

## Optional Summer Math Homework package

## Grade $4 \boldsymbol{\rightarrow} 5$

It is important that you keep practicing your mathematical Knowledge over the summer to be ready for $\mathbf{5}^{\text {th }}$ grade. In this Package you will find a calendar of activities for the month of July and August.

What should you do?
-Take a new notebook for every-day practice. For each day you will need 2 pages;
-Start each day with vocabulary words: copy each word from the given day-list, find and write the meaning of each word in your notebook on the front page (pages $1,3,5, \ldots$ and so on);
-Use the internet to find the meaning of each word you do not know:
https://dynamiclearningmaps.org/sites/default/files/documents/ERP/dlm_math_glossary.pdf
-Solve the problem of the day and write the solution with full explanation on the back page (pages 2,4,6,. . . and so on);
-Have the date of the entry. Have a clear and complete answer. Be neat and organize.
Do not forget to bring your notebook to school on September 3, 2024 - the first school day.

Big Apple Academy $\quad \mathbf{4}$ grade $\boldsymbol{\rightarrow} \mathbf{5}$ grade
Mathematics Department

| JuIV |  |  |  | Adding Decimals <br> Subtracting <br> Decimals | Distributive <br> Property <br> Estimating | Incoming 5th Grade |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |  |
| Variables <br> Algebraic <br> Expression <br> Evaluate | Equations Solution | Division <br> Pattern <br> Factors | Divisibility rules Prime numbers Composite numbers | Multiples Unit fractions | Order of operations | Summer Home Work VOCABULARY |
| Dividing by 2 digit divisors Dividing larger Numbers | Like denominators And unlike denominators | Mode Range | Point <br> Line Curve <br> Line segment <br> Ray <br> Plane | Parallel lines Intersecting lines Perpendicular lines | Angles, types of angles |  |
| Polygon <br> Regular polygon <br> Names for 3-,4-,5-, <br> $6-, 7-, 8-, 9-$, and <br> 10-sided polygons | Classifying <br> Triangles by sides and by angles | Quadrilaterals <br> Parallelogram <br> Rectangle <br> Rhombus | Square <br> Trapezoid <br> Concave, convex | Fractions <br> Proper and Improper fractions Mixed numbers | Equivalent <br> Fractions <br> Decimals |  |
| $\begin{aligned} & \text { Factor } \\ & \text { GCF } \\ & \text { LCM } \end{aligned}$ | Comparing whole numbers; <br> Comparing <br> fractions <br> Comparing mixed <br> numbers | Adding <br> Subtracting <br> Fractions and Mixed numbers | Place Value <br> Comparing whole <br> Numbers <br> Standard form <br> Expanded form Word form | Multiplying fractions Multiplying mixed numbers | Rounding estimating Simplest form |  |


| July <br> Monday | Tuesday | Wednesday | Thursday | Find $75,397.5+897.04$ <br> 6.7-3.85 <br> Friday | Find each product $\begin{array}{\|l\|l\|} \hline 737 \times 54 \\ 409 \times 36 \end{array}$ <br> Saturday | Incoming $5^{\text {th }}$ Grade |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Evaluate each expression for $n=6$ $\mathrm{n} \times 8.4 ; 11.2-\mathrm{n}$ | Solve each equation $\begin{aligned} & 37-m=15 \\ & 25.5 b=25.5 \end{aligned}$ | Write the next Number in this pattern 37,49,61,73, ... | Find all the factors Of 60 and of 85 Find their greatest common factor (GCF) | Is 1628 divisible <br> By 2? By 3? By 4? <br> By 5? By 6? By 9? <br> By 10 ? | Use the order of operations $\begin{aligned} & 135-3-(4 \times 12)+16 \\ & 3 / 4 \times 6-(6-5 / 7)=? \\ & (31 / 4-4 / 9) \times 8=? \end{aligned}$ | Summer Home Work for FUN |
| Find each quotient $\begin{aligned} & 7,368 \div 72 \\ & 36,144 \div 48 \\ & 0.054 \div 0.09 \\ & 0.54 \div 0.0009 \end{aligned}$ | $\begin{aligned} & 3 / 4 \times 6-(6-5 / 7)=? \\ & (31 / 4-4 / 9) \times 8=? \end{aligned}$ | Find the range and the mode <br> a. $4,0.9,5,0.9,1$ <br> b. $61,59,58,58,61$ | Draw and label Two lines segments Two parallel rays Two perpendicular lines | Draw and label Two intersecting, But not perpendicular, Line segments | Draw and label 4 rays with the common endpoint |  |
| How are the figures alike? How are they different? | The measures of two angles of a triangle are $126^{\circ}$, $24^{\circ}$. Find the measure of the third angle. | In quadrilateral three angles are $95^{\circ}, 140^{\circ}, 25^{\circ}$. <br> Find the fourth angle. | Classify each quadrilateral $\square$ <br> Find area and perimeter of a 0.06 cm long square | Write fractions as mixed numbers $\begin{array}{llll}51 & 32 & 601 & 84\end{array}$ $\overline{10} ; \overline{9} ; \overline{20} ; \overline{12}$. Write mixed numbers as fractions $51 / 3401 / 5212 / 3361 / 2$ | Find sum of 3 and the quotient of $\frac{4}{5}$ and $\frac{13}{20}$ <br> Estimate $122 / 5-61 / 8$ <br> Estimate $12^{2} / 5 \times 61 / 8$ |  |
| What is the GCF Of 18 and 63? What is the LCM Of 9 and 4? | Simplify each $\frac{12}{30} ; \frac{14}{42} ; \frac{12}{48} ; \frac{24}{60} .$ <br> Compare fractions $\begin{aligned} & \frac{\mathbf{5}}{\mathbf{6}}-\frac{\mathbf{5}}{\mathbf{8}} ; \frac{\mathbf{1}}{\mathbf{5}} \_^{\frac{\mathbf{1}}{\mathbf{3}}} \\ & \text { Order } \overline{\mathbf{5}}, \frac{\mathbf{5}}{\mathbf{8}} \text {, and } \frac{\mathbf{1}}{\mathbf{3}} \end{aligned}$ | Find each sum Or difference $\begin{aligned} & \frac{9}{10}+\frac{3}{4} ; 11-2 \frac{5}{6} \\ & 12 \frac{3}{5}+3 \frac{3}{8} ; \\ & 3 \frac{1}{6}-2 \frac{1}{5} \end{aligned}$ | Write the value of the digit 6 in 87,642; in 8.567. <br> Write the number in Expanded form: 7,450,693,000; 45.213 | Find each product $\begin{aligned} & \frac{2}{3} \times \frac{7}{8} \quad \frac{8}{9} \times 27 \\ & 2 \frac{8}{9} \times 1 \frac{8}{9} \end{aligned}$ | Round <br> 4,362,045 to the <br> Nearest hundred <br> thousand <br> Compare <br> 737.4 and 72.56 <br> 737.4 and 725.6 |  |


| August <br> Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Incoming 5th Grade |
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| Compatible numbers <br> Compensation Congruent shapes | Width and length <br> Area <br> Units of area <br> Area of rectangles <br> Area of squares | Perimeter <br> Perimeter of rectangles Perimeter of squares | Properties of operations: commutative; Identity; zero; associative | Time <br> Units of time Elapsed time Number line | Temperature and Units of Temperature; Capacity and units of capacity | Summer Home Work VOCABULARY |
| Solid figures Surface, Face, Vertex, Edge Prisms and pyramids | Perimeter of irregular figures Adding and subtracting on a number line | Volume; Units of volume; 2 Formulas for volume of a prism | Estimating capacity Customary Units of Capacity Metric Units of Capacity | Estimating weight Customary Units of Weight Metric Units of mass | Estimating length Customary units of length Metric units of length |  |
| Coordinate <br> Plane; <br> Coordinates; <br> Ordered pair; <br> Origin; Y-axis; X-axis | Measuring cup <br> Protractor <br> Measuring tape <br> Yardstick <br> Weighing scale <br> Thermometer | Degree <br> Reflex angle <br> Quarter-hour <br> Coins and bills | Inverse operations <br> Picture graph <br> Key <br> Tally chart | Venn diagram Distributive property Inequality | Frequency table <br> Number chart <br> Number expression <br> Algebraic <br> expression |  |
| Addend, sum Dividend, divisor Factors, product 3 forms of a number | Symmetry flip slide turn rotation reflection translation | Exponent Base and power Square an cube of a number | Drawing and Measuring angles: tools, ways to check | Line plot Least ; at least At most; most common; mode; range | Bar graph Title Scale Interval Bar | 囪 |


| August <br> Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Incoming 5th Grade |
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| How many $\frac{1}{4} \sin \frac{3}{4}$ ? $5 \frac{1}{7} \div\left(2 \frac{2}{7} \times 7\right)=?$ <br> 7 miand $7 \mathrm{yd}=$ ? yd | Find the area of a rectangle with sides 3.4 m and 65 m Find the area of a 2.4 cm long square. | Find the perimeter Of rectangle $\begin{aligned} & \mathrm{L}=6.3 \mathrm{~cm} \\ & \mathrm{~W}=14.2 \mathrm{~cm} \end{aligned}$ | What is a four-sided polygon with all equal sides is called? Draw 2 congruent rhombuses | Find each elapsed time <br> a. from $8: 16 \mathrm{am}$ to $12: 35 \mathrm{pm}$. <br> b. from 4:22 am to $10: 50 \mathrm{am}$ | Find each change In temperature $97^{\circ} \mathrm{F}$ to $79^{\circ} \mathrm{F}$ $17^{\circ} \mathrm{F}$ to $-3^{\circ} \mathrm{F}$ Compare $4.8 \times 0.4$ with 4.8 ; with 0 . | Summer Home Work for FUN |
| How are a cylinder and a cone alike? <br> A square prism has How many faces, Vertices, edges? | $\square$ <br> Find the perimeter | Find the volume Of 2 rectangular Prisms: $1^{\text {st }}$ with $\mathrm{I}=14 \mathrm{~m}, \mathrm{w}=7.2 \mathrm{~m}$, and $h=3 m$, and $2^{\text {nd }}$ with a base of 0.8 sq $m$ and $h=6 m$ | $\begin{aligned} & 17 \mathrm{qt}=? \mathrm{pt} \\ & 17 \mathrm{pt}=? \mathrm{qt} \\ & 6 \mathrm{gal} 2 \mathrm{qt}=\_\mathrm{qt} \\ & 6 \mathrm{c} 2 \mathrm{fl} \mathrm{oz} \mathrm{-} 5 \mathrm{fl} \mathrm{oz}=\text { ? } \\ & 700 \mathrm{~L}=\ldots \mathrm{mL} \end{aligned}$ | $\begin{aligned} & 7.2 \text { squared=? } \\ & 30 \mathrm{~kg} 6 \mathrm{~g}=? \mathrm{~g} \\ & 362 \mathrm{mg}=? \mathrm{~g} \\ & 2 \mathrm{~kg} 3 \mathrm{mg}=? \mathrm{~g} \\ & 9 \mathrm{lb} 8 \mathrm{oz}+7 \mathrm{lb} 9 \mathrm{oz}=\text { ? } \end{aligned}$ | Complete <br> $38 \mathrm{in}=$ ? ft. <br> $8 \mathrm{ft} 5 \mathrm{in}=$ ? in <br> $9 \mathrm{yd} 1 \mathrm{ft}=$ ? ft . <br> $20 \mathrm{~m}=$ ? cm <br> $20 \mathrm{~m}=$ ? hm |  |
| Which is the better Buy, <br> $\$ 2.96$ for 8 pears Or $\$ 1.70$ for 5 pears? | Is it possible to draw an equilateral obtuse triangle? Explain | What is the greatest area of a rectangle with a perimeter of 50? | Write what inverse operation you would use to find $n$ for $\mathrm{n}-6$; for $92+\mathrm{n}$; for $\mathrm{n} \times 18$ | Solve each equation $\begin{aligned} & p+232=750 \\ & a-7.3=12.6 \\ & 28 \div s=56 \end{aligned}$ | Find triple m if $320=16 \times \mathrm{m}$ <br> Find double $n$ if $70=16+n$ |  |
| The number 59 and p are the only two prime numbers between 50 and 60 . What is $p$ ? | One-half of a number added to one-fourth of 96 is 30. What is the number? | In the number 44.444 which digit has $1 / 10$ the value of the 4 in the hundredth place? | $\begin{array}{\|l\|} \hline \text { Estimate } \\ 1.8+1.95 \\ 31.85 \times 0.86 \\ 28 \div 7.503 \end{array}$ | Use the coordinate plane to graph Each set of points $\begin{aligned} & (0,-3)(+5,-1) \\ & (+6,+2)(-1,+7) \\ & (+6,+6)(+7,0) \end{aligned}$ | Is $\frac{10}{16}=\frac{15}{20}$ ? <br> Explain. <br> Find $(456-4.34) \times 4.8$ | $\text { 輏 }^{-1}$ |

