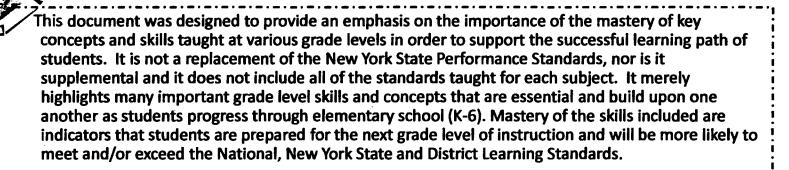


# RCSD Henry Lomb School No. 20 Grades K-6 Grade Level Expectations



## RCSD School No. 20 Grade Level Expectations Sixth Grade

Welcome to sixth grade! This is a very exciting time for both you and your child - a year of new horizons and possibilities. This year contains another leap: toward independent work Sixth graders will read more complex information in every area, take notes, write longer stories, research reports in math algebraic and geometric thinking is a highlight of math. The major goal of sixth grade is to continue the journey to create students who are lifelong learners. To meet these goals, the sixth graders undertake a rigorous curriculum which meets and exceeds the standards set by the New York State Department of Education. The education of students is a responsibility shared by both educators and parents. Therefore, Parents should be aware of what is expected of their child. This sheet contains an overview of the essential skills and concepts in Reading, Writing, Math, Science and Social Studies that students will need to master by the end of the year to be considered proficient. These expectations were developed by the Teachers and Administrators at RCSD Henry Lomb School No. 20.

### Reading

- •DRA reading level of 60 or above (w/ comprehension & fluency)
- Exposed to a variety of genres
- •Reads independently for at least 30 minutes
- Effectively uses a variety of reading strategies

#### Writing

- Paragraph structure
- •Topic sentence, supporting details, sentence variety, craft, voice mood and concluding statement
- Sophisticated vocabulary
- Awareness & use of many parts of speech
- •Writing is focused & on topic
- •Wide range of writing strategies & writer's craft
- Accurately edits & revises work

#### Math

- All (+,-,x,÷) facts memorized to 12
- Read and write whole numbers to trillions
- Read, write, and identify percents of a whole (0% to 100%)
- Multiply and divide fractions
- Multiply one- and two-digit whole numbers by decimals up to two decimal places
- Find prime factorization of whole numbers (#s 1 and 50, express in exponential notation)
- Represent rational numbers as fractions or decimals
- Add and subtract integers and rational numbers (+,-,x,+ integers between -10 and 10)
- Solve applied problems with fractions (unlike denominators)
- Solve decimal, percentage and rational number problems,
- Use exponents
- Compute with rational numbers (operations with integers)
- Understand rational numbers and their location on the number line
- Understand the coordinate plane; Identify and plot points in all four quadrants
- Find areas of geometric shapes using formulas
  - Know the meaning of angles, and solve problems
- Solve problems about geometric shapes
- Understand the concept of congruence and basic transformations
- Understand the concept of probability and solve problems
- Draw, explain, and justify conclusions based on data
- Read, construct and interpret graph

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#### **Science**

- •Knows and describes how energy play a role in our lives? (potential, kinetic and mechanical energy)
- •Knows and describes how machines impact our lives?
- •Knows how matter and energy interact to produce weather patterns?
- •Knows and describes how the transfer of matter and energy through biological communities support diversity of living things?
- •Knows and identifies roles of consumers (idea of respiration/recycling; herbivores/carnivores/omnivores) & decomposers.
- •Knows and describes how interdependence is essential in maintaining life on Earth?
- •Describes Global Warming: natural cycles vs. human impact
- •Describes and identifies Climates and Biomes; Tundra, Tropical, Rain Forest, Temperate, Forests, Grasslands & Deserts
- •Follow safety procedures in the classroom and laboratory.
- Safely and accurately use measurement tools:
- •Uses appropriate units for measured or calculated values.
- •Interpret and/or illustrate the energy flow in a food chain, energy pyramid, or food web.
- Identify structure and function relationships in organisms.

#### **Social Studies**

- •Knows how geography, economics, people, and key events connect to shape a continent
- •Knows and identifies Geography and how geography influence the development of the following:
  - -Eastern Hemisphere
  - -Middle East (deserts, regions, rivers, mountains)
  - -Africa (deserts, rainforests, savannahs, regions, rivers)
  - -Asia (deltas, deserts, mountains, rivers, peninsulas, plateaus, plains, islands)
  - -Europe (seas, rivers, mountains, countries, regions)
- Compare and contrast historical and current events
- •Make inferences based on explicit information in text
- •Combine and categorize information to draw conclusions and create meaning