Academic Growth Charts Sixth Grade

Adult & Child

Therapeutic Foster Care Licensing Program

Academic Benchmarks

* **States across the country are implementing new standards for student achievement, designed to better prepare young people for careers and college.**
  * **These academic benchmarks are meant to help parents understand the course material for each grade.**
  * **They are based on the standards in most of the country and are intended as a general resource for parents, not as a comprehensive breakdown of the contents of your child's curriculum.**
* http://www.parenttoolkit.com/

Sixth Grade Overview

* **Now that he/she's in middle school, your 6th grader is reading more challenging material and is developing his/her critical analysis skills.**
* **The math he/she is studying is becoming more complicated and abstract, as he/she learns about concepts such as variables and equations.**

English/Language Arts

* In 6th grade, students read and understand a wide range of high-quality texts, including stories, plays, and poems from across cultures and time periods.
* 6th graders also read and understand informational texts from a variety of subject areas, including history/social studies, and science.
* 6th grade students use a number of strategies to learn new words, and use the words in stories, reports, and discussions.
* They write for a range of reasons: to argue a position, demonstrate understanding of a topic, and tell stories.
* Students also apply their skills to research, gathering information and learning to evaluate the sources.

Reading

* Rich & Challenging Texts
  * Read closely from rich and challenging 6th grade-level texts, with guidance when text is particularly demanding.
* Making Inferences
  * Cite evidence to explain what a story, play, poem, or informational text says, and what clues can be used to make inferences or "read between the lines."
* Identifying the Main Theme
  * Identify the theme or main idea in both literary and informational text, based on specific details; summarize the text without adding opinions.

Reading

* Tracing an Argument
  * Trace an argument and specific claims in a text, differentiating claims that are supported by reasons and evidence from claims that are not.
* Vocab, Text Meaning, & Tone
  * Read and understand 6th grade vocabulary, and determine how an author's word choices affect the meaning and tone of a text.
* Understanding New Words & Phrases
  * Use different strategies to understand new words and phrases; for example, use context as a clue; use common Greek and Latin roots as a clue; consult a dictionary online or in print.

Writing

* Supporting Arguments
  * Write arguments that state a claim, and support the claim with clear reasons and relevant evidence from credible or trusted sources.
* Informative Papers
  * Write informative or explanatory papers that examine a topic and express information clearly.
  * Use facts, details, and other information to develop the topic.
* Developing Story Elements
  * Write stories or narratives about real or imaginary experiences.
  * Establish a context and develop story elements such as characters, a well-sequenced plot, and descriptive details.

Writing

* Supporting Thinking & Research
  * Include evidence from text to support thinking and research.
* Using Technology
  * Use technology to produce and publish writing, and to work on writing with others.
  * Use a computer keyboard comfortably; type at least three pages in a single sitting.
* Using Basic Grammar Rules
  * Use basic rules of English grammar, capitalization, punctuation, and spelling in written work.

Listening & Speaking

* Class Participation
  * Participate in class discussions about complex 6th grade topics, texts, and issues.
  * Be prepared to refer to evidence in a text when discussing ideas, to restate other people's ideas, and to understand other perspectives.
* Explaining Speakers' Claims
  * Listen to and describe another speaker's arguments and claims, and explain whether the claims are supported by reasons and evidence.
* Giving a Presentation
  * Give a clear, well-organized presentation about an argument or research finding.
  * Support ideas with facts, details, and descriptions.

Research & Inquiry

* Research Projects
  * Conduct short research projects to answer a research question, gathering information from several print and online sources, and refocusing the question when needed.
* Evaluating Sources
  * Evaluate whether sources can be trusted, and paraphrase or summarize the material without copying it.
  * Provide a basic bibliography or list of sources.

Tips & Advice

* ***Give Your Child Space***
  * Find a regular place for your child to read and study. Some people like to read and work in a quiet area while others prefer to hear background music. The most important thing is to make sure that your child has a space where he/she knows he/she can read and study effectively.
* ***Explore Short Novels***
  * Now that your child is in middle school, he/she will be given longer reading assignments, such as short novels. These might be classics you remember, like *The Witch of Blackbird Pond*, or newer works, like the *Hunger Games* trilogy. Try to read these assignments yourself, if you have the time. You'll enjoy them and will be able to discuss them in detail with your child. Ask questions that go beyond just talking about what happened in the book. Ask him/her what motivated different characters or how he/she thinks they felt in different situations.

Tips & Advice

* ***Identify Essential Information While Reading***
  * As the amount of reading material your child is assigned increases, he/she will need to develop new strategies for synthesizing all that he/she is learning. Help him/her figure out how to process information by asking questions such as "What was the main idea in the article you just read?" or "What are the most important things you want to remember about it?" Learning how to identify and focus on essential information will be an important skill throughout his/her life.
* ***Look Up New Words***
  * Keep a dictionary and a thesaurus accessible in the house so that when an unfamiliar word comes up, your child can easily consult these handy reference books. Encourage him/her to always look up words he/she doesn't know.

Tips & Advice

* ***Ask "What If" Questions***
  * Ask "what if" questions about the books and stories your child is reading. What if the author had decided to change a specific plot point? What if a character in a biography had made a different decision at a key moment? Ask questions that prompt your child to think through the motivations behind the actions of different characters.
* ***Join a Book Club Together***
  * Parent-child book clubs are becoming increasingly popular. It takes just a handful of enthusiastic readers and a good book to generate a lively discussion. If doing this with some of your child's friends and their parents doesn't seem practical, you could also try a family book club. Just search parent-child book club to find plenty of online resources offering suggestions.

Tips & Advice

* ***Encourage Debate and Discussion***
  * Encourage discussion as much as possible in your house. Ask your child for his/her opinion about political and social issues, or about books, movies, and TV shows. Listen carefully and prompt him/her to express his/her ideas thoughtfully, backing up his/her claims with evidence. Having dinner together as a family may be harder to do as your child gets older and there are more demands on his/her time, but this is one of the best ways to stimulate these kinds of conversations.
* ***Suggest Fun Writing Projects***
  * Keep an eye out for fun projects that involve writing. If your child made a family tree when he/she was younger, he/she can update it with a companion piece of writing in which he/she provides short biographical entries about each person. He/she can make these as simple or as involved as he/she likes. An especially interesting relative's entry could become a longer profile, incorporating information from an interview with that relative and external published sources.

Mathematics

* **In 6th Grade, students focus on connecting their understanding of multiplication and division to ratios and rates, developing an understanding of rational numbers and the relationships between independent and dependent variables, and writing and solving equations with letters that stand for numbers (variables).**

Ratios & Unit Rates

* Understanding Ratios
  * Understand ratio as a comparison of (exactly) two numbers or quantities.
* Writing Ratios
  * Write and describe a relationship as a ratio.
* Understanding Unit Rates
  * Understand the concept of unit rates: or representing a measurement as a ratio of x to a single unit, or 1.
* Solving Unit Rate & Rate Problems
  * Use tables, diagrams, and/or equations to solve unit rate and rate problems.

Fractions

* Dividing by Fractions
  * Use fraction bars, diagrams, drawings, and/or modeling with materials to understand division of fractions by fractions.
* Solving Word Problems
  * Solve word problems involving division of fractions by fractions.

Negative Numbers

* Recognizing Negative Numbers
  * Recognize a minus (-) directly in front of a number as indicating the number is a negative number (a number less than zero).
  * Understand that on a number line, positive and negative numbers are on opposite sides of 0 (zero).
* Real-World Examples
  * Find real-world examples of negative numbers, including temperature above and below zero, elevation above and below sea level, or credits and debits in a checking account.
* Four-Quadrant Graph
  * Use understanding of negative numbers to plot points in all four quadrants of a four-quadrant graph.

Independent & Dependent Variables

* Algebraic Expressions
  * Write, read and understand algebraic expressions (mathematical statements) in which letters stand for numbers.
  * Understand that solving an equation such as $2 + x = 12$ means "*2 plus what number equals 12*"?
* Equations vs. Expressions
  * Understand the difference between a mathematical equation (like a complete sentence) and a mathematical expression (like a phrase in a sentence).
* Writing Expressions
  * Identify and write equivalent (equal) mathematical expressions in more than one way – for example, $2 (3 + x)$ is the same as $6 + 2x$.
* Whole Number Exponents
  * Write and determine the value of expressions with whole number exponents. For example: $13 + 4^2 = 13 + 16 = 29$.

Geometry

* Area, Surface Area, & Volume
  * Solve real-world and mathematical problems involving area, surface area, and volume of non-circular figures, including cubes, rectangles and rectangular prisms (three-dimensional objects with 6 rectangular faces).
* Graphing Polygons
  * Graph polygons (figures with three or more sides); find side lengths by subtracting coordinates.

Data Analysis

* Mean, Median, & Range
  * Understand the meaning of mean and median as different measures of center and range.
  * Learn how to find mean, median, and range:
    * mean– the average: add data values together; divide by number of values or sample size
    * median– the middle value (half the values are less than the median, and half the values are more than the median): rank data in order from lowest to highest; find the number in the middle
    * range– difference between the largest and smallest values: subtract the lowest value from the highest value. To find mid-range, add the lowest and highest values together, and divide by 2

Tips & Advice

* ***Review New Material Together***
  * As his/her assignments become more complicated, you might start to feel that your child's math homework is outpacing your comfort level. Continue to review math materials with him/her before class and supervise his homework, regardless of your confidence in your own skills. Instead of explaining new concepts, have him/her explain them to you. This will help him/her process and retain the information. If you are both confused, read the material and do your best to think it through and discuss it together. Go to sites like Khan Academy, IXL or XtraMath for extra assistance.
* ***Shop for Bargains***
  * Encourage your child to practice math by helping shop for bargains. Is a gallon of milk a better buy than a half gallon? What about a 16 oz. jar of peanut butter compared to the 12 oz. size? Have him/her divide the cost of bulk-packaged items by the number of single items to find the cost-per-item.

Tips & Advice

* ***Help Your Child Learn How to Study***
  * Help your child learn how to study effectively for math tests. This means working through problems, not just reading through them or skimming the review sheet. In elementary school, knowing the mechanics may be enough for some students. In middle school, many problems now have multiple steps and are best learned through repetition. The more problems your child practices, the more he/she'll internalize the various components. This increases speed and understanding so he/she can be better prepared to adjust the steps when required.
* ***Encourage Persistence***
  * Encourage your child to be persistent whenever a problem seems difficult. This will help your child believe that everyone can learn math.

Tips & Advice

* ***Review Materials Before Class***
  * Sixth grade is a time of transition to middle school, when the comfort of a single teacher and classroom is replaced by a variety of classes and teachers. Sixth grade math is usually taught by a subject teacher instead of by a general-education teacher, as it was in elementary school. You can help promote your child's success in 6th grade math by helping him/her understand both the content and the learning process. Review materials with him/her before class and continue to take an active role in supervising his/her homework.
* ***Break Down Complicated Problems***
  * Have your child discuss a problem that was easy for him/her and another that was difficult. Ask him/her to explain key features of the difficult problem to you. What did he/she find difficult? What was some of important information in the problem? Ask him/her to jot down any part of the problem that he/she still has questions about and ask him/her to share it with the teacher or a classmate the following day.

Tips & Advice

* ***Highlight Math in Sports***
  * Sports provide an engaging way of exploring a host of mathematical concepts, starting with basic addition. Any hard-core baseball fan knows that the game can't truly be appreciated without an understanding of some essential statistics, like a player's batting average and runs batted in. If your child is passionate about a sport, encourage him/her to explore it through math.
* ***Play Games***
  * Play family games that help foster math skills. These include card games like Go Fish, which requires counting and sorting cards into sets, or board games like Monopoly.
* ***Develop a Homework Routine***
  * Help your child develop a consistent homework routine. Make sure that he/she not only reviews that was covered in school that day but also help him/her learn how to keep track of long-term assignments and plan ahead.