

ADDITIONAL INFORMATION FOR COACHES / CONTEST DIRECTORS

• **PREPARATION FOR CONTEST.** Read and follow all instructions provided in the “Information Pertaining to All Contests” section of the *PSIA Academic Handbook*. Observe and practice with students all rules and procedures delineated in the “Instructions to the Contestant” and in the “Checklist for Contest Directors” and the “Checklist for Graders.” Preparation for the Art Memory Contest should include instruction using the *Art Smart Bulletin*, available only through TuneIn. Providing access to the small color pictures is also helpful. (An order form for TuneIn can be found in the member packet sent to all enrolling schools. If further ordering information is needed, please contact TuneIn at 800 488-6346.

Further study of individual paintings may be found at the websites for each museum. Field trips to the museums can be excellent educational enrichment activities to solidify learning about these artworks.

• **PERSONNEL NEEDED FOR CONTEST.**

1. *Contest Director.* May be a knowledgeable coach of contestants in the contest.
2. *Assistant Director.* A knowledgeable coach from a different school other than director’s.
3. *Graders.* Director and assistant director may also serve as graders. To expedite the grading process, provide at least two graders for every 10 papers.

• **ADDITIONAL MATERIALS AND EQUIPMENT NEEDED IF DIRECTING THIS CONTEST.**

1. Arrange to have a set of the 11 x 14 prints, printouts from the internet, slides, or overhead transparencies available for the contest. (Small prints may be used if no others are available.)
2. Any visual device may be used to display pictures.
3. A copy of “The Official List” from the *Art Smart Bulletin*.

• **SCORING (ADDITIONAL INFORMATION).** Graders should each use a different color pen or pencil to mark papers and place their initials at the bottom of the test answer sheet to indicate that they have graded the paper. **Remember to ADD 5 points for every completely correct answer and 3 points for a correct answer that just has spelling, capitalization, or punctuation errors or the omission of articles (a, an, the). A test item that has any other words missing is incorrect and does not receive 3 points.** Bring extra pens and pencils to grading.

If a contestant scores 100% in this contest at the District or State level, Contest Directors should notify the state office by faxing the form found in the index of the *PSIA Academic Handbook*.

ADDITIONAL INFORMATION FOR COACHES / CONTEST DIRECTORS

• **PREPARATION FOR CONTEST.** Read and follow all instructions provided in the “Information Pertaining to All Contests” section of the *PSIA Academic Handbook*. Observe and practice with students all rules and procedures delineated in the “Instructions to the Contestant” and in the “Checklist for Contest Directors” and the “Checklist for Graders.” Preparation for the Calculator Contest should include practice using a calculator that is familiar to contestants. Calculator tests from previous years of competition (available on PSIA order forms) provide multiple practice problems for students. No specific calculator is recommended; however, the list to the right should give coaches a starting point.

• **PERSONNEL NEEDED FOR CONTEST.**

Contest Director and Assistant Director from two different schools, each knowledgeable of contest construction and administration.
Graders. Director and assistant director may also serve as graders. To expedite the grading process, provide at least two math certified graders for every 15 papers.

• **SCORING (SUPPORT INFORMATION).**

+5 for each correct answer; -2 for each incorrect answer, and erased answer or marked-through answer that does not result in a correct answer. REMEMBER, contestants are **NOT** allowed to skip items on this test without a 2-point penalty for each skip. Graders should each use a different color pen or pencil to mark papers and place their initials at the bottom of the test answer sheet to indicate that they have graded the paper.

CALCULATOR SUGGESTION LIST

Hewlett Packard:
32S
32SII
Sharp: # EL531D (Series)
Texas Instruments:
TI-36 (Series)
TI-83 (Series)
TI-84 (Series)
Radio Shack:
EC-4021
EC-4031

ENTRIES. As many as THREE students from EACH GRADE LEVEL (grades 6, 7 and 8) OR ages 11, 12, and 13 by Sept. 1 of the current school year, if in an ungraded school, may be entered in the Calculator Applications District Contest from each school. Designated adults from each school select contestants to represent the campus at the District Meet based on their abilities and interest in math calculations, as well as other factors, which are decided upon by each school. Each grade level is judged separately in contest.

• **ADVANCING TO STATE.** 4 must compete in a grade for 2 to advance (See page 8 for complete rules.)

• **NATURE OF THE CONTEST.** The contest presents 80 problems in straight-forward numerical calculation, in calculations based upon geometrically presented problems, and in word problems. Both accuracy and speed are factors in the competition. Any silent, hand-held calculator that the student is comfortable using may be used in the contest and should be brought to competition. The geometric problems involve knowledge of formulas for simple figures such as circles, squares, rectangles, and right triangles. The word problems require application of appropriate mathematical skills and practical knowledge to real-life situations.

Below we show representative problems of medium difficulty from each category:

45. $(9.17 \times 10^7) (3.37 \times 10^2)$

$$\frac{(6.96 \times 10^6) (7.12 \times 10^{-1})}{45} = \underline{\hspace{2cm}}$$

46. $\frac{1}{2.21} + \frac{1}{7.83 + 3.72}$

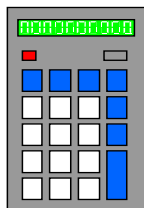
46 = $\underline{\hspace{2cm}}$

47. Three times a certain number, plus 129 squared equals 19,208. What is the number?

47 = $\underline{\hspace{2cm}}$

48. Lazarus can walk 4.2 miles per hour. If he goes to the rich man's house, which is 2.8 miles away from where he lives, to beg for some food twice a day, how much time will he spend walking to and from the house in one week?

48 = $\underline{\hspace{2cm}}$ hours



signal is given. The contest director will tell contestants their ID numbers, usually during roll call. (Alternates taking the place of absent registered contestants should be sure to let the contest director know as they enter the room to save time in roll call.) No alarm watches or other devices that emit sound are allowed in the contest room.

TIME ALOTTED. Contestants will have 30 minutes beginning at the start signal. No time warning will be given. Contestants will remain quietly in their seats until the time has expired.

MARKING ANSWERS. Contestants may write on the test paper, but only the answer should be written in the answer space. Any marking or erasure in the answer space will constitute an attempt. Answers may be written in decimal or in powers of 10 notation of the form, 1.23×10^{-6} . Except in the integer and dollar sign problems, answers should be written with three significant digits only, with plus or minus one digit error in the third significant digit permitted. Integer problems require answers written as an integer, and no error is permitted. Dollar sign problems should be answered to the exact cent, but plus or minus one cent error is permitted. Answers should be given in the units specified on the answer blank, if a unit is required, and with the correct sign. All test questions up through the last one attempted will be scored.

• **SCORING.** Add 5 points for each correct answer. Subtract 2 points for each wrong answer, every skipped test question, and for each answer that was marked through or erased, without resulting in a correct answer.

• **VERIFICATION PERIOD.** No pens, pencils, papers, cell phones, or any other items should be in contestants' area while tests and answer sheets with keys are reviewed. Contestants and ONE coach OR parent OR adult have 15 minutes to check the computation of scores and ask questions about items counted incorrect. If the contest is held before **March 29**, tests must be turned back in to the contest director. Contestants will be disqualified from the contest should the paper be taken from the room prior to this date. After verification has been completed, awards will be issued. (At State, medals will be awarded through 6th place.)

• **MATERIALS.**

Last year's PSIA Calculator Applications tests and answer keys, plus tests from previous PSIA contests, are included in the PSIA Academic Study Materials Booklets, which may be ordered from the PSIA office. A PSIA Study Materials Order Form and Tests Order Form for these booklets are included in the appendix of the handbook and on the web.

A Commonly Asked Question

Q. If the answer to a question is 3.68×10^1 , would the answer be correct if it were given as 3.68×10 with the (1) omitted?

A. 3.68×10^1 , 3.68×10 and 36.8 are correct answers. $3.68E1$, $3.68 \cdot 10^1$ and 36.8×10^0 are incorrect.

• **WHAT HAPPENS IN THE CONTEST.** The contest director will announce the time and place that contestants and one adult should report for verification of the scoring of tests. Contestants will be assisted by the director and assistant(s) in clearing all calculator memories and turning calculators to the "off" position. Tests will be distributed to contestants face up, and contestants will be instructed to write their grade levels and their contestant ID numbers in the spaces provided on the front cover. Contestant must not open the test until the start