Name $\qquad$ Date $\qquad$

## Math 5 Benchmark Study Guide 1 CCGPS TCUE

1. Kathie fed her chicks 5.23 grams of Chicky Crumbles in the morning. After school, Kathie fed her chicks 4.893 grams of Chicky Crumbles. How many grams of Chicky Crumbles did Kathie feed to her chicks?

$$
\begin{aligned}
& 5.23 \\
& +4.893 \\
& \hline 10.123 \text { grams }
\end{aligned}
$$

2. James is driving to Atlanta which is 256.45 miles away. He drove 165.56 miles to Macon. How much farther does James need to drive to get to Atlanta?

$$
\begin{array}{r}
256.45 \\
-165.56 \\
\hline 90.89 \text { miles }
\end{array}
$$

3. DJ bought 25.5 pounds of sugar to make lemonade at the fair. He only used 18.75 pounds of the sugar. How many pounds of sugar does DJ have left?

| 25.50 |
| :--- |
| -18.75 |
| 6.75 pounds |

4. One Direction had a concert on Friday and $x$ number of people attended the concert. On Saturday, there were 27 more people that attended the concert than there had been on Friday. How would you represent the number of people that attended the concert on Saturday?

$$
x+27
$$

5. How would you represent 9 multiplied by the number $\mathbf{x}$ ?

9x
6. Which mathematical expression best represents five times a number less three?
A. $3 \mathrm{x}-5$
B. $5^{-} 3 \mathrm{x}$
C. $5 \mathrm{x}-3$
D. $3-5 \mathrm{x}$
7. Solve. $5 \times[(7+3) \times(9-6)]$
$5 \times[10 \times 3]$
$5 \times 30$
150
8. Solve. $4+[(9 \times 6)-(28 \div 7)] \times 2$
$4+[54-4]$ x 2
$4+50 \times 2$
$4+100$
104
9. What is the place value of the digit 5 in $7,453.289$ ?

$$
\text { Tens place }=50
$$

10. What is the place value of the underlined digit? $7,453 . \underline{8} 29$ ?

$$
\text { Tenths place }=0.8 \text { or } 8 / 10
$$

11. The 9 in the number 8,956 is different from the value of the 9 in the number 569. The value of the 9 in the number 8,956 is 100 times the value in the number 569 .

$$
\begin{aligned}
8, \underline{956} & =900 \\
56 \mathbf{9} & =9
\end{aligned}
$$

12. Solve: $3 \times 10^{4}$

The decimal in the whole number 3 is invisible at the end. It must be moved four places to the right according to the exponent. 30,000 is the answer
13. What is $3.598 \times 10^{5}$ ?

The decimal must be moved 5 places to the right according to the exponent. 359,800 is the answer.
14. What is $63 \div 10^{4}$ ?

The decimal must be moved opposite of multiplication. It must be moved to the left four places. Since this is a whole number the decimal is invisible at the end. The answer is 0.0063
15. There are 389 students that want to go to Atlanta. Each bus can hold 54 students. How many buses will be completely filled? How many will be on the other bus?

$$
\begin{array}{r}
7 \\
5 4 \longdiv { 3 8 9 } \\
-\frac{378}{11}
\end{array}
$$

7 buses are filled and there are 11 people on the other bus.
16. Thomas County Schools has 5,895 students. Only 29 students are allowed in a classroom. How many classrooms are needed?

| 293 |
| ---: |
| 29895 |
| $-\frac{58}{58}$ |
| 09 |
| $\frac{-0}{9} 5$ |
| $\frac{-87}{8}$ |

204 classrooms are needed to accommodate all the students including the extra ones.
17. Emily likes to make lanyards. She can make 57 in a week. How many lanyards can Emily make in 367 weeks?
18. If Mr. Hugans wants to give 94 students 15 Jacket Bucks each. How many Jacket Bucks will Mr. Hugans need?

| 15 |
| :---: |
| $\times 94$ |
| 60 |
| $+\quad 1350$ |
| 1410 jacket bucks |

19. Please write 72.956 in expanded form using decimals for the digits behind the decimal.

Answer: $(7 \times 10)+(2 \times 1)+(9 \times 0.1)+(5 \times 0.01)+(6 \times 0.001)$
20. Please write 72.956 in expanded form using factions for the digits behind the decimal.

Answer: $(7 \times 10)+(2 \times 1)+(9 \times 1 / 10)+(5 \times 1 / 100)+(6 \times 1 / 1000)$
21. For the following which symbol should replace the box $\langle$,$\rangle , or =$ ?

$$
0.956<0.96
$$

22. Round 94.64 to the nearest whole number.

The whole number is 94 . The neighbor to the right must be looked at. If it is 5 or more you add one more. If the neighbor is four or less, you take a rest. The answer is 95
23. Round 783.594 to the nearest tenths.

5 is in the tenths place. Looking at the neighbor we see it is 9 so we need to add one more to the 5 . The answer is 783.6
24. Round each number to the nearest hundredths and then compute the sum $63.4895+32.1825=$

In the first number, 8 is in the hundredths place and rounds to 63.49 because 9 is (five or more). In the second number 8 is also in the hundredths place. It rounds to 32.18 because 2 is (four or less).
25. Solve $658 \times 43$ using an array.

|  | 600 |  | 50 |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
| 40 |  |  |  |
| 30 | 24000 | 2000 | 320 |
|  | $(26,320)$ |  |  |
| $(1800$ | 150 | 24 |  |
|  |  |  |  |

Get your partial products in parentheses by adding across. Add your two partials together to get your total.
26. Please list the following from least to greatest. $0.567,0.6759,0.9,0.676,0.5662$

The best way to list from least to greatest is to line up your decimals. Compare the places just like you would to find what comes first in a dictionary. Cat and Cab both start with c so you move to the next letter. Both have an a so you move to the last letter. Same way with decimals. These all have a zero so we move over to the next number. Two of them have a 5 and two have a 6 . The 5 is smaller so we compare both of those. They both have a 6 next so you have to move to the next number and compare. Here we find that 0.5662 is less than 0.567 .

| ORDER |
| :--- |
| 0.567 |
| 0.6759 |
| 0.9 |
| 0.676 |
| 0.5662 |
| ANSWER |
| 0.5662 |
| 0.567 |
| 0.6759 |
| 0.676 |
| 0.9 |

