#### Introduction to the Abacus and Mental Arithmetic Course

The instruction of Abacus and Mental Arithmetic, based on Abacus Calculative Theory, teaches students to visualize the abacus in their minds. Through a series of training lessons, a conditional reflex is formed mentally, and the students will learn these intellectual skills and rapid calculation methods. During practice, the children's ears, eyes, fingers and brains are working together simultaneously, carefully looking up or listening to questions, manipulating an actual abacus or picturing one mentally, and remembering the answers to every step in the problem's solution. This is extremely useful and effective training which improves a child's focusing ability and strengthens the memory. The learning process involves doing mental exercises which stimulate the brain to react quickly, expanding memory capacity to store abacus picture information when students are doing mental practice. The whole mental arithmetic process reflects a dynamic of manipulating an abacus in the mind by constantly replacing abacus pictures of answers for every step of a question, mentally. It benefits the brain's concentration, memorization, imagination, and logical thinking. Like a golden key which unlocks intelligence development, mastering the abacus and mental calculation not only helps in improving math skills, but also provides a boost to the study of other academic subjects throughout any student's academic career.

The golden age for learning Abacus and Mental Arithmetic is for children from K to G3. This program will be a small size class which has no more than 12 students. We use bilingual teaching with English as the main language. We use *Abacus Class Textbook 1* in fall semester, and use *Abacus Class Textbook 2* in spring semester. The abacus class is offered 30 lessons, and each lesson is 75 minutes.

## **Sessions**

Time: 10:00-11:15am, online live sessions on Sundays except holidays

First session: Sep.19th, 2021

#### Tuition

Each school year: \$380 (\$420 for student not enrolled in SCS Chinese Class)

\* Tuition is due by the first session. Late tuition payment will have an additional late charge \$10 per week for every week after the due date. We do not offer single semester registration.

Registration here

#### **Materials**

Abacus Student Kit is a combination of a few right Abacus Material / Abacus Study Material for children to help learn Abacus Math and practice the skills of Mental Arithmetic. A perfect combination of two books each semester, which includes a book to learn and know the method of the other book to practice and master the skills for the same. (continue on the next page...)

In Fall Semester, we offer ABACUS STUDENT KIT 1 (\$40), which includes:

- 1 \*13 Rods Student Abacus (\$15)
- 1\* Abacus Class Textbook 1 (\$12)
- 1 \*Abacus Class Workbook 1 (\$12)
- 2 \*Abacus Imaging Sketchbook (\$5/each)

In Spring Semester, we offer ABACUS STUDENT KIT 2 (\$30), which includes:

- 1\* Abacus Class Textbook 2 (\$12)
- 1 \*Abacus Class Workbook 2 (\$12)
- 2 \*Abacus Imaging Sketchbook (\$5/each)

Note - Textbook cost is non-refundable, not included in tuition. Cash Only.

Contact: Joy Zou (Email: joyz2u@gmail.com / Wechat: 17091300523)

## 珠心算初级班简介

珠心算教育就是以算盘为工具,根据珠算的算理,同过系统科学的教学方法,把拨珠的操作活动内化为脑珠算(即在脑子里想象拨珠),而后形成条件放射,直接心算得出结果的一种速算方法和智力技能。儿童在珠心算训练过程中,手、眼、耳、口和左右两个半脑同时运用,无论拨珠运算,还是看心算听心算,都需要学生注意力高度集中,既要听清,、看清数、又要记住每一步的心算结果,储存以算珠图像为形式的信息,整个运算过程记的都是不断更迭的"珠算图",所反映的是整个拨珠计算的动态过程,促使儿童在思维力、注意力、记忆力、想象力和感知力等方面受到反复的有效锻炼,从而加强了思维的灵活性、深刻性、敏捷性、促进智力水平的提高,达到"一科学习,多科受益,终身受益"的启智效果。

珠心算初级班适合K-G3的儿童学习。我们实行小班教学,一个班最多不超过12个学生。采用英语为主中文为辅的双语教学。秋季学期的内容是儿童珠心算教材第一册。 春季学期是儿童珠心算教材第二册。初级班课程共有30堂课,每堂课75分钟。

## 上课时间:

每星期天10:00-11:15am, 在线上课, 节日除外

第一课:2021-09-19

# 学费(不含教材费用):

一学年:\$380 (\$420 如果学生未注册SCS中文课)。不提供单学期注册。 学费在开学第一天必须付清。如果晚交,必须额外每星期交\$10。

请在此注册

### 教材教具:

Abacus Student Kit 用于帮助儿童学习珠算和练习心算技能。 每学期两本书的完美结合 ,其中包括一本课程教材和一本同步配套练习册,以练习和掌握相同的技能。

在秋季学期, 我们提供 ABACUS STUDENT KIT 1(40美元), 其中包括:

- 1. 1\*学生算盘(\$15)
- 2. 1\* 珠心算教材 1(\$12)
- 3. 1\*珠心算练习册 1 (\$12)
- 4. 2\*珠心算画书本(\$5/每本)

在春季学期, 我们提供 ABACUS STUDENT KIT 2(\$30美元), 其中包括:

- 1. 1\* 珠心算教材 1(\$12)
- 2. 1\*珠心算练习册 1 (\$12)
- 3. 2\*珠心算画书本(\$5/每本)

注 - 教材费用不予退还, 只收现金。

联系人: Joy Zou (Email: joyz2u@gmail.com / Wechat: 17091300523)

# Sierra Chinese School 2021-2022 Abacus Beginner Class Teaching Plan

Fall Semester (topics are tentative, subject to change without notice)

9/19/2021 Week 1 // Introduction to the Abacus, Learning to Count on the Abacus

9/26/2021 Week 2 // Vertical form of Abacus Question, Addition and Subtraction within 4

10/3/2021 Week 3 // Learning with 5-9 and 0, Direct and Simple Addition and Subtraction 5-9

10/10/2021Week 4 // Review Simple addition and Subtraction (#'s 0-9)

10/17/2021 Week 5 // Intro. to 2-digit numbers, Simple Addition and subtraction with 2-digit numbers

10/24/2021Week 6 // Review Simple Addition and subtraction

10/31/2021Week 7 // Intro. to Complementary Numbers with Respect to 5, Grouping FIVES +4

11/7/2021 Week 8 // Addition and subtraction -Grouping FIVES +3, 2, 1

11/14/2021Week 9 // Review Addition and subtraction - Grouping FIVES

11/21/2021 No school, Thanksgiving break

11/28/2021 Week 10 //Addition and subtraction -Ungrouping FIVES -4

12/5/2021 Week 11 // Addition and subtraction -Ungrouping FIVES -3,2, 1

12/12/2021 Week 12 // Review Addition and subtraction -Ungrouping FIVES

12/19/2021 Week 13 // Review Addition and subtraction 1-digit and 2-digit numbers

12/26/2021 No school, Winter break

Spring Semester (topics are tentative, subject to change without notice)

1/9/2022 Week 14 // Review Textbook 1, Intro. To Combinations of the Ten, ADD-Complementary Numbers Respect to 10 (+9)

1/16/2022 Week 15 // ADD-Complementary Numbers Respect to 10 (+5,9)

1/23/2022 Week 16 // ADD- Complementary Numbers Respect to 10 (+8,7,6)

1/30/2022 Week 17 // ADD-Complementary Numbers Respect to 10 (+4,3,2,1)

2/6/2022 Week 18 // Review ADD-Complementary Numbers Respect to 10

2/13/2022 Week 19 // Subtract- Complementary Numbers Respect to 10 (-5,9)

2/20/2022 No school, President Week

2/27/2022 Week 20 // Subtract- Complementary Numbers Respect to 10 (-8,7,6)

3/6/2022 Week 21 // Subtract- Complementary Numbers Respect to 10 (-4,3,2,1)

3/13/2022 Week 22 // Review Subtract- Complementary Numbers Respect to 10

3/20/2022 Week 23 // Mul-digit Number Addition and Subtraction -Simple

3/27/2022 Week 24 // Mul-digit Number Addition and Subtraction - ONE'S ,TEN'S Column

4/3/2022 Week 25 // Mul-digit Number Addition and Subtraction - Each Place

4/10/2022 No school, spring break

4/17/2022 Week 26 // Mul-digit Number Addition and Subtraction - Grouping FIVES and Ungrouping FIVES

4/24/2022 Week 27 // Mul-digit Number Addition and Subtraction - Continued Carrying or Borrowing a 1 from Each Place

5/1/2022 Week 28 // Review Mul-digit Number Addition and Subtraction

5/8/2022 Week 29 // Review ADD/ Subtract -Complementary Numbers Respect to 10, Simple/ Group Addition and Subtraction Mul-digit Number Parent info meeting for next year.

5/15/2022 Week 30 Final exam.