Hua Xia Abacus & Mental Math
(4 to 6 years old):

Children are going to learn, to write and count numbers properly. This course will help children to develop a conceptual understanding of math, and understand math contents easily such as addition and subtraction by using Chinese Abacus.

Hua Xia Abacus & Mental Math
(7 to 8 years old):

This course will help children to learn how to phrase, write and place value of the numbers. Children will understand the basic concept of the number patterns and rules, how they fit into math, and what those numbers represent; they will take what they have learned from one concept and apply it to the next, such as adding and subtracting two and one digit numbers, two and two digit numbers, and so on.
The state of Texas defines a Gifted and Talented (GT) student as a student who performs at or shows the potential for performing at a remarkably high level of accomplishment when compared to others of the same age, experience, or environment and who exhibits high performance capability in an intellectual, creative, or artistic area, possesses an unusual capacity for leadership, or excels in a specific academic field. GT students need to be identified by various of GT screening tests.

Houston Huaxia Chinese school 2020 Fall Semester Sunday Gifted and Talented Prep Level I course is designed to provide students with the opportunity to learn the main content of a variety of tests used by the Greater Houston area to identify children for GT programs, including but not limited to COGAT, IOWA Assessments, OLSAT, and NNAT. The aim of this course is to help students build up critical thinking, cognitive, logical and abstract thinking abilities such as problem solving, classifying and categorizing, recognizing patterns and sequencing, reasoning with shapes and figures, deductive and inductive reasoning, mathematical reasoning. By achieving these abilities, students will not only get well prepared for GT tests in your district, but also build up a solid foundation for academic excellence and success in any assessments.

The gifted and talented test is measuring thinking ability, not knowledge. The test does not require that the child knows anything but can think through problems. So in this course, instead of telling your children the answers, the teacher will encourage them to think through questions, get their own answers, and explain his or her reasoning. I believe that by this way, they will learn to think, and thinkers will end up knowing a lot more because know how to learn.
The state of Texas defines a Gifted and Talented student as a student who performs at or shows the potential for performing at a remarkably high level of accomplishment when compared to others of the same age, experience, or environment and who exhibits high performance capability in an intellectual, creative, or artistic area, possesses an unusual capacity for leadership, or excels in a specific academic field. GT students need to be identified by various of GT screening tests.

Houston Huaxia Chinese school 2020 Fall Semester Sunday Gifted and Talented Prep Level II course is designed to provide students (2nd and 3rd Graders) with the opportunity to learn the main content of tests used by the Greater Houston Area to identify children for GT programs, including but not limited to COGAT, IOWA Assessments, OLSAT, and NNAT. The aim of this course is to help students build up critical thinking, cognitive, logical and abstract thinking abilities such as problem solving, classifying and categorizing, recognizing patterns and sequencing, reasoning with shapes and figures, deductive and inductive reasoning, mathematical reasoning. By achieving these abilities, students will not only get well prepared for GT tests in your district, but also build up a solid foundation for academic excellence and success in any assessments.

The gifted and talented test is measuring thinking ability, not knowledge. The test does not require that the child knows anything but can think through problems. So in this course, instead of telling your children the answers, I will encourage them to think through questions, get their own answers, and explain his or her reasoning. I believe that by this way, they will learn to think, and thinkers end up knowing a lot more because know how to learn.
HuaXia Math Enrichment
1st Grade

Instructor: 冯树 博士

<table>
<thead>
<tr>
<th>Students</th>
<th>1st Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-requisites</td>
<td>Kindergarten Math</td>
</tr>
<tr>
<td>Prepare for</td>
<td>Huaxia Math Enrichment Grade 2</td>
</tr>
</tbody>
</table>

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 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.

上课时间：
周六 11:00am-12:00pm
周日 1:00pm-2:00pm
Huaxia Math Enrichment 2nd Grade

Instructor: 冯树 博士

Students | 2nd Grade
---|---
Pre-requisites | 1st Math
Prepare for | Huaxia Math Enrichment Grade 3

Description:

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.

- 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.

上课时间:
周六 11:00am-12:00pm
周日 1:00pm-2:00pm
美国教育学硕士，持有德州认证标准全科老师（EC-6）及标准中文老师（EC-12）教师资格证。擅长结合中美两国的教育理念。教学中强调用美式课堂活跃的教学手段调动学生积极性并发展批判性思维，同时传承中式教育中对学生的高期待、严要求。

Introduction of Instructor: Ms. Li has a master’s degree on education and she is holding two Texas Standard Teaching Certificates, Core Subject (EC-6) and Chinese (EC-12). Ms. Li is very good at combining the American and Chinese pedagogies. Ms. Li has a very high expectation for her students. She loves using strong teaching strategies to engage her students and help them learn critically.

课程内容：乘法、除法、度量衡、分数及分数加减法、时间及时间加减、简单平面几何。

Content: Multiplication, division, measuring, fraction/ fraction addition and subtraction, time/ time addition and subtraction, simple geometry.

课程特点：英文授课。以新加坡数学的教材为基本进度，运用美式课堂的教学手段，中西结合地为孩子讲授数学课。作为美国学校数学课堂以外的一个提高性补充。

Features: Use English to deliver the lessons. As a proud Chinese parent, Ms. Li has a very high expectation for her math students. She will use Primary Mathematics as textbooks and American pedagogies as teaching strategies.
• Use “Specific Learning Tasks” to introduce basic mathematical Concepts and cultivate students’ ability to learn assessment and consolidation.
• Use “Concrete-Pictorial-Abstract Approach” to guide and develop children’s logical and critical thinking.
• Use “Modeling Method” to visualize and solve mathematic problems quickly and efficiently.
**HuaXia Math Enrichment**

**5th Grade**

**Instructor:** 唐军平 博士

### Target Students:

5th to 6th grade

<table>
<thead>
<tr>
<th>Required Prerequisites</th>
<th>Have knowledge of arithmetic operations (addition, subtraction, multiplication, and division) of natural and whole numbers, and some basic knowledge of fractions.</th>
</tr>
</thead>
</table>

### Course Syllabus

The following concepts and skills will be studied in this course:

1. **Integers and number lines:**
   - comparison of integers;
   - addition, subtraction of integers;
   - multiplication and division of integers and sign rules.

2. **Fractions:**
   - equivalent fraction, the simplest form;
   - comparison of fractions;
   - addition of fractions;
   - subtraction of fractions;
   - multiplication of fractions;
   - division of fractions.

3. **Concept of complex fractions and their operations.**

4. **Mixed numbers and concept of improper fractions; operations of mixed numbers.**

**Saturday、Sunday：11:00am-12:30pm**
**HuaXia Math Enrichment 6th Grade**

**Instructor:** 唐军平 博士

**Dr. Tang** has background in Physics, Biophysics. He obtained his Ph. D in engineering from UT Austin.

**Target Students:** 6th grade – 7th grade

**Contents**

**Percents**
1) Concept of percents
2) Converting fraction to percents
3) Converting decimals to percents
4) Converting percents to fractions or decimals
5) Operations of percents
   Word problems

**Ratio, Rate, and Proportion**
1) Concept of ratio
2) Concept of rate
3) Concept of proportion
4) Properties of proportion

**Required Prerequisites**
Have knowledge of concept and operations (addition, subtraction, multiplication, and division) of fractions. Have taken the 5th grade math.

介绍百分数，以及与分数，小数的关系以及互相转换。详细讲解rate, ratio, proportion的区别与联系，使得学生对于有理数与无理数有清晰的理解。特别侧重在有关文字题的分析与解题技巧，进而为学习实数的概念，以及代数预修 (Pre-algebra) 打下牢固的基础。

**Saturday、Sunday:** 12:30pm-2:00pm
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