

Huaxia Gifted and Talented Prep Level –I

Teacher/教师: Dr. Shu Feng

Register(注册): www.Houstonhuaxia.org Phone (电话): 281-798-3016

Aims: To help students build up cognitive ability, critical thinking, logical thinking and abstract thinking abilities such as classifying and categorizing, recognizing patterns and sequencing, reasoning with shapes and figures, deductive and inductive reasoning, mathematical reasoning and problem solving. By achieving these abilities, students will not only get well prepared for Gifted and Talented (GT) screening tests in their school district, but also build up a solid foundation for academic excellence and success in any assessments.

Contents: The Gifted and Talented Prep Level II course is designed to provide students with the opportunity to study the main contents of a variety of tests used by the Greater Houston area to identify children for GT programs, including but not limited to COGAT, OLSAT, and NNAT and IOWA Assessments. Students will be trained in **Verbal reasoning** (verbal comprehension, aural reasoning and verbal classification), **Arithmetic reasoning** (number analogy, number series and number puzzles) and **Non-verbal reasoning** (Pictorial reasoning and Figural reasoning: picture analogy, figure analogy, picture classification, figure classification, pattern matrix, serial reasoning, pattern completion and spatial visualization).

Students:

1. K and 1st Graders (5 – 7 year old) who plan to take the screening tests for admission into the Gifted and Talented programs or highly-selective public school in Great Houston area.
2. All K and 1st Graders in both Public schools and Private Schools (including those that have already admitted to GT programs) who want to learn and build up strong cognitive ability, critical thinking, logical thinking and abstract thinking abilities.



Shu Feng, MD., Ph.D., is an Assistant Professor at Baylor College of Medicine. She has been passionate about educating the future generations. Dr. Feng has been teaching the weekend Gifted and Talented Preparation courses and basic Math Enrichment courses at Houston Huaxia Chinese School for years. Many students from her GT Prep classes have successfully entered into their local GT programs or highly selected public schools with excellent GT test scores. In her GT and Math classes, Dr. Feng not only teaches students about math and GT knowledge, but most importantly, she strives to inspire their curiosity, promote their critical, logical and abstract thinking abilities and help them build a solid foundation for academic excellence and success in any assessments.

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Students: 1. 2nd and 3rd Graders (8–9 year old) who plan to take the GT screening tests for admission into the Gifted and Talented programs or highly-selective public school in Great Houston area.
2. All 2nd and 3rd Graders in both Public Schools and Private schools (including those that have already admitted to GT programs) who want to learn and build up strong cognitive ability, critical thinking, logical thinking and abstract thinking abilities.

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Teacher: Dr. Shu Feng **Phone:** 832-660-1759 **Email:** shu.feng@houstonhuaxia.org

华夏数学 HuaXia Math
Enrichment, 采用新加坡
数学教材, 用“特定的学
习任务”引入基本的数学
概念, 培养孩子整合、自
测能力; 用“具体→图形
→抽象”方法引导孩子数
学思考、分析能力; 用
“条形表”快速有效地解
决复杂的数学应用问题。

这套学习与训练是“视觉
思维的学习与训练”, 给
您的孩子一个聪明的开始。

HuaXia Math

Enrichment 1st Grade

Instructor:

冯树 博士

Students	1st Grade
Pre-requisites	Kindergarten Math
Prepare for	Huaxia Math Enrichment Grade 2

HuaXia Math Enrichment Grade 1

is designed to teach students mathematics on many fronts, including numbers and number sense, computation (addition, subtraction, multiplication and division), fractions, patterns, geometry shapes, money, measurement, time and simple graphs. Certain GT related content will be introduced to inspire student's critical thinking. This course will help students to move away from counting objects to doing more mental math, understand math concepts, master basic operations, and develop a positive attitude towards math.

Description

Recognize, describe and compare numbers.

Develop addition and subtraction concepts and strategies.

Understand place value.

Add one and two- digit numbers in columns without and with regrouping.

Subtract one and two-digit numbers in columns without and with regrouping.

Solve addition and subtraction word problems.

Recognize number patterns.

Develop multiplication and division concepts.

Measure length weigh with non-standard units and compare objects.

Identify money and solve simple addition and subtraction problems involving money.

Recognize time.

Identify and compare plane and solid shapes.

Describe fractional parts.

Organize and represent data.

HuaXia Math Enrichment 2nd Grade

Instructor:
冯树 博士

Students	2 nd Grade
Pre-requisites	1 st Math
Prepare for	Huaxia Math Enrichment Grade3

Huaxia Math Enrichment Grade 2

is designed to teach students mathematics on many different areas, including numbers and number sense, arithmetic operations (addition, subtraction, multiplication and division), fractions, geometry (two-dimensional and three-dimensional shapes), measurement (length, weight, perimeter, area and capacity), time, and data presentations. Certain GT related content will be involved to inspire student's critical thinking. This course will help students to not only develop a positive attitude towards mathematics, but also build up a solid math foundation.

Description:

- Identify place value and compare numbers.
- Round numbers and define odd and even numbers.
- Add two- and multi- digit numbers without and with regrouping.
- Subtract two- and multi- digit numbers without and with regrouping.
- Apply addition and subtraction concepts and strategies to solve word problems.
- Identify and compare fractions.
- Develop multiplication and division concepts and strategies.
- Apply multiplication and division concepts and strategies to solve word problems.
- Identify patterns
- Tell time and identify relationships of time.
- Determine the value of money and solve word problems involving money.
- Understand Geometry and Spatial reasoning.
- Measure length, perimeter, area, weight, and capacity.
- Organize and use data with graphs.

Hua Xia Math

3rd Grade

Instructor: Ms. Kong
授课老师: 孔红 老师

Target Students: Rising to 3rd Grader
招收学生: 已完成二年级数学的学生

Required Prerequisites:

Master 2-digits addition and Subtraction. Some knowledge of multiplication and division

课前知识预备:

熟练掌握两位数的加、减法运算，初步了解乘、除法的概念。

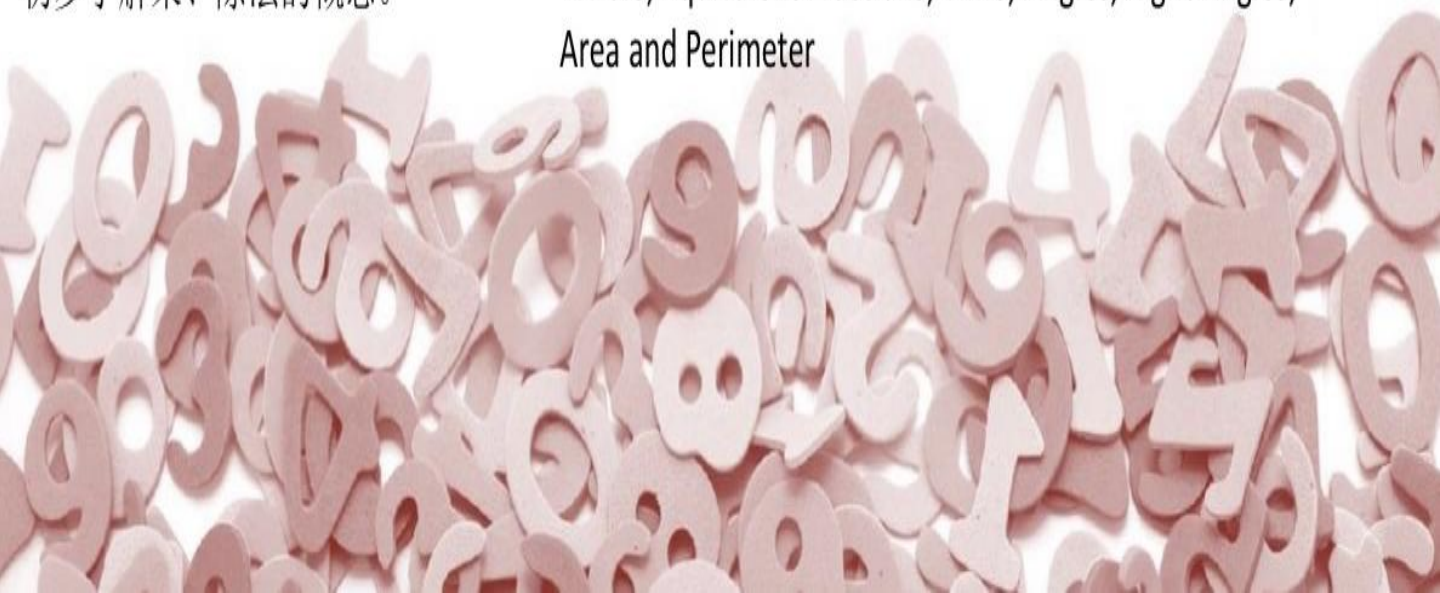
Ms. Kong is a certified Montessori teacher, CDA and Oversea Chinese Teacher Certificate of Accreditation holder. She has been working in Huaxia Chinese School for more than 12 years. She likes to apply her knowledge to create a child friendly environment and a good learning atmosphere for her students. So, the students will accomplish more and build up their positive self-esteem and self-confidence.

3rd Grade Math Course Purpose:

This course aims to assist student grasp all the Math Concepts and knowledge in 3rd Grade STAAR.

Course Syllabus:

Numbers to 10,000; 4-digit addition and subtraction; Multiplying Ones, Tens and Hundreds; Dividing Hundreds, Tens and Ones; Quotient and remainder; Two-step Word Problem solving; Multiplication Table; Money; Mental Calculation; the Units of Length, Weigh and Capacity convert; Bar Graphs; Fraction of a Whole; Equivalent Fractions; Time; Angles, Right Angles; Area and Perimeter



Hua Xia Math

4th Grade

Instructor: Ms. Kong
授课老师: 孔红 老师

Ms. Kong is a certified Montessori teacher, CDA and Oversea Chinese Teacher Certificate of Accreditation holder. She has been working in Huaxia Chinese School for more than 12 years. She likes to apply her knowledge to create a child friendly environment and a good learning atmosphere for her students. So, the students will accomplish more and build up their positive self-esteem and self-confidence.

3rd Grade Math Course Purpose:

This course aims to assist student grasp all the Math Concepts and knowledge in 4th Grade STAAR.

Course Syllabus:

Numbers to 100,000; Multiplication and Division by a 1-digit Number
Multiplication by a 2-digit Number; Factors, Multiplies, Product;
Faction; Tables and Graphs; Measuring Angles; perpendicular and
Parallel Lines; Area and Perimeter; Decimals; The Four Operations of
Decimals; Measures; Symmetry; Solid Figures; Volume

Target Students: Rising to 3rd Grader

招收学生: 已完成三年级数学的学生

Required Prerequisites:

Master 4-digit Number Addition and Subtraction. 3-digit Number
Multiplying or Dividing by a 1-digit
Number.

课前知识预备:

熟练掌握三、四位数的加、减法
运算; 三位数与一位数的乘、除法
运算。



Hua Xia Math

5th Grade

Instructor: Ms. Kong
授课老师: 孔红 老师

Target Students: Rising to 3rd Grader
招收学生: 已完成五年级数学的学生

Required Prerequisites:

Familiar with four operations of Whole Numbers, Fractions and Decimals, etc.

课前知识预备:

熟练掌握整数的加、减、乘、除运算; 分数、小数的加减运算。

Ms. Kong is a certified Montessori teacher, CDA and Oversea Chinese Teacher Certificate of Accreditation holder. She has been working in Huaxia Chinese School for more than 13 years. She likes to apply her knowledge to create a child friendly environment and a good learning atmosphere for her students. So, the students will accomplish more and build up their positive self-esteem and self-confidence.

5th Grade Math Course Purpose:

This course aims to assist student grasp all the Math Concepts and knowledge in 5th Grade STAAR.

Course Syllabus:

Whole Numbers order of Operation; Multiplication and Division by a 2-digit Number; Product of Fractions; Dividing a Fraction by a Whole Number; Fraction Word Problems; Area of Triangle; Ratio; Angles; Approximation and Estimation of Decimals; Conversion of Measurements; Percentage; Average; Rate; Graphs; Sum of Angles of a Triangle; Isosceles and Equilateral Triangles, 4-sided Figures; Volume, etc.



6th Grade Math Credit By Exam

FOR FIFTH GRADERS

MS.YIDONG WU

CBE Math 6th 跳级班 吴亦东老师写给家长的话：

CBE (Math) 是德州教育部认证公立学校的数学考试学分制度。每年5月至7月学生在所在学区通过考试，就能跳级。对于CBE (6) 来说，开学就读五年级的学生，在自己学校学习五年级数学的同时，我们利用课后班的64个小时来完成并提升到六年级水准。如果明年暑假顺利通过考试的话，孩子就能在六年级时跳过六年级数学而直接进入代数预科（七年级数学）。家长们，相信您的孩子是有这个潜力的。我在华夏总校开设这班已经有三年了，每年都看到学生跳级，有个学生还跳了两级，今年的一个学生以满分的成绩跳级，听到家长的感谢声，我就想告诉你们，您的孩子也一定能做到！

LEVEL UP

Following CBE study guide, this course is designed for current 5th graders who are willing and academically prepared to accept the challenge of accelerating 6th grade math.

The course covers the following objectives.

Objective 1: Number Operations

Objective 2: Fraction and Decimal Operations

Objective 3: Ratios, Rates and Percentages

Objective 4: Integer Operations

Objective 5: Financial Literacy

Objective 6: Expressions, Equations, and Inequalities

Objective 7: Multiple Representations

Objective 8: Two-Dimensional Figures and Measurement

Objective 9: Data and Statistics

Middle School Math Competition Class

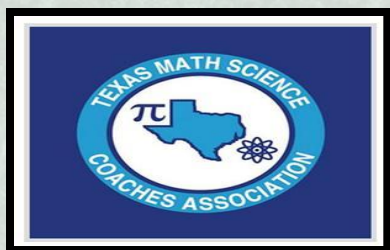
Taught by Baohong Wang 汪宝宏

ABOUT THE CLASS

Course mission: Middle School Math Competition Class provides engaging math programs to middle school students of all ability levels to build confidence and improve attitudes about math and problem solving.



AMC8 and MATHCOUNTS are national mathematics competitions that build problem solving skills. The students will be building their knowledge of Algebra, Geometry, and other subjects. Learning AMC8 and MATHCOUNTS will help apply the knowledge while developing problem solving skills.



TMSCA and UIL are similar as they cover many areas of middle school math. This includes Algebra, Geometry, Probability, and also number skills. The students will become faster at answering problems and find success in school competitions when they learn and practice.

ABOUT THE TEACHER

Mr. Wang 汪宝宏老师 has ten years of coaching experience in AMC8, MATHCOUNTS and TMSCA/UIL. As a head coach of MATHCOUNTS, he led the Willow Wood Junior High School math team to participate in MATHCOUNTS State Competition three times. In the year 2019, the school team was honored the sixth-place spot in the state competition. Now Mr. Wang continues to teach Math in Hua Xia Chinese School for the seventh year with his coaching experience.



We look forward to seeing you in class!

Pre-Algebra

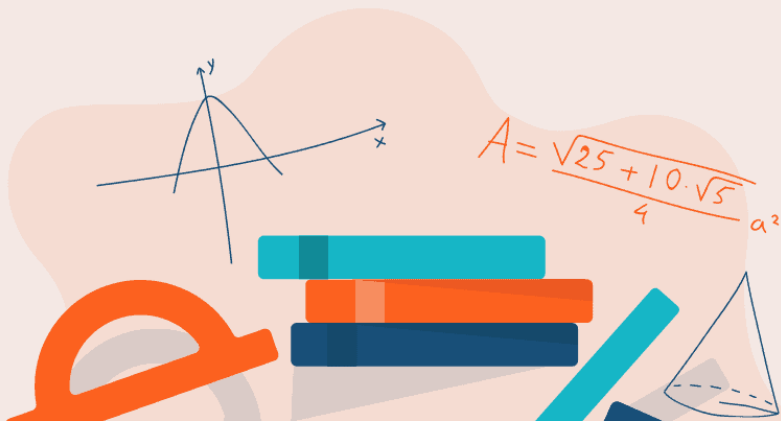
Instructor: 汪宝宏老师

Pre-Algebra includes a thorough exploration of the fundamentals of arithmetic, including fractions, exponents, and decimals. We also introduce beginning topics in number theory and algebra, including common divisors and multiples, primes and prime factorizations, basic equations and inequalities, and ratios. The course also surveys a wide range of topics, including geometry, counting, statistics, and probability.

This course is specifically designed for high-performing students and draws material from many programs for top middle school students in the country. Our philosophy is that students develop more by learning to solve problems they haven't seen before, as opposed to offering repeated drills that students can memorize their way through. In this way, our classes are structured much more like courses at top-tier colleges. Time Commitment: This 36-week course includes 90 minutes in-class and 1-3 hours of homework each week, corresponding to a full year course.

Week Topic will include 36 topics.

Pre-Algebra



Algebra I

Instructor: 俞新天老师

Xintian Yu, a graduate from top Chinese university and a Ph.D. holder from top U.S. university, has strong scientific computing background and work experience in both academia and industry. He has coaching experience in various mathematical competitions including Mathcounts, UIL, AMC8/10, TMSCA, and Mathleague. He also had college teaching experience in the U.S.

Pre-requisites: Pre-Algebra
Students: 6-8 grade

Courses Description

Algebra I makes up the Heart of Algebra in SAT Math. This course helps students to explore the tools of Algebra. Students will learn to comprehend fundamental Algebra Concepts such as Factoring Technique, Completing the Squares, Quadratic Equations, etc. and master the ability to solving problems using Logical Reasoning and Algebraic Skills.



Contents

- Solving Linear Equations
- Functions and Patterns
- Analyzing Linear Equations
- Solving Systems of Linear Equations
- Solving Linear Inequalities
- Polynomials
- Factoring
- Quadratic and Exponential Functions
- Radical Expressions and Triangles
- Rational Expressions and Equations