

MathMatters Competition
Beehive Science and Technology Academy
November 12, 2022



4th Grade
TEST BOOKLET

Instructions:

- 1) Do not open your testing booklet until instructed to do so.
- 2) You will have 40 minutes to complete 30 questions. Each question is multiple choice with answer selections a, b, c, d.
- 3) All answers must be indicated by filling in the circles on the **answer sheet**. Be sure to fill in each circle completely. No answers written in the test booklet will be counted.
- 4) Each question is worth 1 point, except for the last 5 questions which are worth 2 points. Remember that this is a competition, not a test. There is no failing or passing score.
- 5) Calculators are **not** allowed.



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<p>1) $7 \times 8 = ?$</p> <ul style="list-style-type: none">a) 28×2b) 34×2c) 14×3d) 16×3	<p>5) $10000 \div 200 \times ? = 10000$</p> <ul style="list-style-type: none">a) 100b) 200c) 1000d) 2000
<p>2) If each fork costs \$6, each spoon costs \$7, and each knife costs \$8, what is the total cost of 3 forks, 4 spoons, and 5 knives?</p> <ul style="list-style-type: none">a) \$40b) \$46c) \$80d) \$86	<p>6) Which pair of numbers has a common factor greater than 1?</p> <ul style="list-style-type: none">a) 4 and 9b) 6 and 27c) 27 and 50d) 33 and 100
<p>3) When Flash, the tortoise, divides the number of peas he ate by 5, the remainder <i>cannot</i> be</p> <ul style="list-style-type: none">a) 0b) 1c) 3d) 5	<p>7) $5 \text{ m} + 5 \text{ cm} + 5 \text{ mm} = \underline{\quad? \quad} \text{ mm}$</p> <ul style="list-style-type: none">a) 5055b) 5505c) 5550d) 55550
<p>4) The length and width of a rectangle are 20 and 16 respectively. Its perimeter is</p> <ul style="list-style-type: none">a) 320b) 160c) 72d) 36	<p>8) 33 hours and 36 minutes = <u> ?</u> minutes</p> <ul style="list-style-type: none">a) 1996b) 2006c) 2016d) 2026

<p>9) The product of any two multiples of 3 must be a multiple of</p> <ul style="list-style-type: none"> a) 6 b) 9 c) 12 d) 15 	<p>13) The product of one million and one-thousand million has how many zeros in the number?</p> <ul style="list-style-type: none"> a) 15 b) 16 c) 17 d) 54
<p>10) Which of the following has an odd number of whole-number factors?</p> <ul style="list-style-type: none"> a) 47 b) 48 c) 49 d) 50 	<p>14)</p> $24 \times 26 \times 28 \times 30 \times 32 = 48 \times 52 \times 56 \times 60 \times \underline{\quad ? \quad}$ <ul style="list-style-type: none"> a) 2 b) 4 c) 16 d) 64
<p>11) Joe started with 30 books. He sold 1 book, bought 2 books, sold 3 books, bought 4 books, sold 5 books, and finally bought 6 books. After all that, how many books does he have?</p> <ul style="list-style-type: none"> a) 9 b) 27 c) 33 d) 51 	<p>15) On Day 1, there are 256 apples on a tree. On each day after Day 1 until one apple is left, the number of apples on the tree is half the number there were the day before. On Day <u>?</u>, there will be only one apple on the tree.</p> <ul style="list-style-type: none"> a) 10 b) 9 c) 8 d) 7
<p>12) A square whose side-length is <u>?</u> has the same numerical value for its perimeter and its area.</p> <ul style="list-style-type: none"> a) 1 b) 2 c) 4 d) 16 	<p>16) What time is 11999 hours after 3 P.M.?</p> <ul style="list-style-type: none"> a) 2 A.M. b) 2 P.M. c) 4 A.M. d) 4 P.M.

<p>17) Which of the following is a factor of both 12345678 and 123456789?</p> <p>a) 2 b) 7 c) 9 d) 11</p>	<p>21)</p> $2022 \times 20 + 2022 \times 40 + 2022 \times 60 = 2022 \times ?$ <p>a) 120 b) 240 c) 2016 d) 48000</p>
<p>18) The product of any whole number and 2 is always</p> <p>a) Prime b) Composite c) Odd d) Even</p>	<p>22) How many thousands of seconds are there in 365 days?</p> <p>a) 31536 b) 525600 c) 1892160 d) 3536000</p>
<p>19) If my age 15 years ago was 15, my age 15 years from now will be</p> <p>a) 15 b) 30 c) 45 d) 60</p>	<p>23) How many whole numbers are greater than 30 and less than 70?</p> <p>a) 38 b) 39 c) 40 d) 41</p>
<p>20) What a busy week! Each of my 4 English assignments took me 45 minutes to complete, and each of my 6 math assignments took 40 minutes. On just these, I spent a total of <u>?</u> hours on homework assignments.</p> <p>a) 6 b) 7 c) 420 d) 430</p>	<p>24) Tom and Jerry had a fishing contest. By noon Tom had caught 47 more fish than Jerry, so Tom went to sleep and caught no more fish. Jerry kept fishing, and the total number of fish he caught all day was 19 more than Tom's total. If the total number of fish Jerry caught that day was 3 times as many as he had caught by noon, Jerry caught a total of <u>?</u> fish.</p> <p>a) 33 b) 80 c) 99 d) 102</p>

<p>25) The sides of a right triangle have lengths 9, 40, and 41. What is the area of the triangle?</p> <ul style="list-style-type: none">a) 180b) 184.5c) 360d) 820	<p>28) Daisy likes to help her father. She dusts every 3 days, sweeps every 4 days, and cooks dinner every 5 days. If she does all 3 chores on a Sunday, she next does all 3 on the same day on a</p> <ul style="list-style-type: none">a) Wednesdayb) Thursdayc) Fridayd) Saturday
<p>26) <u>?</u> is a factor of $1 \times 2 \times 3 \times 4 \times 5 \times 6 \times 7 \times 8 \times 9 \times 10$</p> <ul style="list-style-type: none">a) 71b) 73c) 75d) 77	<p>29) What is the ones digit of $2022^{2022} + 2023^{2023}$</p> <ul style="list-style-type: none">a) 1b) 3c) 5d) 7
<p>27) Elena is a physical education teacher for her school. For every 3 soccer balls Elena bought, she bought 4 baseballs and 5 basketballs. If she bought a total of 144 balls, the number of baseballs she bought would be <u>?</u>.</p> <ul style="list-style-type: none">a) 12b) 36c) 48d) 60	<p>30) The sum of 5 consecutive whole numbers is 280. What is the sum of the next 5 consecutive numbers?</p> <ul style="list-style-type: none">a) 285b) 305c) 405d) 425