

# Play 2021 Year Game

Play, Win and Get, a Prize!

## How to play:

For writing the number 2021 we use the digits 0, 1 and 2. The digit 2 is used 2 times. Using all 4 digits: 0, 1, 2 and 2 and any operations, try to write equations that have the numbers from 1 to 100 as the answer.

- Two twos, one one and one zero must be used for each mathematical equation
- Any of the following operations can be used:  
+, -, x, ÷,  $\sqrt{\quad}$  (square root), ^ (raise to a power), ! (factorial), and parentheses.
- Two or more digits can be combined to create multi-digit numbers such as 20, 21, 22, 102, 122 or 0.2 or 0.22



## How to win:

There are three levels:

1. level A (grade 2-3) – winner more than 10 numbers
2. level B (grades 4-5) – winner more than 15 numbers
3. level C (grades 6+) – winner more than 20 numbers

Play Year 2021 Game and win  
**ARCHIMEDES WATER BOTTLE**  
**FULL OF YOUR FAVORITE CANDIES!**

What are your favorite candies? \_\_\_\_\_

## Think of a good strategy!

Below you will find several examples for using 0, 1, 2, and 5

$1 = (2 + 5) \times 0 + 1$	$2 = (1 + 5) \times 0 + 2$	$3 = 1 + 2 + 5 \times 0$	$4 = 5 - 1 + 2 \times 0$	$5 = 5 + (1 + 2) \times 0$
$6 = 5 + 1 + 2 \times 0$	$7 = 1 \times 0 + 2 + 5$	$8 = (5 - 1) \times 2 + 0$	9 =	$10 = 5 \times 2 + 1 \times 0$
$11 = 5 \times 2 + 1 + 0$	$12 = 12 + 5 \times 0$	13 =	14 =	$15 = 15 + 2 \times 0$
46 =	$47 = 50 - 2 - 1$	48 =	$49 = 50 - 2 + 1$	50 =

Turn the page and find the table with 100 numbers to fill and have fun!

Do not forget to turn in your paper before January 31<sup>st</sup>, 2021.

Name: \_\_\_\_\_ Grade: \_\_\_\_\_



## Play 2021 Year Game

1 =	2 =	3 =	4 =	5 =
6 =	7 =	8 =	9 =	10 =
11 =	12 =	13 =	14 =	15 =
16 =	17 =	18 =	19 =	20 =
21 =	22 =	23 =	24 =	25 =
26 =	27 =	28 =	29 =	30 =
31 =	32 =	33 =	34 =	35 =
36 =	37 =	38 =	39 =	40 =
41 =	42 =	43 =	44 =	45 =
46 =	47 =	48 =	49 =	50 =
51 =	52 =	53 =	54 =	55 =
56 =	57 =	58 =	59 =	60 =
61 =	62 =	63 =	64 =	65 =
66 =	67 =	68 =	69 =	70 =
71 =	72 =	73 =	74 =	75 =
76 =	77 =	78 =	79 =	80 =
81 =	82 =	83 =	84 =	85 =
86 =	87 =	88 =	89 =	90 =
91 =	92 =	93 =	94 =	95 =
96 =	97 =	98 =	99 =	100 =