successfully in school and society. It will also offer opportunities for students to develop the social and academic English skills needed for all of the subject areas in a pull-out model. This curriculum offers an emphasis on the language and terminology of English Language Arts. The vocabulary of Science and Social Studies is infused in each unit and the language of Mathematics is provided within an ongoing support setting, in which students are given the tools and techniques to build their math skills in their math content classes.

Through a consistent application of the WIDA framework and standards, the students will practice listening, speaking, reading, and writing in English. Each unit provides ELLs with plenty of opportunities to practice social and academic English. In addition, each unit will help students to perform better in their main content areas by offering linguistic support.

Goals

This course aims to:

- Develop English language proficiency for students at all levels of English
- Focus on the fulfillment of the academic, social, and personal goals of each individual student
- Support the development of all of the four language domains: listening, speaking, reading and writing
- Recognize individual differences in language proficiency and cultural backgrounds
- Provide learners with opportunities to develop and realize their potential, interest, and aspirations
- Apply the WIDA standards framework and its features in the daily teaching-learning process of ELLs

Materials

Core Materials: Pearson Language Central K-5
Supplemental: See ESL K-12 Resources Link

Resources

ESL K-12 Resources

Modifications and Adaptations for English Language Learners

Benchmark Assessments
These assessments will take place three times during the school year and assess the standards of the course.
Modifications and Adaptations for Special Needs Learners (Gifted and Talented Students, English Language Learners, Students with Special Needs, At-Risk Students, and Students with 504 Plans)

Scope and Sequence
(Pacing Guide)

Unit Number	Topic of Study	Duration (Weeks Taught)
1	**Readiness Unit**	As needed
2	**Exploring Animals**	40 lessons
3	Cultures	40 lessons
4	Importance of Dreams	40 lessons
5	**Math Content Support grade K**	180 lessons
6	**Math Content Support Grades 1-2**	180 lessons
7	**Content Support Grades 3-5**	180 lessons

Unit 1 Overview
Unit Title : **Readiness Unit (for WIDA levels 1 and 2 see the Newcomer Curriculum)**
Unit Summary: This unit focuses on gaining necessary basic vocabulary to survive in school and in America while working toward other academic goals. Students will learn how to express personal information about themselves and their families. Students will learn social language to engage with peers. Students will learn survival questions and vocabulary related to their school and community. Finally, students will learn traditional American customs and holidays to help acclimate them to their new surroundings.
Suggested Pacing: As needed based on the proficiency level of the student.

Learning Targets

Unit Essential Questions:

- How can I effectively communicate personal information about myself and my family?
- How can I engage with peers through the use of social language?
- What language do I need in order to communicate successfully within my school and community?
- What language do I need in order to comprehend and engage in the topic of American holidays and traditions

Unit Enduring Understandings:
Developing the ability to give and ask for information and express themselves personally, in ways that are already familiar to English proficient students, is the first step to achieve the language proficiency needed by ELLs in academic and social settings.

- Students can express themselves personally through listening, speaking, reading and writing.
- Students can use content specific questions to ask for things they need or want in their school and community.
- Students can communicate with peers through listening, speaking, reading, and writing.
- Students can recognize and recall American holidays and traditions through listening, speaking, reading and writing.

Evidence of Learning

Formative Assessments: Students will work on "Do Nows" in class, break into pairs to complete writing activities, and also produce longer, individual skill based writing assessments.

Summative Assessments: Create a writing portfolio and/or memoir about themselves including: family, hobbies, school, community, etc. Present an oral presentation on family, hobbies, school, community, etc. Grading based upon the Speaking and Writing Rubrics of the WIDA Consortium
WIDA Speaking and Writing rubric

Objectives for ELP 3, 4 and 5 (Developing/Expanding, and Bridging) (Students will be able to...)	**Essential Content/Skills**	**Suggested Assessments**	**Standards**	**Pacing**
Speaking/Writing **Greet classmates, teachers and members of the community.** **Ask questions with peers, teachers and members of the community** **Retell facts/events of various texts**	Content: Self Skills: ELP 3:Relate personal facts(e.g.,to pen pals) using models and pictures. (e.g., "I play soccer") ELP 4: Produce personal messages for friends or family using models and pictures. ELP 5: Compose personal stories from pictures or illustrated scenes. Content:	Class participation Create a family tree and label family members Write complete sentences in simple present and past tense Write a simple paragraph	***WIDA Standards*** Standard 1: Social and Instructional Language Standard 2: The Language of Language Arts Standard 5: The Language of Social Studies	**As needed**

<u>Listening</u>: **Answer simple questions about themselves and their families** **<u>Writing:</u>** **Talk about feelings using them to add detail to writings.** **<u>Writing/listening:</u>** **Recall basic grammar rules for punctuation and syntax** **Use adjectives to describe friends, school and the community** **Recall and apply simple present and past tense verbs** **Write about personal feelings related to self, family friends, home, school, community, and holidays** **<u>Speaking:</u>** **Use descriptive words to clarify and extend ideas.** **<u>Reading</u>:** **Read about the background of unfamiliar holidays** **Read and define vocabulary related to self, family, friends, home, school, community, and holidays.** **Read various fiction and nonfiction related to school, home, community and holidays.** **<u>Listening:</u>** **Follow simple oral directions in sequence.** **Speaking:**	Greetings ALL ELP's: Respond spontaneously to greetings and name questions. <u>Content:</u> Feelings and emotions ELP 3: Produce phrases or sentences about personal experiences involving feelings and emotions. ELP4: Maintain diaries or journals of related sentences about personal experiences involving feelings and emotions in L1 and L2. ELP 5: Compose illustrated stories based on personal experiences involving feelings and emotions. <u>Content:</u> Family <u>Skills:</u> ELP 3: Describe images related to family traits ELP 4: Compare and contrast two family members through writing. ELP 5: Analyze differences in the roles of family members in different countries. <u>Content:</u> School <u>Skills:</u> ELP 3: Relate school areas, personnel or activities described orally in a series of sentences to illustrate school or classroom scenes. ELP 4: Sort school areas, personnel or activities from non-school areas, personnel or activities according to oral descriptions with visual support. (e.g.,"which person works outside the school?") ELP3: Relate multiple functions or uses of everyday objects depicted visually (e.g "I do homework on the table and eat dinner there") ELP 4: Compare/Contrast uses of everyday objects depicted visually. (e.g "I wash myself with soap and water.I dry myself with paper towels.") ELP 5: Evaluate and give reasons for usefulness of everyday objects. (e.g., "Pencils are better than	Fill out a form Ask and answer Wh-questions Greets classmates, students and school personnel in an appropriate manner. Complete graphic organizers from fiction and nonfiction texts Write descriptive sentences and paragraphs about self, home, school, peers, community and/or holidays. Speaking rubric/checklist. Teacher Observation Class participation	***NJSLS for English Language Arts*** NJSLSA.L1. NJSLSA.L2. NJSLSA.L3. NJSLSA.L4. . NJSLSA.L5. NJSLSA.L6. W.1.1. W.1.2. W.1.3.. 8.1.2.A.1 CRP4. CRP1. 8.1.5.A.1	

Offer personal opinions related to topics of discussions. **Wait turn to speak**	crayons for writing.You can write neater with pencils." <u>Content:</u> Community <u>Skills:</u> ELP 3: Describe different types of homes or communities from pictures using phrases or short paragraphs. ELP 4: Find specific locations on neighborhood or community maps based on detailed oral statements.(e.g., "The school is at the corner of First and Oak.") ELP 5: Provide detailed information about homes/communities. (e.g, personal address, town places, etc") ELP 5: Construct or complete neighborhood or community maps with places and signs based on a series of written and oral directions. <u>Content:</u> Holidays <u>Skills:</u> ELP 3: Match symbols of holidays with illustrated scenes based on oral/written directions. ELP 4: Identify symbols of holidays within illustrated scenes based on readings. ELP 5: Find symbols of holidays based on descriptions or oral reading. <u>Content:</u> Following directions ELP 3: Follow oral directions by comparing them with visual clues, nonverbal clues or modeling(e.g.,"Fold the paper in half. Then place it on your table the long way.") ELP 4: Follow oral directions without visual or nonverbal support and check with peer. (e.g.,"put your name on the top line of the paper.") ELP 5: Follow series of oral directions without support(e.g., "put your name on the left-hand side of the paper. Then put the date on the right-hand side.")	Write addresses from recordings and phone calls. Activity completions Listening rubric/checklist.		

	ELP 3: Paraphrase or combine likes, dislikes or needs with a partner(e.g.,"She likes cake and ice cream.") ELP 4: Give reasons for likes, dislikes or needs to a partner (e.g., "I like _____ because.") ELP 5: Convince a partner to share likes , dislikes or needs.			

Unit 2 Overview

Unit Title: **Exploring Animals (for WIDA levels 1 and 2 see the Newcomer Curriculum)**

Unit Summary:
In this unit, students will learn about animals. They will read literature and science texts about animals (domestic and wild). They will also read about nature exploration. These topics will help students practice and learn the language they need to use in school on this topic. Students will also be exposed to short stories about nature. Students will practice reading, comprehension and writing skills help them understand how to read and write narrative texts.

Suggested Pacing: (40 days /lessons) 40 lessons

Learning Targets

Unit Essential Questions:

- What language do I need in order to demonstrate comprehension and engage in the topic of animals?
- How are people and animals important to one another?
- What parts of the natural world are essential for our survival?
- What is narrative writing?
- How does beginning, middle and end are important in narrative texts?
- What language do I need to write a small moment?
- What reading strategies are useful when reading non-fiction texts?

Unit Enduring Understandings:
Students will understand that…

- Listening, speaking, reading, and writing about the natural world requires specific academic language.
- Animals and humans interact in different ways.
- Animals can survive in different climates and environments in a variety of ways.
- There are specific literary techniques used when writing narrative texts.

Evidence of Learning

Formative Assessments: Students will work on "Do Nows" in class, break into pairs to complete writing activities, and also produce longer, individual skill based writing assessments.

Summative Assessments: Research and present on an animal (Example: Polar bears). Tell about the animal's features, habitat, and the way the chosen animal interacts with humans.

Grading based upon the Speaking and Writing Rubrics of the WIDA Consortium

WIDA Speaking and Writing rubric

Objectives (Students will be able to…)	Essential Content/Skills ELP levels 3-5	Suggested Assessments	Standards	Pacing
Reading and writing **Define and use vocabulary related to animals.** **Name different animals and its babies.** **Identify animal body parts.** **Name animals and the places they live.** **Writing and Speaking** **Identify structures to tell present and past events.** **Use verbs in present and past correctly.** **Create narrative texts using past and present events.** **Listening and Writing** **Identify the features of narrative text.** **Tell and retell stories about past and present events in small moments narratives.** **Listening,Speaking, reading and Writing.** **Compare and contrast the story elements of two or three narrative stories.**	Content: What is a Pet? Skills: ELP 3: Sort pictures of animals with labels with a partner. ELP4: Find animal words in books/texts with or without a partner. ELP 5: Classify pictures of animals with labels according to nonfiction texts. Content: Present and past simple Skills: All ELPs: Use the words now and long time ago to identify when stories happen. All ELPs: Use present simple to narrate present events and use past simple to narrate past events. Content: What are animals needs? Narrative text features. Skills: ELP 3: state actions of the characters,or identify setting, beginning, middle, end and dialogue in narrative texts. ELP 4: Tell stories from pictures or wordless picture books in small groups or pairs. ELP 5: Create original stories from a series of pictures, wordless picture books or personal experiences. Content: How animals help people? Compare and contrast story elements (characters, settings, and plot). Description : adjectives. Comparison: alike/different Retelling Main idea. ELP3:	Have the students match the animal with its baby. Identify the vocabulary learned in an academic text. Class activity Use a graphic organizer to sort stories that happened long time ago and stories that happen now. Ask students to write past and present personal events with or without sentence frames. Narrative composition using different colors for beginning, middle, end and dialogue. Use Google Slides to create a sequence of events with pictures to be narrated orally. Ask students to complete a graphic organizer and share their ideas with a partner. Answer comprehension questions of varying difficulties on readings Ask students to compare and contrast two stories making sure they use the academic language related to story elements. Have students retell a short story after a read aloud. Use rubric to assess use of past and present tenses.	***WIDA Standards*** Standard 1: Social and Instructional Language Standard 2: The Language of Language Arts Standard 3: The language of Mathematics. Standard 4: The Language of Science Standard 5: The Language of Social Studies ***NJSLS for English Language Arts*** ***RI.1.1.*** ***RI.1.2.*** ***RI.1.3.*** ***RI.1.4.*** ***RI.1.5.*** ***RI.1.6.*** ***RI.1.7.*** ***RI.1.8.*** ***RI.1.9.*** ***RI.1.10.*** ***RL.2.1.*** ***RL.2.2.*** ***RL.2.3.*** ***RL.2.4.*** ***RL.2.5.*** ***RL.2.6*** ***RL.2.7.*** ***RL.2.8.*** ***RL.2.9.*** ***RL.2.10.*** ***RI.3.1.*** ***RI.3.2.*** ***RI.3.3.*** ***RI.3.4.*** ***RI.3.5.*** ***RI.3.6.*** ***RI.3.7.*** ***RI.3.8.*** ***RI.3.9.*** ***RI.3.10.*** ***NJSLS for Math.***	40 Lessons

<u>Speaking and writing</u> **Use present simple and numbers to talk about facts about animals.** **Write and say statements and questions about wild animals.** **Talk about cause and effect using statements with numbers.**	State main ideas or themes of stories, including characters or settings, from pictures books or illustrated short stories. ELP 4: Narrate main events of plot sequences in given time frames of illustrated short stories. ELP 5: Re/Tell stories using story elements from short stories. Content: Learning about wild animals. Numbers from 1000 to million. (review 1 to 100 if needed for grades k-1) Cause and effect : because. Statements and questions in present simple and past simple. Skills: ELP 3: Produce statements and questions using graphic organizers about nonfiction short texts. ELP 4: Discuss and support facts learned about animals using statements and questions including numbers. ELP 5: Summarize nonfiction texts with multiple compound statements including numbers.	Ask students to read and write numbers in expanded, standard and word form. Have the students write a daily fact about wild animals and read it to the class. The fact should include numeric data. Ask questions to a partner about a red aloud or listening. Ask students to complete graphic organizers from nonfiction texts. Participate in a discussion in which a position needs to be defended using facts and cause and effect statements. Use the WIDA speaking rubric to assess performance.	***1.NBT A AND B*** ***2.NBT A AND B*** ***NJSLS SCIENCE*** ***1-LS1-1 AND 1-LS1-2***	

Unit 3 Overview

Unit Title: **Cultures (for WIDA levels 1 and 2 see the Newcomer Curriculum)**

Unit Summary:

This unit is about Cultures. In this unit, students will read literature, science, and social studies texts about other cultures and its influence in the various aspects of a human's life. Learning about these topics will help students acquire the language needed in their regular content-area classes. In addition, students will explore literary elements for writing narratives and telling their own personal stories about their journeys to America. They will also explore opinion and persuasive writing.

Suggested Pacing: (40 days /lessons) 40 lessons

Learning Targets

Unit Essential Questions:

- What language do I need in order to demonstrate comprehension and engage in the topic of cultures?
- What happens when two ways of life come together?
- How are different cultures alike and/or different?
- How difficult it is to adapt to a new culture?
- What is the influence of different cultures ?
- How can I effectively persuade or express my opinion?

Unit Enduring Understandings:
Students will understand that…

- Listening, speaking, reading, and writing about cultures requires specific language.
- Our cultures are an important part of who we are
- People explore other cultures for many different reasons
- There are specific literary techniques used when writing a persuasive or opinion piece.
- Analyzing character traits helps us become better readers and writers of fiction

Evidence of Learning

Formative Assessments: Students will work on "Do Nows" in class, break into pairs to complete writing activities, and also produce longer, individual skill based writing assessments.

Summative Assessments: Write a persuasive letter to an American to convince him/her to learn about the author's culture.
Grading based upon the Speaking and Writing Rubrics of the WIDA Consortium

WIDA Speaking and Writing rubric

Alternative Assessments: Record their writing to share with others using a digital tool.

Objectives (Students will be able to…)	**Essential Content/Skills** ELP levels 1-5	**Suggested Assessments**	**Standards**	**Pacing**
Listening and Speaking **Understand how culture influences the choice of clothing.** **Name and describe different kinds of clothing.** **Tell how geography, weather and culture affects what people wear.** **Reading** **Differentiate fact from opinion in interpreting texts.** **Use information and reasoning to examine bases of hypothesis and opinions.** **Use the appropriate words to express opinions** **Writing, reading and listening.** **Sequence information learned from text into a logical order to retell facts.** **Listen to make predictions about stories read aloud.**	Content: Clothing Skills: ELP 3: Describe clothing on self, peers, and other cultures in phrases or short sentences. ELP4: Describe with details clothing worn by peers or by characters in picture books using a variety of adjectives. ELP5: Give reasons for wearing different kinds of clothing. Content: fact and opinion. Skills: ELP 3: Sort language associated with fact or opinion in fiction or nonfiction illustrated text. ELP 4: Differentiate between statements of fact and opinion found in various illustrated reading selections. ELP5: Identify author's purpose associated with fact or opinion in fiction and non-fiction from grade level text. Content: opinion words: I feel, I think, worse, better, most, least. Content: comparative adjectives ALL ELP: Write opinion and fact sentences or short paragraphs. Content: moving to a new culture Skills: ELP3: Sequence pictures of stories read aloud by beginning. Middle and end or by first, next, then, later, and finally. ELP4:	Have the students read a passage about clothing in another culture. Circle the vocabulary words and have a peer conversation. Describe pictures of clothing from other cultures orally. Use speaking rubric or checklist to assess. Answer comprehension questions of varying difficulties on readings Graphic organizers Vocabulary assessments Fluency practice Make a fact /opinion infographic about a culture. Write facts and opinions about migration. Write a persuasive letter about leaving or staying in America using facts and opinions. Talk about the origin of foods we eat and explain how other	***WIDA Standards*** Standard 1: Social and Instructional Language Standard 2: The Language of Language Arts Standard 4: The Language of Science Standard 5: The Language of Social Studies ***NJSLS for English Language Arts*** ***RI.1.1.*** ***RI.1.2.*** ***RI.1.3.*** ***RI.1.4.*** ***RI.1.5.*** ***RI.1.6.*** ***RI.1.7.*** ***RI.1.8.*** ***RI.1.9.*** ***RI.1.10.*** ***RL.2.1.*** ***RL.2.2.*** ***RL.2.3.*** ***RL.2.4.*** ***RL.2.5.*** ***RL.2.6*** ***RL.2.7.*** ***RL.2.8.*** ***RL.2.9.*** ***RL.2.10.*** ***RI.3.1.*** ***RI.3.2.*** ***RI.3.3.*** ***RI.3.4.*** ***RI.3.5.*** ***RI.3.6.*** ***RI.3.7.*** ***RI.3.8.*** ***RI.3.9.*** ***RI.3.10.*** 9.2.4.A.4 Explain why knowledge and skills acquired in the	30 Lessons

	Match story sequence read aloud to a series of pictures. ELP5: Select logical outcomes or endings to stories read aloud. Content: origin of foods. Content: Expressions. Skills: ALL ELPs: Identify the true meaning of commonly used expressions in America, such as: feeling blue, go with the flow, chill out, hitting the road.books,open a can of worms, etc. Content: comparing actions. All ELPs: Use adverbs and comparative words to compare actions.	cultures influence our gastronomy. Using Google Slides create a picture dictionary of expressions. Using sentence frames assess the correct use of adverbs.	elementary grades lay the foundation for future academic and career success.	

Unit 4 Overview

Unit Title: **The importance of Dreams (for WIDA levels 1 and 2 see the Newcomer Curriculum)**

Unit Summary:
This unit is about setting goals and working to achieve our dreams. In this unit, students will read literature, science, and social studies texts about successful people their influence. Learning about these topics will help students acquire the language needed in their regular content-area classes. In addition, students will explore literary elements for writing biography.

Suggested Pacing: (40 days /lessons) 40 lessons

Learning Targets

Unit Essential Questions:

- What language do students need in order to demonstrate comprehension and engage in the topic of achieving dreams?
- What does it take to achieve our goals and dreams?
- What really makes someone unique and relevant?
- How do the achievements of others influence our goals.
- How can a person's dream can make the difference in the world?

Unit Enduring Understandings: Students will understand that…

- Listening, speaking, reading, and writing about successful people requires specific academic language
- We have all had successful and unsuccessful experiences in our lives.
- There are many characteristics that make someone's vision and work influential.
- There are famous success stories throughout history
- There are specific literary techniques used to write an expository essay and biography texts.

Evidence of Learning

Formative Assessments: Students will work on "Do Nows" in class, break into pairs to complete writing activities, and also produce longer, individual skill based writing assessments.

Summative Assessments: Write a biography about a successful person and identify the traits that make him or her successful.
Grading based upon the Speaking and Writing Rubrics of the WIDA Consortium

WIDA Speaking and Writing rubric

Alternative Assessments: Prepare a multimedia presentation to share with the class.

Objectives (Students will be able to…)	Essential Content/Skills ELP levels 1-5	Suggested Assessments	Standards	Pacing
Speaking and listening **Define and use vocabulary related to goals and dreams.** **Use sequence of events to gain meaning.** **Distinguish between major and minor details.** **Use visuals such as graphs or charts when presenting for clarification.** **Demonstrate higher order thinking skills when answering open-ended and essay questions in content areas or as responses for literature.,** **Writing** **Write complex sentences** **Use gerunds, infinitives, and expressions of quantity in context** **Compare and contrast in context** **Distinguish between problems and solutions Analyze texts to write a critique /**	Content: Informational social students text Skills: ELP 3: Compare and contrast characters from different success stories ELP 4: Analyze characters' motives in context ELP 5: Research and write a biography about a successful person Content: Biography. Skills: ELP 3: Sort relevant from irrelevant biographical information using illustrations and graphic organizers. ELP4: Compare/contrast biographical information of two people using illustrations and graphic organizers. ELP5: Synthesize biographical information of two people from grade level material to form opinions on people Content: Interview Skills: ELP 3: Recall information from reading to answer questions	Class participation Write a compare/contrast paragraph Write a problem/solution paragraph Write a simple critique Write a news article Create a self portrait Write an expository essay Answer comprehension questions of varying difficulties on readings Graphic organizers Vocabulary assessments Fluency practice Send email, tweet or message to a successful person with the questions created. Write explanations of games.	***WIDA Standards*** Standard 1: Social and Instructional Language Standard 2: The Language of Language Arts Standard 3: The Language of Math Standard 4: The Language of Science Standard 5: The Language of Social Studies ***NJSLS for English Language Arts*** ***RI.4.1.*** ***RI.4.2.*** ***RI.4.3.*** ***RI.4.4.*** ***RI.4.5.*** ***RI.4.6.*** ***RI.4.7..*** ***RI.4.8.*** ***RI.4.9.*** ***RI.4.10.*** ***NJSLS for Math.*** **2MD A -D** ***NJSLS SCIENCE*** **K-2-ETS1-1.** **K-2-ETS1-2.** **K-2-ETS1-3..**	40 Lessons

news article **Listening** **Talk about talents or abilities.** **Identify and respond to the elements of sound and structure in poetry.** **Make inferences based on oral presentation (poetry)** **Use mathematical vocabulary and concepts to create a game.** **Explain technological advances using the appropriate language.**	ELP 4: Compare and contrast an interview. ELP 5: Create questions for an interview relating to achieving a dream. <u>Content: Poetry</u> <u>Skils:</u> <u>ELP3:</u> Match ideas in recited short poems or free verse with illustrations and check with a partner. ELP4: Interpret main ideas or details in recited poems or free verse with illustrations and check with a partner. ELP 5: Make inferences from main ideas and details of recited grade-level poetry or free verse. <u>Content:</u> Short story <u>Skills:</u> ELP 3: Describe math concepts used in games ELP 4: Design a game from your country to teach to the class ELP 5: Critique a game through writing an article <u>Content:</u> Informational science text <u>Skills:</u> ELP 3: Answer Wh-questions about robotics or STEAM topic ELP 4: Demonstrate the creation of a experiment with step-by-step directions ELP 5: Produce a summary of a science	Write a poem about achieving a dream. Illustrations and graphic organizers. Class participation. Activity completion. Create a set of instructions. Write a how to brochure/ video.		

	text using graphs/charts			

Unit 5
Ongoing

Title: **Math Content Support grade K (for WIDA levels 1 and 2 see the Newcomer Curriculum)**

Summary:
This unit is designed to offer support in the content area of Math with fundamental concepts and language needed to succeed in the district's Math curriculum. This unit could be use in push in and pull out ESL support.

Suggested Pacing: Ongoing (180 days)

Learning Targets

Unit Essential Questions:
How can counting, measuring or labeling help to make sense of the world around us?
How can we decide when to use an exact answer and when to use an estimate?
How do geometric relationships help us to make sense of phenomena?
How can I clarify my understanding of mathematics?
How can measurement be used to solve problems.
How can the collection, organization, interpretation, and display of data de used to answer questions?

Unit Enduring Understandings:

- Numeric fluency includes both the understanding of an the ability to appropriately use numbers.
- Context is critical when using estimation.
- Geometric relationships provide a mean to make sense of a variety of phenomena.
- Measurements can be used to describe, compare and make sense of phenomena.
- reading , understanding, interpreting and communicating data are critical in modeling a variety of real world situations and in supporting and refuting arguments.
- By sharing mathematical understandings in oral and written form with classmates, teachers, and parents, students solidify understandings.

Evidence of Learning

Formative Assessments: Students will work on "Do Nows" in class, break into pairs to complete writing activities, and also produce longer, individual skill based writing assessments.

Summative Assessments: Grading based upon the topic and unit assessments of the Math in Focus program for the each grade.

Objectives (Students will be able to…)	Essential Content/Skills ELP levels 1-5	Suggested Assessments	Standards	Pacing
Use real-life experiences to construct meanings for numbers Use real-life experiences to construct meanings for numbers	**Content: Quantity** **Speaking** Level 1 Participate in and supply quantity words in songs and chants in a whole group (e.g., "One, two, button my shoe.") Level 2 Complete phrases in songs and chants involving quantity in a whole group (e.g., "One potato, two potato, _____.") Level 3 Repeat verses and chants involving quantity in a whole group Level 4 Provide sentences or lines from songs and chants involving quantity in a whole Group Level 5 Initiate and lead songs and chants involving quantity in a whole group **Content: Equivalency** Writing Level 1 Draw or trace matched pairs of real-life objects as modeled and directed orally (e.g., two hands, two feet) Level 2 Connect 1:1 matched sets of real-life objects or pictures as modeled and directed orally (e.g., three pencils with three pencils) Level 3 Trace numerals that correspond to matched sets of real-life objects or pictures as modeled and directed orally Level 4 Make or reproduce numerals up to number ten with various materials that correspond to matched sets of pictures from word walls or word banks as modeled Level 5	Math In Focus Supplemental Lessons Speaking rubric/ checklist Teacher observation Class participation	***WIDA Standards*** Standard 1: Social and Instructional Language Standard 2: The Language of Math. ***NJSLS for Mathematics*** Counting and Cardinality K.CC A. Know number names and the count sequence. 1. Count to 100 by ones and by tens. 2. Count forward beginning from a given number within the known sequence (instead of having to begin at 1). 3. Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects). B. Count to tell the number of objects. 4. Understand the relationship between numbers and quantities; connect counting to cardinality. a. When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object. b. Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted. c. Understand that each successive number name refers to a quantity that is one larger. 5. Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1–20, count out that many objects. C. Compare numbers. 6. Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies.1 7. Compare two numbers between 1 and 10 presented as written numerals.	Ongoing

Apply terms related to time including past, present, and Future. Attempt to put ideas into writing using pictures, Developmenta l spelling, or conventional text. Observe the teacher modeling writing. Directly compare and order objects according to Measurable Attributes. Select and use appropriate	Supply numerals and number words that correspond to matched sets of pictures from word walls or word banks **Content: time** **Writing** Level 1 Draw, trace or copy pictures from models to express times of day. Level 2 Depict times of day (e.g., day or night) from illustrated scenes and models using icons, letters or scribble Writings. Level 3 Express times of day (e.g., morning, noon or night) from illustrated scenes and models using words with invented Spellings. Level 4 Complete "story" starters related to times of day from illustrated scenes and models using words or phrases with invented spellings. Level 5 Produce "stories" about times of day related to events or actions using phrases or short sentences with invented spellings **Content: Non-Standard measurement tools.** **Listening** Level 1 Associate size of real life objects (e.g., "big," "little") with nonstandard measurement tools with a partner as modeled orally Level 2 Sort real-life objects by size (e.g., "short," "long") using nonstandard measurement tools with a partner as modeled orally. Level 3 Determine size of real life objects using		Measurement and Data K.MD A. Describe and compare measurable attributes. 1. Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object. 2. Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference. For example, directly compare the heights of two children and describe one child as taller/shorter. B. Classify objects and count the number of objects in each category. 3. Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.3 Geometry K.G A. Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres). 1. Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to. 2. Correctly name shapes regardless of their orientations or overall size. 3. Identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid"). B. Analyze, compare, create, and compose shapes. 4. Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/"corners") and other attributes (e.g., having sides of equal length). 5. Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes. 6. Compose simple shapes to form larger shapes. For example, "Can you join these two triangles with full sides touching to make a rectangle?"	

standard and nonstandard units of measure and Standard measurement tools to solve real-life problems Identify and describe spatial relationships among objects in space and their relative shapes and sizes Use concrete objects,	nonstandard measurement tools (e.g., 3 hands long) with a partner as modeled orally. Level 4 Estimate size of objects from pictures using non-standard measurement tools with a partner as directed Orally. Level 5 Rank size of objects described according to non-standard measurement tools with a partner as directed orally **Content: Size** Speaking Level 1 Indicate size of objects in pictures (e.g., “small,” “big”) using gestures and words Level 2 Specify size of objects in pictures (e.g., “a small ball,” “a big ball”) Level 3 Compare the size of two objects in pictures using phrases (e.g., “the smaller ball”) Level 4 Make statements about size from pictures or illustrated scenes (e.g., “This is the biggest.”) Level 5 Make up related sentences or “stories” about differences in size using comparative language from illustrated scenes **Content: Geometric Shapes** **Reading** Level 1 Match pictures of real-life objects (e.g., books or windows) with figures of geometric Shapes. Level 2 Classify pictures of Real Life objects according to geometric shapes (e.g., circles or squares)			

drawings, and computer graphics to identify, classify, and describe standard three dimensional and two-dimensional shapes	Level 3 Sort diagrams of geometric shapes according to their first letter (e.g., “c” or “r”) Level 4 Find pairs of matching words and diagrams of geometric shapes Level 5 Identify words for geometric shapes from labeled diagrams			

Unit 6
Ongoing

Title: **Math Content Support Grades 1-2 (for WIDA levels 1 and 2 see the Newcomer Curriculum)**

Summary:
This unit is designed to offer support in the content area of Math with fundamental concepts and language needed to succeed in the district's Math curriculum. This unit could be use in push in and pull out ESL support.

Suggested Pacing: Ongoing (180 days)

Learning Targets

Unit Essential Questions:

How can counting, measuring or labeling help to make sense of the world around us?
How can we decide when to use an exact answer and when to use an estimate?
How do geometric relationships help us to make sense of phenomena?
How can I clarify my understanding of mathematics?
How can measurement be used to solve problems.
How can the collection, organization, interpretation, and display of data de used to answer questions?

Unit Enduring Understandings:

- Numeric fluency includes both the understanding of an the ability to appropriately use numbers.
- Context is critical when using estimation.
- Geometric relationships provide a mean to make sense of a variety of phenomena.
- Measurements can be used to describe, compare and make sense of phenomena.
- reading , understanding, interpreting and communicating data are critical in modeling a variety of real world situations and in supporting and refuting arguments.
- By sharing mathematical understandings in oral and written form with classmates, teachers, and parents, students solidify understandings.

Evidence of Learning

Formative Assessments: Students will work on "Do Nows" in class, break into pairs to complete writing activities, and also produce longer, individual skill based writing assessments.

Summative Assessments: Grading based upon the topic and unit assessments of the Math in Focus program for the each grade.

Objectives (Students will be able to…)	Essential Content/Skills ELP levels 1-5	Suggested Assessments	Standards	Pacing
Use real-life experiences, physical materials, and technology to Construct meanings for Numbers. Use real-life experiences, physical materials, and technology to construct meanings for numbers.	**Content: Number sense** **Skills** **<u>Speaking</u>** Level 1 Provide identifying information that involves real-world numbers (e.g., age, address or telephone number) to a partner. Level 2 Give examples of things with real-world numbers (e.g., room numbers, bus numbers or calendars) to a Partner. Level 3 Exchange examples of how or when to use numbers outside of school with a partner (e.g., shopping) Level 4 Explain how to play games or activities that involve numbers (e.g., sports, board games, hopscotch) to a partner. Level 5 Tell or make up stories or events that involve Numbers. **Content: Whole Numbers** **Skills** **Writing** Level 1 Find and reproduce number words (e.g., from 1-100) from an assortment of labeled Visuals. Level 2 Distinguish number words from other math words using graphic or visual support and word Banks.	Math In Focus Supplemental Lessons Writing rubric/ checklist Activity completion Teacher observation	***WIDA Standards*** Standard 1: Social and Instructional Language Standard 2: The Language of Math. ***NJSLS for Mathematics*** Number and Operations in Base Ten 1.NBT A. Extend the counting sequence. 1. Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral. Students need not use formal terms for these properties. New Jersey Student Learning Standards for Mathematics 14 B. Understand place value. 2. Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases: a. 10 can be thought of as a bundle of ten ones — called a “ten.” b. The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones. c. The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones). 3. Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols >, =, and < . C. Use place value understanding and properties of operations to add and subtract. 4. Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models (e.g., base ten blocks) or drawings and strategies based on place value, properties of	Ongoing

Use real-life experiences, physical materials, and technology to construct meanings for numbers	Level 3 Group numbers presented in graphs or visuals using phrases or short sentences (e.g., “This group has more than 40.”) Level 4 Compare numbers in graphs or visuals using sentences (e.g., “85 is greater than 75. It goes up higher in the table.”) Level 5 Describe illustrated scenes or events using numbers in a series of related sentences **Content: Quantity.** **Skills** **Writing** Level 1 Produce pictures with numerals or reproduce words associated with quantities from models (e.g., from newspapers or magazines) Level 2 Take dictation or make notes of examples of phrases associated with quantities in everyday situations (e.g., “a little of ”, “a lot of ””) Level 3 Provide examples of quantities in context (e.g. “a bunch of grapes”) using phrases or short sentences Level 4 Describe uses of quantities in everyday math with illustrated examples using sentences Level 5 Explain importance of everyday math using quantities in real-life situations (e.g., when shopping or cooking) using a series of related sentences **Content: Estimation** **Money** **Skills** **Reading** Level 1		operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten. 5. Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used. 6. Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Measurement and Data 1.MD A. Measure lengths indirectly and by iterating length units. 1. Order three objects by length; compare the lengths of two objects indirectly by using a third object 2. Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps. B. Tell and write time. 3. Tell and write time in hours and half-hours using analog and digital clocks. C. Represent and interpret data. 4. Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.	

Judge without counting whether a set of objects has less than, more than, or the same number of objects as a reference set. Count and perform simple computations with coins. Use concrete objects, drawings, and/ or computer graphics to	Match labeled pictures with general words related to estimation (e.g., “a lot,” “a little”) to pictures of varying quantities Level 2 Match words or phrases related to estimation (e.g., “about 20 cents”) to illustrated word banks of varying quantities Level 3 Identify language associated with estimation in illustrated phrases or sentences (e.g., “I see close to 100 nickels.”) Level 4 Distinguish between language of estimation (e.g., “I have almost one dollar.”) and language of precision (“I have one dollar.”) in illustrated sentences Level 5 Order illustrated sentences involving the language of estimation used to solve grade-level problems **Content: Two & Three dimensional shapes.** **Skills** **Listening** Level 1 Identify two- or three dimensional shapes depicted in illustrations described orally (e.g., “Find a shape like the sun.”) Level 2 Match attributes of two or three-dimensional shapes described orally to objects Level 3 Identify objects composed of multiple two- or three dimensional shapes described orally (e.g.,“Put a sphere or ball on either side of a cylinder. What do you see?”) Level 4 Construct two- or		Operations and Algebraic Thinking 2.OA A. Represent and solve problems involving addition and subtraction. 1. Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem. 1 B. Add and subtract within 20. 2. Fluently add and subtract within 20 using mental strategies. 2 By end of Grade 2, know from memory all sums of two one-digit numbers. C. Work with equal groups of objects to gain foundations for multiplication. 3. Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends. 4. Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends. Number and Operations in Base Ten 2.NBT A. Understand place value. 1. Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases: a. 100 can be thought of as a bundle of ten tens — called a “hundred.” b. The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones). 2. Count within 1000; skip-count by 5s, 10s, and 100s. 3. Read and write numbers to 1000 using base-ten numerals, number names, and expanded form. 4. Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using >, =, and < symbols to record the results of comparisons. B. Use place value	

identify, classify, and describe standard three dimensional and two-dimensional shapes. Select and use appropriate standard and nonstandard units of measure and standard measurement tools to solve real-life problems.	three-dimensional figures described orally (e.g., “Put two lines up and down and two lines across. What shape do you have?”) Level 5 Change attributes of two- or three dimensional shapes to make others based on oral discourse (e.g., “Take one side away from a square. Then move the three line segments to make a shape. What do you have?) **Content: Standard & metric measurement tools** **Skills** **Reading** Level 1 Use diagrams to guide use of standard or metric measurement tools with a partner Level 2 Use labeled diagrams from texts to guide use of standard or metric measurement tools with a partner Level 3 Identify key phrases in illustrated text to use standard or metric measurement tools with a partner Level 4 Follow illustrated directions from text to compare tools for standard or metric measurement with a partner Level 5 Follow illustrated directions from text to use standard or metric measurement tools **Content: Graphs Interpretation of data** **Skills** **Listening** Level 1 Shade or color graphs		understanding and properties of operations to add and subtract. 5. Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction. 6. Add up to four two-digit numbers using strategies based on place value and properties of operations. 7. Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds. 1.OA.6 for a list of mental strategies. New Jersey Student Learning Standards for Mathematics 19 8. Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900. 9. Explain why addition and subtraction strategies work, using place value and the properties of operations. 3 Measurement and Data 2.MD A. Measure and estimate lengths in standard units. 1. Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes. 2. Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen. 3. Estimate lengths using units of inches, feet, centimeters, and meters. 4. Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit. B. Relate addition and subtraction to length. 5. Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem. 6. Represent whole numbers as lengths from 0 on a number line	

Read, interpret, construct, and analyze displays of data.	according to oral commands modeled by a teacher (e.g., “Here is a graph. Color this bar red.”) Level 2 Identify data in graphs from oral commands or questions modeled by a teacher (e.g., “Which bar shows the most?”) Level 3 Locate information on graphs based on oral statements or questions (e.g., “Which bar shows that most people like ice cream?”) and check with a partner Level 4 Display comparative data on graphs according to oral commands (e.g., “Fill in the graph to say there are more girls than boys.”) and check with a partner Level 5 Interpret data on graphs from oral descriptions (e.g., “Which graph says, ‘Most children are wearing red, some are wearing blue and the fewest are wearing green?’”) **Content: Basic operations** **Skills** **Speaking** Level 1 Recite math-related words or phrases related to basic operations from pictures of everyday objects and oral statements Level 2 Restate or paraphrase basic operations from oral statements, referring to pictures of everyday objects (e.g., “Ten pencils and ten more are twenty.”) Level 3 Describe representations of basic operations from pictures of everyday objects and oral descriptions (e.g.,		diagram with equally spaced points corresponding to the numbers 0, 1, 2, ..., and represent whole-number sums and differences within 100 on a number line diagram. C. Work with time and money. 7. Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m. 8. Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using $ and ¢ symbols appropriately. Example: If you have 2 dimes and 3 pennies, how many cents do you have? D. Represent and interpret data. 9. Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units. 10. Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put together, take-apart, and compare problems 4 using information presented in a bar graph.	

Use the language of mathematics to express mathematical ideas precisely	“There are seven dogs altogether.”) Level 4 Compare/contrast language of basic operations from pictures and oral descriptions (e.g., “Tell me different ways to say this math sentence…”) Level 5 Explain basic operations involved in problem solving using pictures and grade-level oral descriptions			

Unit 7
Ongoing

Title: **Content Support Grades 3-5 (for WIDA levels 1 and 2 see the Newcomer Curriculum)**

Summary:
This unit is designed to offer support in the content area of Math with fundamental concepts and language needed to succeed in the district's Math curriculum. This unit could be use in push in and pull out ESL support.

Suggested Pacing: Ongoing (180 days)

Learning Targets

Unit Essential Questions:

- How can counting, measuring or labeling help make sense of the world around us?
- How can we decide when to use an exact answer and when to use an estimate?
- How do geometrical relationships help to make sense of phenomena?
- How can measurement be used to solve problems?
- How can patterns, relations, and functions be used as tools to best describe and help explain real -life situations?
- How can the collection, organization, interpretation and display of data be used to answer questions?
- How can I clarify my understanding of mathematics?

Unit Enduring Understandings:
Developing the ability to give and ask for information, in ways that are already familiar to English proficient students, is the first step to achieve the language proficiency needed by ELLs in academic and social settings.

- Numeric fluency includes both the understanding of and the ability to appropriately use numbers.
- Context is critical when using estimation.
- Geometric relationships provide a means to make sense of a variety of phenomena.
- Measurements can be used to describe, compare and make sense of phenomena.
- Algebraic representation can be used to generalize patterns and relationships.
- Reading, understanding, interpreting and communicating data are critical in modeling a variety of real world situations and in supporting and refuting arguments.
- By sharing mathematical understandings in oral and written form with classmates, teachers and parents, students solidify understandings.

Evidence of Learning

Formative Assessments: Students will work on "Do Nows" in class, break into pairs to complete writing activities, and also produce longer, individual skill based writing assessments.

Summative Assessments: Grading based upon the district's math program topics and unit assessments.

Objectives (Students will be able to…)	Essential Content/Skills ELP levels 1-5	Suggested Assessments	Standards	Pacing
Listening Read, interpret, construct, analize, generate questions about and draw inferences from displays of data. Learn mathematics through problem solving, inquiry, and discovery Use communication to organize and clarify their	Content: Descriptive statistics Level 1: Mark position /location of numbers or illustrated objects from oral commands (top, bottom, middle) Level 2 Identify comparative quantities of numbers or illustrated objects from oral commands or questions (e.g., "most," "least") Level 3 Match general and some specific language associated with descriptive statistics to illustrated oral examples Level 4 Discriminate between different meanings of language associated with descriptive statistics from illustrated oral discourse Level 5 Apply technical language related to descriptive statistics to grade-level oral scenarios (e.g., "mean," "mode," "median," "range") Content: Strategies for problem solving Speaking Level 1 State words in figures or formulas from	Math In Focus Supplemental Lessons Writing rubric/ checklist Activity completion Teacher observation Activity Completion Class Participation Teacher observation	***WIDA Standards*** Standard 1: Social and Instructional Language Standard 2: The Language of Language Arts Standard 3: The language of Math. ***NJSLS for Mathematics*** Operations and Algebraic Thinking 3.OA A. Represent and solve problems involving multiplication and division. 1. Interpret products of whole numbers, e.g., interpret 5 × 7 as the total number of objects in 5 groups of 7 objects each. For example, describe and/or represent a context in which a total number of objects can be expressed as 5 × 7. 2. Interpret whole-number quotients of whole numbers, e.g., interpret 56 ÷ 8 as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each. For example, describe and/or represent a context in which a number of shares or a number of groups can be expressed as 56 ÷ 8. 3. Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.1 4. Determine the unknown whole number in a multiplication or division equation relating three whole numbers. For example, determine the unknown number that makes the	Ongoing

mathematical thinking. Use the language of mathematics to express mathematical ideas precisely Use real-life experiences, physical materials, and technology to construct meanings for numbers	illustrated examples (e.g., X in 3 X 5 says “times”) Level 2 Use general vocabulary in math sentences from illustrated examples (e.g., “You times three by five.”) Level 3 Relate multiple uses of specific vocabulary in illustrated math sentences (e.g., “How many are left when you take away?,” “Which number is to the left?”) Level 4 Paraphrase illustrated math sentences using specific or technical vocabulary (e.g., “‘How many are left?’ means, ‘What is the remainder?’”) Level 5 Explain different ways of problem solving grade-level examples using specific or technical vocabulary Content: Large whole numbers Reading Level 1 Identify large whole numbers from pictures and models (e.g., “This number has 7 places.”) Level 2 Identify large whole numbers from pictures or models and phrases or short sentences Level 3 Sort examples of large whole numbers from pictures or models and text (e.g., those more than and less than one thousand) Level 4 Compare examples of large whole numbers presented in pictures and text Level 5 Match situations to use of large whole numbers from grade-level text		equation true in each of the equations 8 × ? = 48, 5 = □ ÷ 3, 6 × 6 = ?. B. Understand properties of multiplication and the relationship between multiplication and division. 5. Apply properties of operations as strategies to multiply and divide.2 Examples: If 6 × 4 = 24 is known, then 4 × 6 = 24 is also known. (Commutative property of multiplication.) 3 × 5 × 2 can be found by 3 × 5 = 15, then 15 × 2 = 30, or by 5 × 2 = 10, then 3 × 10 = 30. (Associative property of multiplication.) Knowing that 8 × 5 = 40 and 8 × 2 = 16, one can find 8 × 7 as 8 × (5 + 2) = (8 × 5) + (8 × 2) = 40 + 16 = 56. (Distributive property.) 6. Understand division as an unknown-factor problem. For example, find 32 ÷ 8 by finding the number that makes 32 when multiplied by 8. C. Multiply and divide within 100. 7. Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that 8 × 5 = 40, one knows 40 ÷ 5 = 8) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers. D. Solve problems involving the four operations, and identify and explain patterns in arithmetic. 8. Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.3 9. Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. For example, observe that 4 times a number is always even, and explain why 4 times a number can be decomposed into two equal addends.	

Identify and describe spatial relationships of two or more objects in space. Use properties of standard three dimensional and two-dimensional shapes to identify, classify, and describe them Use real-life experiences, physical materials, and technology to construct meanings for numbers	Content: Three dimensional shapes Writing Level 1 Reproduce names of three-dimensional shapes from labeled models (e.g., cones, cylinders or prisms) Level 2 Make lists of real-world examples of three dimensional shapes from labeled models Level 3 Describe attributes of three-dimensional shapes from labeled models Level 4 Compare/contrast attributes of three dimensional shapes from labeled models or charts (e.g., “A __ is like a __ because __.”) Level 5 Incorporate descriptions of three-dimensional shapes into real-world situations Listening Level 1 Identify proportional representation of objects from oral directions and graphs or visuals (e.g., “Two halves make a whole. Find half a pizza.”) Level 2 Follow multi-step oral directions to change proportional representation of percent or fractions in graphs or visuals Level 3 Match everyday examples of percent or fractions with oral descriptions using graphic or visual support (e.g., interest or taxes) Level 4 Analyze everyday			

Understand and apply concepts involving lines and angles. Select and use appropriate units to measure angles, area, surface area, and volume. Develop and apply strategies and formulas for finding	situations involving percent or fractions from oral scenarios with graphic or visual support (e.g., “Sales tax is based on percent. When might you need to use percent?”) Level 5 Apply ways of using percent or fractions in grade-level situations from oral discourse Content: Line segments & angles Speaking Level 1 Identify line segments or angles from pictures of everyday objects Level 2 Define or describe types of line segments or angles from pictures of everyday objects (e.g., “This angle is larger.”) Level 3 Compare/contrast types of line segments from diagrams (e.g., parallel v. perpendicular lines) Level 4 Discuss how to solve problems using different types of line segments or angles from diagrams Level 5 Explain, with details, ways to solve grade-level problems using different types of line segments or angles Content: Perimeter/ Area, volume & circumference Reading Level 1 Match vocabulary associated with perimeter or area with graphics, symbols or figures Level 2 Identify visually supported examples of use of perimeter, area, volume or			

perimeter and area. Develop and apply strategies and formulas for finding the surface area and volume of rectangular prisms and cylinders Use reasoning to support their mathematical conclusions and problem solutions. Use reasoning to support their mathematical conclusions and problem solutions.	circumference in real world situations (e.g., painting a room) Level 3 Classify visually supported examples of use of perimeter, area, volume or circumference in real world situations Level 4 Order steps for computing perimeter, area, volume or circumference in real world situations using sequential language Level 5 Select reasons for uses of perimeter, area, volume or circumference in grade-level text Content: Algebraic Equations. Writing Level 1 Show pictorial representations or label terms related to algebraic equations from models or visuals Level 2 Give examples and express meaning of terms related to algebraic equations from models or visuals Level 3 Describe math operations, procedures, patterns or functions involving algebraic equations from models or visuals Level 4 Produce everyday math problems involving algebraic equations and give steps in problem solving from models or visuals Level 5 Summarize or predict information needed to solve problems involving algebraic			

Select, apply, and translate among mathematical representations to solve problems. Apply mathematics in practical situations and in other disciplines Use reasoning to support their mathematical conclusions and problem solutions.	equations			