

# 2015 World City Cup

## Abacus, Mental Arithmetic & Mathematics Competition Rules (USA)

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### Objectives

We celebrate the rich cultural heritage of the abacus through the World City Cup Abacus, Mental Arithmetic, and Mathematics Competition. Our goals are to:

- (1) Share teaching and learning experiences across an international network of abacus educators and students.
- (2) Engage and inspire students through the spirit of competition.
- (3) Encourage cultural exchanges and foster lasting friendships among members from the participating countries.

|                      |   |
|----------------------|---|
| <b>Date</b>          | July 24-26, 2015  |
| <b>Location</b>      | USS Hornet Museum<br>707 West Hornet Avenue<br>Alameda, CA, 94501, U.S.A.   |
| <b>Sponsor</b>       | Chinese American Abacus Association   |
| <b>Co-Sponsors</b>   | National Council of Associations of Chinese Language Schools<br>Association of Northern California Chinese Schools<br>Chinese Academy of the Abacus<br>Taiwan Chamber of Commerce Abacus Promoting Committee<br>All participating organizations |
| <b>Media Sponsor</b> | World Journal San Francisco   |

**Eligibility:** Any student currently enrolled in abacus associations worldwide may compete.

### Competing Teams, Groups, & Competition Content

- (1) Competing teams: (in alphabetic order)
  - a. District I Representatives: Cities or regions in China, Japan, Korea, Malaysia, and Taiwan.
  - b. District II Representatives: Cities or regions in Canada, Hong Kong, India, Macau, Singapore, USA, and Vietnam.
- (2) Groups within each competing team:
  - a. Students of each competing team are divided according to their skill levels into one of three Groups: A, B, or C. Each Group is further subdivided into school grades 1, 2, 3, 4, 5, 6, Middle School (grades 7, 8, & 9), and Open Group (grades 10 and above). Kindergarteners will be moved into Grade 1 and placed in Group C.
- (3) All students in Groups A, B, and C will participate in the entire competition, which consists of three (3) categories: Mental Arithmetic, Abacus, and Mathematics. Please refer to Appendix A found at the end of this document for further details.

### Scoring

- (1) Each category: Abacus, Mental Arithmetic, and Mathematics, will be scored separately. The sum of the scores of the three (3) categories constitutes the Total Score.
- (2) In the event where more than one competitor achieves the same Total Score, the involved competitors' lowest score, regardless of the category it was from, will be compared. The competitor whose lowest score is highest among the other involved competitors will be awarded the highest rank and so forth.
- (3) If the competitors tie in all three categories, an arbitrary drawing will be conducted to determine the ranks.

## Awards

|                       |  |
|-----------------------|--|
| <b>Grand Champion</b> | Awarded to the competitor in Group A or B judged to have the highest score in their Region (I or II) and grade level                       |
| <b>Gold Medal</b>     | Awarded to the top 30% of competitors in each grade level per participating team.  |
| <b>Silver Medal</b>   | Awarded to the competitors in each grade level per participating team, excluding the Grand Champion Award and Gold Medal Award recipients. |

## Registration Fee(s)

- (1) All registration materials must be postmarked or received by **June 08, 2015**.
- (2) Registration fee(s) are non-refundable. Included in the fee(s) are an event t-shirt, boxed lunch, formal buffet dinner, admission into the museum, activities aboard the USS hornet, and the Awards Ceremony.

| Registration Fee Details       |   |
|--------------------------------|---|
| <b>\$120.00 USD</b> per person | Competing students, teachers, team leaders, and teaching assistants |
| <b>\$90.00 USD</b> per person  | Accompanying family members of competing students and teachers      |

- (3) Payment method:
  - a. Local registrants shall submit their fee(s) in form of a check payable to CAAA.
  - b. Overseas registrants shall submit their fee(s) by bank wire transfer to:

|                 |  |
|-----------------|--|
| Bank Name       | Bank Of America                            |
| Routing Number  | 026009593                                  |
| Account Number  | 000663628382                               |
| Account Name    | Chinese American Abacus Association        |
| Account Address | 1363 Jacklin Road, Milpitas, CA 95035, USA |
| SWIFT#          | BOFAUS3N (In US Dollars)                   |

## Grading Criteria

Please follow these rules when completing your examination. No points will be awarded for any violation of these rules:

### *Abacus and Mental Arithmetic*

- (1) Write your answers in Arabic numerals clearly. Unclear or ambiguous writing is counted as invalid.'
- (2) Regardless of whether the correct answer is written, a question with two or more answers is void.
- (3) Use a "comma(,)" to separate every third digit in a whole number that has 4 or more digits.  
Example: 5,384,200
- (4) Write two "zeros" or a "dash (-)" (also called a hyphen or minus) after the "decimal point (.)" for monetary (\$) problems. Examples: \$4,832.00 or \$4,832.-
- (5) Draw "double lines" to cross out the entire answer if you discover a mistake, then write the correct answer under, or next to it. DO NOT USE an eraser or correction fluid to cover the wrong answer or to make a partial correction.  
Examples: ~~\$34.78~~ \$34.79 (valid); ~~\$34.78~~ \$34.79 (invalid)
- (6) Answers must be written in the assigned space on the answer sheet.
- (7) **Group A students:** For Multiplication and Division in Abacus, round monetary calculations to the second place after the decimal point. For non-monetary calculations, round to the fifth place after the decimal point. Example: 2,745.12345

## **Mathematics**

- (1) Besides the answer sheet, a blank piece of paper will be provided to be used as scratch paper.
- (2) Write your answers in the assigned space on the answer sheet. No points will be awarded for violating this rule, nor will points be given for answers written on the scratch paper.
- (3) No points will be awarded for any questions that have two answers.
- (4) You may use the abacus as a calculating tool. Calculators are not allowed.
- (5) Students in School Grades 7 and above may use abacus during the mathematics section.

## **Team Participation at Awards Ceremony Banquet**

- (1) To celebrate each city's talents and the competitors' achievement, each participating team is invited to perform during the Awards Ceremony Banquet.
- (2) Each group of performers will be allotted 3 to 5 minutes to showcase their talents that may be representative of their culture and traditions.
- (3) Please provide CAAA with the name and content of your act in advance.

## **Further Information**

|                |  |             |                |
|----------------|--|-------------|----------------|
| <b>Website</b> | <a href="http://caaa-abacus.org/world/index.html">http://caaa-abacus.org/world/index.html</a><br><a href="http://caaa-abacus.weebly.com/">http://caaa-abacus.weebly.com/</a> |             |                |
| <b>E-mail</b>  | caaa.us@gmail.com  |             |                |
| <b>Phone</b>   | Overseas Inquiries   | Ms. Lin     | 1-510-398-7268 |
|                |  | Ms. Huang   | 1-510-623-0978 |
|                | USA Inquiries  | Ms. Ta      | 408-209-8510   |
|                |  | Ms. Lin     | 510-861-7357   |
|                |  | CAAA Office | 408-263-7966   |

## **2015 World City Cup** **Abacus, Mental Arithmetic & Mathematics Competition** **(Appendix A: Group, Categories, Content)**

| Group    | Category                             |                        | Content & Degree of Difficulty  | # of Questions | Score | Time Limit |
|----------|--------------------------------------|------------------------|---|----------------|-------|------------|
| <b>A</b> | <b>I</b><br><b>Mental Arithmetic</b> | Multiplication         | Questions of 4-, 5-, 6- and 7-digit whole numbers<br>Examples: (25 questions of each)<br>2digits $\times$ 2digits , 3digits $\times$ 2digits ,<br>3digits $\times$ 3digits , 4digits $\times$ 3digits, etc. | 100            | 100   | 3 minutes  |
|          |                                      | Division               | Questions of 4-, 5-, 6- and 7-digit whole numbers<br>Examples: (25 questions of each)<br>4digits $\div$ 2digits, 5digits $\div$ 3digits, 6digits $\div$ 3digits,<br>7digits $\div$ 4digits, etc.            | 100            | 100   | 3 minutes  |
|          |                                      | Addition & Subtraction | \$ Monetary questions for ten 3-digit numbers, ten 3- and 4-digit numbers, ten 4-digit numbers, ten 4- and 5-digit numbers, and ten 6-digit numbers (10 questions of each)                                  | 50             | 100   | 3 minutes  |

|          |                                    |                               |   |    |     |                       |
|----------|------------------------------------|-------------------------------|---|----|-----|-----------------------|
| <b>A</b> | <b>II<br/>Abacus</b>               | Multiplication                | Questions of 6- and 7-digit whole numbers;<br>\$ Monetary, non-monetary and mixed decimal questions for 8- and 9-digits numbers<br>Examples: (5 questions of each)<br>3digits x 3digits, 4digits x 3digits (Whole number questions)<br>4digits x 4digits, 4digits x 5digits, etc.(\$ Monetary, non- monetary and mixed decimal questions) | 20 | 100 | <b>6<br/>minutes</b>  |
|          |                                    | Division                      | Questions of 5- and 6-digit whole numbers<br>\$ Monetary, non-monetary and mixed decimal questions for 7-, 8- numbers Examples: (5 questions of each)<br>5digits ÷ 2 digits , 6digits ÷ 3digits, 7digits ÷ 3digits, 8digits ÷ 3digits, etc.   | 20 | 100 |                       |
|          |                                    | Addition & Subtraction        | \$ Monetary questions of ten 6- and 7-digit mixed decimal; \$ Monetary questions for ten 7- and 8-digit mixed decimal (5 questions of each)   | 10 | 100 |                       |
|          | <b>III<br/>Mathematics</b>         | Multiple Choice               | The questions for each grade rest upon referencing curriculum standards of different countries and regions.   | 15 | 150 | <b>15<br/>minutes</b> |
|          |                                    | Fill Ins                      | Middle school and Open groups do abacus applications.   | 15 | 150 |                       |
| <b>B</b> | <b>I<br/>Mental<br/>Arithmetic</b> | Multiplication                | 2digits x 1digit , 3digits x 1digit<br>Whole numbers questions (25 questions of each)   | 50 | 100 | <b>3<br/>minutes</b>  |
|          |                                    | Division                      | 3 digits ÷ 1digit, 4 digits ÷ 1 digit<br>Whole numbers questions (25 questions of each)   | 50 | 100 |                       |
|          |                                    | Addition & Subtraction        | Five 2-digit numbers (20 questions), six 2-digit numbers (10 questions)<br>Seven 2-digit numbers (10 questions), eight 2-digit numbers (10 questions)   | 50 | 100 |                       |
|          | <b>II<br/>Abacus</b>               | Multiplication                | Questions of 4-, 5-, 6- and 7-digit whole numbers<br>Examples: (5 questions of each)<br>2digits x 2digits, 2digits x 3digits, 3digits x 3digits, 4digits x 3digits, Whole number questions  | 20 | 100 | <b>6<br/>minutes</b>  |
|          |                                    | Division                      | Questions for 4-, 5-, and 6-digit whole numbers<br>Examples:<br>4digits ÷ 2digits (10 questions)<br>5digits ÷ 2digits, 5digits ÷ 3digits (5 questions)<br>6digits ÷ 3digits, 6digits ÷ 4digits, etc. (5 questions)  | 20 | 100 |                       |
|          |                                    | Addition & Subtraction        | \$ Monetary questions for ten 2-4 digits mixed decimals (5 questions)<br>\$ Monetary questions for ten 3- and 4-digit mixed decimals (5 questions)  | 10 | 100 |                       |
|          | <b>III<br/>Mathematics</b>         | Multiple Choice               | The questions for each grade rest upon referencing curriculum standards of different countries and regions.   | 15 | 150 | <b>15<br/>minutes</b> |
|          |                                    | Fill Ins                      | Middle school and Open groups do abacus applications.   | 15 | 150 |                       |
| <b>C</b> | <b>I<br/>Mental<br/>Arithmetic</b> | Mental Addition & Subtraction | Questions of five one-digit whole numbers   | 50 | 100 | <b>3<br/>minutes</b>  |
|          |                                    | Mental Addition & Subtraction | Mixed questions of two one-digit whole numbers and two 2-digit whole numbers  | 50 | 100 |                       |
|          |                                    | Mental Addition & Subtraction | Mixed questions of one one-digit whole number and three 2-digit whole numbers   | 50 | 100 |                       |
|          | <b>II<br/>Abacus</b>               | Addition & Subtraction        | Questions of seven 2-digits whole numbers.  | 30 | 300 | <b>6<br/>minutes</b>  |
|          | <b>III<br/>Mathematics</b>         | Multiple Choice               | The questions for each grade rest upon referencing curriculum standards of different countries and regions.   | 15 | 150 | <b>15<br/>minutes</b> |
|          |                                    | Fill Ins                      |   | 15 | 150 |                       |