 Christ the Teacher Grade 7 Screener G1 Name\_\_\_KEY\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

A group of colorful dice

Description automatically generated with low confidence

How do you feel about Math? Circle one.

Recall: We can represent a number several ways

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| Standard Form | Expanded form | Word form |
| 86 458 | 80 000 + 6000 + 400 + 50 + 8 | Eighty-six thousand four hundred fifty-eight |

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| 1. Write **301 982** in word form.   Three hundred one thousand nine hundred eighty-two | |
| N 5.1*Representing Number* | |
| 2) Write **40 000 + 3 000 + 700 + 60 + 2**  in standard form.  43 762 | |
| N5.1 *Representing Number* | |
| 3) Write the number **seven hundred fifty-six thousand nine hundred thirty-**  **seven**inexpanded form  700 000 + 50 000 + 6 000 + 900 + 30 + 7 | |
| N 5.1 *Representing Number* | |
| 4) Write the number **three million two hundred thirty-nine thousand thirty-seven**in standard form.  3 239 037 | 5) Write the value of the underlined digit.  **62 421 384**  Two million or 2 million  If the student writes 2 000 000 have them say the number and/or write it in words. |
| N6.1 *Representing Number* | N6.1 *Place value* |

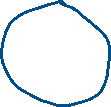
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| 6)  Write the value of the underlined digit in words or fraction form.  **81.375** seven hundredths or 7/100 | 7) Write a number greater than 4.1 and less than 4.2  4.11 or 4.15 or 4.1008 etc. The concept is that they can move to the next decimal place. | |
| N6.1 *Place Value Decimal* | N5.1 *Place value* | |
| 8) Write the number 2.3 billion in standard form  2 300 000 000 This question is from the curriculum guide | |
| N6.1 *Place Value* | |
| 9) Fill in the blanks to continue the counting pattern:  **54 997 , 54 998 , 54 999 , 55 000, 55 001** | |
| N5.1 *Representing Number, Place Value* | |
| 10) Write the number that is represented by these base ten blocks in **standard form.**  https://www.teacherfiles.com/clipart/place_value/PV-10A.jpghttps://www.teacherfiles.com/clipart/place_value/PV-10A.jpg  Note:  https://www.teacherfiles.com/clipart/place_value/PV-01A.jpg = 1 whole  https://www.teacherfiles.com/clipart/place_value/PV-100.jpghttps://www.teacherfiles.com/clipart/place_value/PV-100.jpghttps://www.teacherfiles.com/clipart/place_value/PV-1000.jpghttps://www.teacherfiles.com/clipart/place_value/PV-1000.jpghttps://www.teacherfiles.com/clipart/place_value/PV-100.jpghttps://www.teacherfiles.com/clipart/place_value/PV-10A.jpghttps://www.teacherfiles.com/clipart/place_value/PV-10A.jpghttps://www.teacherfiles.com/clipart/place_value/PV-01A.jpghttps://www.teacherfiles.com/clipart/place_value/PV-01A.jpghttps://www.teacherfiles.com/clipart/place_value/PV-01A.jpghttps://www.teacherfiles.com/clipart/place_value/PV-01A.jpghttps://www.teacherfiles.com/clipart/place_value/PV-01A.jpghttps://www.teacherfiles.com/clipart/place_value/PV-01A.jpghttps://www.teacherfiles.com/clipart/place_value/PV-01A.jpg 2 347 | |
| N 5.1*Representing Number* | |
| 11) Order these numbers from **least to greatest.**  **99 856**  **665 104**  **800 279**  **618 951**  99 856 618 951 665 104 800 279 | |
| N 5.1*Place Value* | |
| 12) Fill in the blanks (Continue the pattern)  **8 452, 8 462, 8 472, 8 482, 8 492 8 502 8 512** | |
| N5.1 *Place Value* | |

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| 13) **Estimate** the sum of the following. Show your strategy.  **3 395  + 4 623** approx8 000 (make sure students don’t write an = sign when they estimate. Correct this with a conversation) *(If students calculate then round, mark it wrong and review estimation especially front-end estimation)* | | | | | | |
| N5.4*Estimation* | | | | | | |
| 14) Add **15 341 + 13 201 = 28 542** | | | | | | |
| N5.4 *Add (no regrouping)* | | | | | | |
| 15) Add  639 803 | 16) Subtract  854 116 | | | | 17) Subtract 1 524 696 | |
| N5.4 *Add (regrouping)* | N5.4 *Subtract (No regrouping)* | | | | N5.4 *Subtract (regrouping)* | |
| 18) Multiply.726  **22 x 33 =** | 19) Find the product.  **45 x 1000 =**    45 000 *If a student needs an algorithm to calculate the product, we need to reteach multiplying by powers of ten* | | | | | 20) Divide.  **40 ÷ 8 = 5** We would expect a single character answer if students know their mult/div facts. If a student needs an algorithm to divide, we should work on fact fluency |
| N 5.2 *Multiply 2 digit by 2 digit* | N 5.2 *Multiplying by factors of ten* | | | | | N5.5 *Division* |
| 21) Divide. Show your remainder. 145 r4    **5**  **729** | | 22) Divide.  **245 ÷ 5 =** 49 student can be prompted to use algorithm | | 23) What is the greatest common factor of 48, 16 and 40? 8 | | |
| N 5.3 Division *3 digit by 1 digit with remainder* *Strategy* | | N 5.3 *Divide*  *3 digit by 1 digit no remainder* | | N6.2 *Factors and Multiples* | | |
| 24)  **Estimate** the product:  **18 × 72** 20x 70 = 1400  answers may vary slightly.  Students should not insert an = sign behind the question. You may prompt or remind them. If they calculate then round, reteach estimation | | | 25) **Estimate** the quotient:  **198 ÷ 4** 200 = 50 | | | |
| N 5.4 *Estimate (Compensation)* | | | N 5.4 *Estimate (Front End Rounding)* | | | |

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| 26) What is the least common multiple of 3,4, and 6? 12 | 27) Circle all the prime numbers  10 15 17 5 21 29 11 |
| N6.2 *Factors and Multiples* | N6.2 *Factors and Multiples* |
| 28) Use any method you like to write all the prime factors of 36 | 29) Calculate |
| N6.2 *Factors and Multiples* | N 6.3 *Order of Operations* |

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| 30) Place these three fractions on the number line.    **1**  **10**  **3**  **4**  **1**  **3**  1  0  1 | | |
| N 5.5 *Fraction* | | |
| 31) Place these three fractions on the number line.  1 You can prompt students to approximate rather than create common denom  and calculate. We are looking for a sense of number | | |
| N 6.7 Fractions | | |
| 32) Split this chocolate bar into **fourths**. | 33) Insert either **<** , **>**, or  **=** between these two fractions  **2**  **5**  **5**  **9** | |
| N 5.5 *Fraction* | N 5.5 *Fraction, compare* | |
| 34) Change to a mixed number | 35) Write as an improper fraction (common fraction) | 36) Write in lowest terms (reduce/simplify) |
| N6.7 *Fractions* | N6.7 *Fractions* | N6.7 *Fractions* |

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| 37) This *thousandths grid* represents **one whole**. Express the shaded part as a decimal.  0.892 | | | | | | | | 38) Add.  420.038  Students can be prompted  to use the algorithm but it  will be interesting to see  how students approach this | | | | |
| N 5.6 *Decimals to thousandths* | | | | | | | | N5.7 *Decimals to thousandths, add (regrouping)* | | | | |
| 39) Place the decimal where it belongs in this product  16 X 3 = 48 so about 51 | | | | | | | 40) Place the decimal where it belongs in this quotient  40 5 = 8 | | | | | | |
| N 6.4*Mult and Div of decimals* | | | | | | | N 6.4*Mult and Div of decimals* | | | | | | |
| 41)Find the product  5.34 | 42)Divide (do not leave a remainder)  4.805  Students can be prompted to use the algorithm but it will be interesting to see what strategies they’ll use, like mult by 10 and then take half. | | | | | | | | | 43) Shade 18% of this hundred grid |
| N 6.4*Mult and Div of decimals* | N 6.4*Mult and Div of decimals* | | | | | | | | N 6.5 *Percent* | |
| 44) What **percent** of this shape is shaded? 20% | | 45) Express 35% as a fraction or  We can accept the unreduced form | | | | | | | 46) Insert either **<** , **>**, or  **=** between these two integers  **-6 > -10** | |
| N 6.5 *Percent* | | N 6.5 *Percent* | | | | | | | N6.6 *Integers* | |
| 47) Place these integers on the number line  **+5 -5 +2 0 -4 +4** | | | | | | | | | | |
| N6.6 *Integers* | | | | | | | | | | |
| 48) What is the ratio of cars to trucks?  3:5 | | | | 49) Write an equation with a variable for:  **Five groups of a number is 30.**  5n=30  For all equation questions, if students simply report an answer, like “6” or ‘the number is 6”, prompt them to write the equation. If they are unable then the item is incorrect | | | | | | |
| N6.8 *Ratios* | | | | 5.2 *Equations* | | | | | | |
| 50) Write an equation with a variable for **15 is 4 less than a number**  15 = *x*-4 or *x*-4 = 15 | | | | | | | | | | |
| 5.2 *Equations* | | | | | | | | | | |
| 51) Four friends each bought a package of game cards. All together they have 64 cards. **Write an equation using the variable *x* to represent how many cards are in each package.**  4 *x=*64o r 4 x *x* = 64 | | | | | | | | | 52)  Write an equation with a variable for **seven more than a number is 18.**  *x* + 7 = 18 or 7 + *x* = 18 | |
| P5.2 *Equations* | | | | | | | | | P5.2 *Equations* | |
| 53) Solve for *n*.  *n* = 8 | | | 54) Solve for *x*:  x = 6 | | | | | | | |
| P5.2 P6.2 *Equations* | | | P5.2 P6.2*Equations* | | | | | | | |
| 55) Write the rule with words or an equation *y* = 4 *x* -1  x y   |  |  | | --- | --- | | 1 | 3 | | 2 | 7 | | 3 | 11 | | 4 | 15 | | 5 | 19 | | | | | | | | | | | |
| P6.1 *Tables and Graphs* | | | | | | | | | | |
| |  |  | | --- | --- | | Figure number | Number of Blocks | | 1 | 1 | | 2 | 3 | | 3 | 5 | | 4 | 7 | | 5 | 9 |   56) Create a table of values for this increasing pattern    Fig. 4  Fig. 3  Fig. 2  Fig. 1 | | | | | | | | | | | |
| P6.1 *Tables and Graphs* | | | | | | | | | | | |
| The X-Y Axis - Free Math Help57) Plot the point (4,2) | | | | | | |  |  | | --- | --- | | Input | Output | | 2 | 3 | | 4 | 7 | | 6 | 11 | | 8 | 15 |   58) Create an input/output table | | | | | |
| P6.1 *Tables and Graphs* SS6.4 *Cartesian Plane* | | | | | | P6.1 *Tables and Graphs* | | | | | |
| 59) Write an equation to represent the rule for this table. Use **C** for cost and **n** for number of guests. C = 20n   |  |  | | --- | --- | | **Number of Guests** | **Cost** | | 1 | 20 | | 2 | 40 | | 3 | 60 | | 5 | 100 | | n |  | | | | | | | | | | | | |
| N6.3 *Patterns and Relations* | | | | | | | | | | | |
| 60) The area of this rectangle is 24m2, what could the length and width be? | | | | | 61) Find the **perimeter** of the garden:  40m  **12m**  Flower Clipart - Free vector graphic on PixabayFlower Clipart - Free vector graphic on PixabayFlower Clipart - Free vector graphic on PixabayFlower Clipart - Free vector graphic on PixabayFlower Clipart - Free vector graphic on PixabayFlower Clipart - Free vector graphic on Pixabay  For SS questions, if students forget units, prompt them. If they skip exponents or write incorrect exponents, have a conversation and make a note to review this, but as long as the computation is correct, the item is correct. If students don’t remember how to find rectangular area or are unable to apply given formulas, then the item is incorrect  **8m** | | | | | | |
| SS5.1 *Area (rectangle)* | | | | | SS 5.1 *Perimeter (rectangle)* | | | | | | |
| 62)Circle the angle that is about 45 | | | | | 63) Find the volume 100 cm3 | | | | | | |
| SS6.1 *Angles* | | | | | SS 6.2 *Volume* | | | | | | |
| 64) How many people bought ice cream during the second week of August? 900  Ice cream sold in July and August | | | | | 65) How deep was the snow on Dec 1? About 18 cm | | | | | | |
| SP5.2 *Double Bar Graph* | | | | | SP 6.1 *Line graphs and data* | | | | | | |



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How did you feel about this assessment? Circle one.