



# Critical Outcomes

## Grade 5

### Mathematics

#### Number and Operation Strand

The student will...

- Divide multi-digit numbers
- Solve real-world and mathematical problems using arithmetic
- Read, write, represent and compare fractions and decimals
- Recognize and write equivalent fractions
- Convert between fractions and decimals
- Use fractions and decimals in real-world and mathematical situations
- Add and subtract fractions and mixed numbers to solve real-world and mathematical problems
- Add and subtract decimals to solve real-world and mathematical problems

#### Algebra Strand

The student will...

- Recognize and represent patterns of change
- Use patterns, tables, graphs and rules to solve real-world and mathematical problems
- Use properties of arithmetic to generate equivalent numerical expressions
- Use properties of arithmetic to evaluate expressions involving whole numbers
- Understand and interpret equations and inequalities involving variables and whole numbers
- Use equations and inequalities to represent and solve real-world and mathematical problems

#### Geometry and Measurement Strand

The student will...

- Describe, classify, and draw representations of three-dimensional figures
- Determine the area of triangles and quadrilaterals
- Determine the surface area of rectangular prisms in various contexts
- Determine the volume of rectangular prisms in various contexts

#### Data Analysis and Probability Strand

The student will...

- Display data (given and/or collected) using tables and graphs (line & bar)
- Interpret data from tables and graphs (line & bar)
- Determine mean, median and range from a given set of data

### Language Arts

#### Reading

The student will...

- Analyze main idea and supporting details in fiction and non-fiction
- Apply context clues, word parts, and phonics to read new words, determine new meaning, and expand vocabulary
- Identify and derive meaning from literary elements and figurative language:
  - plot
  - setting
  - character development
  - similes
  - of view
- Read fluently with comprehension
- Apply comprehension strategies to a variety of fiction and non-fiction
- Apply word analysis

#### Writing

The student will...

- Communicate ideas using voice, word choice, sentence fluency, conventions, and presentation
- Write pieces in each of the modes:
  - Expository/Informative
  - Narrative/Expressive
  - Persuasive
- Write using the steps of the writing process with emphasis on editing:
  - prewriting - planning strategies such as brainstorming, journaling, sketching, listing, outlining and determining audience, purpose and focus
  - drafting - organizing, supporting and putting ideas into sentences and paragraphs

- revising - improving the quality of content, organization, sentence structure and word choice
- editing - correcting errors in spelling and grammar
- publishing - producing a document and sharing the writing with the audience
- Use correct spelling
- Write legibly in cursive

#### Listening

The student will...

- Demonstrate interpretive and evaluative comprehension through listening to fiction and nonfiction selections
- Demonstrate listening comprehension

#### Viewing

The student will...

- Interpret effects of persuasive visual messages

#### Speaking

The student will...

- Use effective delivery techniques: eye contact, clear articulation, speed, expression, and volume

### Social Studies

The student will...

- Demonstrate an understanding of the establishment of the new nation, its government, and the people involved
- Know Pledge of Allegiance and Star Spangled Banner
- Explain the differences and similarities among the peoples in the three geographical areas of the 13 colonies
- Demonstrate an understanding of the causes, underlying principles, and course of the American Revolution
- Identify important cultural traits and regional variations of major North American indigenous nations
- Describe the three branches of government and their primary functions



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### Science

The student will...

- Conduct systematic observations of controlled experiments by manipulating variables that affect the outcome and communicate predictions and results
- Demonstrate an understanding of the application of work (force) in lever and pulley systems

Understand and use the methods of scientific processes

### Library Media

Progress on these outcomes is assessed and reported as part of a variety of curriculum areas.

#### Reading and Media Literacy

The student will...

- Independently, routinely, efficiently and appropriately select and read materials
- Critically evaluate a variety of print and multimedia formats
- Create a product using a variety of media forms to demonstrate learning

#### Research

The student will...

- Generate feasible, researchable questions
- Gather information from multiple sources to answer a question
- Organize and interpret the information to draw conclusions and answer the question
- Communicate research findings in a format appropriate to both the audience and the message
- Reflect on process and generate questions related to findings

#### Responsible Use of Information and Technology

The student will...

- Access resources safely and ethically
- Use school resources responsibly
- Use resources to learn both independently and in collaboration with others

#### Technology

The student will...

- Demonstrate fluency in selecting and using appropriate technology for educational and personal goals

### Health

The student will...

- Demonstrate bus and pedestrian safety
- Describe physical and emotional changes during puberty
- Explain biological differences between males and females
- Practice assertive communication and refusal skills
- Use appropriate strategies to deal with harassing and/or abusive situations
- Explain negative effects of chemical abuse

### Physical Education

The student will...

- Continue to develop and display loco-motor and non-loco-motor with increasing agility and speed during activities
- Demonstrate dance styles from more than one form or tradition
- Demonstrate kicking, striking and throwing skills
- Evaluate and improve physical fitness level as assessed by age-appropriate National Fitness Standards
- Participate in leisure activities, team sports, clubs, and/or classes outside of school
- Demonstrate age-appropriate physical fitness level
- Demonstrate various strategies involved in cooperative activities
- Identify the five components of physical fitness
- Demonstrates sportsmanship and teamwork in a class setting

### 5th Grade Orchestra/Band

#### Performs

The student will...

- Performs simple rhythmic, melodic, and harmonic patterns on instrument

#### Reads

The student will...

- Read music in treble, alto, or bass clef using whole, half, quarter, and eighth notes and corresponding rests in 2/4, 3/4, 4/4, and 6/8 meter.
- Read scales: A, A-flat, B, B-flat, C, D, D-flat, E, E-flat, F, G, G-flat

### Music

#### Performs

The student will...

- Perform simple rhythmic, melodic and harmonic patterns on classroom instruments.
- Sing alone, and with others, with accurate pitch and rhythm.
- Sing rounds and partner songs in a group
- Sing own vocal line against contrasting parts

#### Creates

The student will...

- Improvise and compose melodies and accompaniments using instruments and/or voice
- Improvise melodies using instruments or voice

#### Reads and Writes

The student will...

- Identify letter names in the bass clef.
- Read and notate melodies in the treble clef.
- Read and notate melodies and rhythms using whole, half, dotted half, quarter, eighth, sixteenth notes and rests in 2/4, 3/4 and 4/4 meter.

#### Responds

The student will...

- Aurally identify individual instruments and their orchestral families

### Art

The student will...

- Become aware of principles of visual art including contrast, variety, pattern, unity/harmony, emphasis, proportion, balance, movement, and rhythm
- Understand and demonstrate elements of visual art including color, line, shape, form, space, value, and texture
- Understand and apply cultural and historical forms or traditions of visual arts
- Demonstrate the elements of shape and form
- Demonstrate the principles of emphasis and balance

### PYP Spanish

The student will...

- Develop listening, speaking, reading and writing proficiency