Welcome to 6th GRADE!

The Commonwealth of Massachusetts sets expectations, or standards, for what *every* student will know and be able to do in school. This guide is designed to help you understand those standards and partner with teachers to support your child's learning during sixth grade. If you have questions about this information or your child needs extra help, please talk to your child's teacher.

To talk to your child about school, you can ask:

- Can you tell me about something you read today?
- ▶ How could you use the **math** you learned today?
- What scientific ideas did you talk about today?
- What did you learn about your role in society today?
- How did someone help you learn today?

If your child is also learning English, you can ask:

- ▶ How does your teacher help you understand and participate in class?
- ▶ How do you work on your English while you learn academic material?





TO LEARN ENGLISH LANGUAGE ARTS AND LITERACY at every grade, your child will:

- Read various texts, like books, poems, letters, news articles, and Internet pages.
- Speak and listen in formal and informal ways, like presentations and conversations.
- Communicate opinions, information, and experiences in writing for various readers.
- Use knowledge of English grammar and vocabulary in both speech and writing.



TO LEARN MATHEMATICS at every grade, your child will:

- Use math to represent and solve real-world problems.
- Use math to make arguments about why something is true or false.
- Use tools, like rulers and calculators, to show mathematical relationships.
- Use patterns and the structures of numbers to think about math.

TO LEARN SCIENCE AND TECHNOLOGY/ ENGINEERING at every grade, your child will:

- Ask scientific questions about the natural world and things humans design.
- Learn through various experiences, like observations and experiments.
- Solve problems using the skills and tools of engineers and scientists.
- Share solutions and communicate explanations of how the world works.

TO LEARN HISTORY AND SOCIAL SCIENCE at every grade, your child will:

- Learn about their local community and about the state, country, and world.
- Discover how people and events from the past relate to the present.
- Work to understand how different people see the world differently.
- Use various sources of information in research, discussion, and inquiry.





The next four pages focus more specifically on the Massachusetts learning standards for **6th GRADE.**



NEW EXPECTATIONS FOR SIXTH GRADE:

- Move from writing opinions to writing arguments. Arguments are more formal and objective, and they rely on evidence (like quotations or statistics).
- When citing evidence from a text, decide whether to quote the text directly or to paraphrase it (put it in different words).
- Work on longer research projects as well as shorter ones. Be flexible: adjust a project's focus or research question as needed.
- Decide on goals (what needs to be done) and roles (who will be responsible for what) when working in a group.

BY THE END OF SIXTH GRADE, STUDENTS CAN:

- Read a play or poem silently. Then listen to someone reading or performing it aloud. Compare the two experiences.
- Describe how a story's plot develops and how characters change during the story.
- Summarize a text objectively, without personal opinions.
- Understand how different words can have similar meanings (denotations) but very different feelings (connotations): for example, *thrifty* and *stingy*.
- Understand what plagiarism is and how to avoid it.
- Decide whether a speaker is citing enough evidence to support their claims.
- Analyze the impact of a specific word, phrase, sentence, paragraph, or section in a text.
- Use parentheses, commas, and dashes around words that add extra information to a sentence. For example, write The three boys—Joey, Amid, and Juan—went to look for the missing notebook.

QUESTIONS YOU CAN ASK YOUR CHILD:

- Can you tell me about the last research project you did?
- When you are working in a group, how do you and your classmates decide how you will get your work done?

- What new types of writing your child is exploring
- What topics your child is curious about and what types of things they read at home

FOCUS AREAS FOR SIXTH GRADE:

- Solve word problems with ratios and rates. For example, use ratios to compare how many votes two candidates received in an election.
- Understand and use negative numbers. For example, explain which temperature is colder: -9 degrees or -20 degrees.
- ▶ Use variables (like *x*) and write expressions (like 8*x* + 7) and equations to solve problems. For example, use a formula to find the volume of a swimming pool.
- Understand and use language related to basic statistics. For example, ask questions like How much water do people use in my town?
- Solve real-world problems related to area, surface area, and volume. For example, find how much paint is needed to paint a room.

BY THE END OF SIXTH GRADE, STUDENTS CAN:

%

- Explain the concepts of ratio and unit rate.
- Solve problems by finding the percentage of a quantity (like 70% of 280).
- Divide fractions by other fractions: for example, $\frac{2}{3} \div \frac{3}{4}$.
- Fluently (quickly and correctly) divide multi-digit numbers (like 684) using the standard algorithm.
- Fluently (quickly and correctly) add, subtract, multiply, and divide multidigit decimal numbers (like 47.06) using the standard algorithms.
- Place negative fractions, positive fractions, and whole numbers on a number line.
- Compare and find the value of algebraic expressions (like y + y + y and 3y).
- Use a grid (graph) to show how two variables (like distance and time) are related.
- Find the median (middle number), mean (average), mode (most common number), and range (distance between the lowest and highest numbers) of a data set.
- Create visual displays of data: for example, dot plots, histograms, and box plots.

QUESTIONS YOU CAN ASK YOUR CHILD:

- How long will it take to drive home if we go 30 miles per hour?
- How many goals does your soccer team typically score?

- Ways to practice using ratios and rates at home
- Your child's fluency with basic operations (addition, subtraction, multiplication, and division)







FOCUS AREAS FOR SIXTH GRADE:

- Understand how fossils and rock layers tell us how the Earth has changed over long periods of time.
- Understand that different systems in the human body (like the skeletal and digestive systems) work together to keep a person alive.
- ▶ Understand the concept of density. Explore materials' differences in density.
- Understand that a wave has energy and is a repeating pattern with a specific length, frequency, and amplitude.
- Explain how different engineering solutions have different impacts on people and the environment.

BY THE END OF SIXTH GRADE, STUDENTS CAN:

 Use models to explain eclipses and the

phases of the Moon. For example, show the positions of the Sun, Moon, and Earth during a full moon.

- Use maps and other evidence to explain that the Earth's continents have changed shape and moved great distances over many millions of years.
- Explain that the Earth and its solar system are in the Milky Way galaxy and that there are many galaxies in the universe.
- Give evidence that plants and animals are made of cells. Use a model to show how different parts of a cell help with different things, like providing food and energy and getting rid of waste.
- Do experiments to show how chemical reactions can give off (release) or take in (absorb) energy.
- Use diagrams and models to explain how sound and light waves can be reflected and absorbed and how they travel through different materials.
- Draw a solution to a design problem. Use scale accurately. For example, make every inch in the drawing represent a foot in the real world.

QUESTIONS YOU CAN ASK YOUR CHILD:

- What kinds of materials and tools would you use to build a birdhouse?
- What are some ways to separate salt from salt water?

- Ways of applying what your child learns in science to everyday situations
- Places in the community that can help your child learn science

FOCUS AREAS FOR SIXTH GRADE:

- Study places and peoples from the perspectives of different social scientists (like geographers and economists).
- > Understand how humans first began to form complex societies.
- > Explore the peoples and physical environments (geographies) of ancient societies.
- Explain how geography and climate affect how people live and work.

BY THE END OF SIXTH GRADE, STUDENTS CAN:



- Give examples of what work can look like in different social sciences (like political science, economics, geography, history, and archaeology).
- Make a timeline to show how human society began and developed.
- Describe ancient societies in Mesopotamia, Egypt, Phoenicia, Israel, the Arab Peninsula, and sub-Saharan Africa.
- Describe the cultures and ways of life of Native Peoples in the Caribbean, Central America, and South America.
- Find important physical features (like rivers) and political features (like cities) on maps of Western Asia, the Middle East, North Africa, Central America, the Caribbean, and South America.
- Explain how aspects of the climate and geography of sub-Saharan Africa (like droughts) have affected where people live and move.
- Explain how early trade in gold, ivory, and enslaved peoples across the Sahara affected the larger world.
- Use information from a variety of sources to report on a history or social science topic in speech or writing.

QUESTIONS YOU CAN ASK YOUR CHILD:

- How do archaeologists try to figure out how ancient people lived?
- What is an ancient society you find interesting? Why?

- Books about ancient societies and events to look for at the library
- Nearby museums with ancient artifacts from around the world

