$\qquad$

1. A bag can hold 10 notebooks. If 3 folders take up the same amount of space as 1 notebook, how many folders can the bag hold if it already has 4 notebooks in it?
(A) 3
(C) 18
(B) 12
(D) 30
2. Base your answer to this question on the picture of the clown below:


Which of the following statements is not true?
(A) The clown is wearing a hat or the clown has a striped shirt.
(B) The clown is wearing a jacket or the clown has his hands up.
(C) The clown has pockets in his pants or the clown is wearing suspenders.
(D) The clown is holding a scarf or the clown is frowning.
3. Trevor went for a run. He ran 2 miles to his school, 3 more miles to a store, 1 mile to the library, and 2 miles home. How many miles had Trevor ran once he hit the library?
(A) 8 miles
(C) 6 miles
(B) 5 miles
(D) 1 mile
4. Lydia has $\$ 1$ to spend on candy. After the clerk rang up her purchase, Lydia handed the clerk a dollar bill. The clerk gave her $\frac{1}{4}$ of the money back as change. How much money did the clerk give Lydia?
(A) $\$ 0.10$
(C) $\$ 0.40$
(B) $\$ 0.25$
(D) $\$ 0.75$
5. James needed to buy 5 cans of dog food. Each can costs $94 \phi$. What is the best estimate of the total cost of the food?
(A) $\$ 5$
(C) $\$ 3$
(B) $\$ 4$
(D) $\$ 6$
6.


Based on the picture above, which of the following statements is false?
(A) The snowman is wearing shoes or the snowman is wearing pants
(B) The snowman is wearing a hat or the snowman's hat fell off
(C) The snowman has a carrot nose or the snowman has a banana nose.
(D) The snowman is smiling or the snowman has no arms.
7.


Johnathan would like to buy some school supplies. To see if he has enough money, he correctly rounds each of the prices to the nearest dollar and adds them together. Which of the following sentances did Johnathan use?
(A) $\$ 1+\$ 2+\$ 3+\$ 11=\$ 17$
(B) $\$ 2+\$ 2+\$ 3+\$ 12=\$ 19$
(C) $\$ 1+\$ 2+\$ 4+\$ 12=\$ 19$
(D) $\$ 2+\$ 3+\$ 4+\$ 12=\$ 21$
8. Which is the same as 385 ?
(A) $300+80+5$
(C) $300+80+50$
(B) $30+800+5$
(D) $3+8+5$
9. It will be Julia's birthday in ten days. It was Michelle's birthday 5 days ago. How many days are there between Michelle and Julia's birthdays?
(A) 5
(C) 15
(B) 10
(D) 50
10. Tim is standing in line at the drinking fountain. He is the second student after the girl holding the book. Which of the students shown below is Tim?

(A) A
(C) C
(B) $B$
(D) D
11. There are twice as many people in the bank as there are in the restaurant. What other information is needed to find the number of people in the bank?
(A) The distance between the bank and restaurant
(B) The locations of the bank and restaurant
(C) The number of people in the restaurant
(D) The type of restaurant
12. Lynn made chocolate chip cookies. She sold them at a bake sale and made $\$ 96.00$ She made 48 cookies in total. How much did each cookie cost?
(A) $\$ 1.50$
(C) $\$ 2.00$
(B) $\$ 1.00$
(D) $\$ 1.75$
13.


Which fraction shows the part of the set of balls that has stripes?
(A) $\frac{1}{4}$
(C) $\frac{3}{4}$
(B) $\frac{2}{3}$
(D) $\frac{3}{2}$
14. Sera buys 12 pounds of chicken. She cookes $\frac{1}{4}$ of the chicken for a barbeque. How many pounds of chicken did she cook?
(A) 4
(C) 9
(B) 3
(D) 5
15. Which of the following is not a prime number?
(A) 9
(C) 7
(B) 3
(D) 5
16. Barry saved two hundred thirty-six and five-tenths dollars. What number is shows much money Barry saved?
(A) 2,365
(C) 23.65
(B) 236.5
(D) 236.05
17. Which decimal is between $\frac{2}{3}$ and $\frac{3}{4}$ ?
(A) .60
(C) .76
(B) .71
(D) .65
18. Haylie is saving all of her allowance every month, starting with month \#1, according to the chart below.

| Month \# | Allowance | Total Saved |
| :---: | :---: | :---: |
| 1 | $\$$ | 8.00 |
| 2 | $\$$ | 16.00 |
| 3 | $\$$ | 24.00 |
| 4 | $\$$ | 32.00 |
| 5 | $\$$ | 40.00 |
| 6 | $\$$ | 48.00 |

How much allowance does Haylie receive per month?
(A) $\$ 6$
(C) $\$ 24$
(B) $\$ 8$
(D) $\$ 48$
19. Lisa scored $80 \%$ on her math test. Fara scored $95 \%$ on the same math test. How many points more did Fara score?
(A) 5
(C) 15
(B) 10
(D) 20
20. If 2 slices of pizza cost $\$ 3.00$, how much will 8 slices cost?
(A) $\$ 8.00$
(C) $\$ 16.00$
(B) $\$ 12.00$
(D) $\$ 24.00$
21. Greg had 12 comic books. He gave 2 to Dave and gave 4 to Samantha. He then received 2 from Jamal. How many comic books does Greg have now?
(A) 12 comic books
(C) 8 comic books
(B) 6 comic books
(D) 20 comic books
22. There are 28 students in a class and each were given 4 handouts. How many handouts were given out altogether?
(A) 112 dittos
(C) 84 dittos
(B) 7 dittos
(D) 32 dittos
23. Jill, an art teacher, is making a project with her class. It requires 10 sticks to make one project. Her class has 8 students. How many total sticks are needed so that everyone can make a project?
(A) 18
(C) 180
(B) 80
(D) 160
24. The Girl Scouts are making bracelets. There are 15 girls in the troop. Their troop leader bought 300 beads for the project. How many beads does each girl get for her bracelet?
(A) 285
(C) 24
(B) 20
(D) 200
25. Martha puts numbers in her calculator and performs an operation. The numbers that come out of her calculator are results of that operation.

| IN | OUT |
| :---: | :---: |
| 16 | 8 |
| 6 | 3 |
| 2 | 1 |
| 12 | 6 |
| 8 | 4 |

What function did Martha's calculator perform?
(A) Subtract 8
(C) Divide by 4
(B) Multiply by 2
(D) Multiply by $\frac{1}{2}$
26. Rimon returned a video game 3 days late. The video store charges a $\$ 1$ late fee for the first day a game or video is late and $\$ 2$ more for each additional day the game or video is late. How much did Rimon pay in late fees?
(A) $\$ 2$
(C) $\$ 5$
(B) $\$ 3$
(D) $\$ 6$
27. Marcus has 10 pieces of candy. He wants to split the candy between himself, his sister, and his mother.


They all get the same number of candy pieces. How many are left over?
(A) 1
(C) 3
(B) 2
(D) 9
28. Which of these figures does not have four sides?
(A) Parallelogram
(C) Trapazoid
(B) Rectangle
(D) Triangle
29. How many degrees are there in a circle?
(A) 90
(C) 270
(B) 180
(D) 360
30. How many sides does a pentagon have?
(A) 5
(C) 7
(B) 6
(D) 8
31.


This is an example of a:
(A) rotation
(C) reflection
(B) translation
(D) rotation and translation
32. Base your answer to the following question on the graph below.


Consider the boy who read the most books. How many books did he read?
(A) 3
(C) 6
(B) 5
(D) 12
33. What shape does the object below resemble?

(A) sphere
(C) triangular prism
(B) diamond
(D) cube
34. Marta asked some classmates what their favorite primary color was. She recorded the data on the bar graph shown below.


How many people said that their favorite primary color was blue?
(A) 6
(C) 8
(B) 7
(D) 4
35. The thermometer shows that the temperature outside is $-3^{\circ} \mathrm{C}$.


What would the temperature be if it were 7 degrees warmer?
(A) $-10^{\circ} \mathrm{C}$
(C) $4^{\circ} \mathrm{C}$
(B) $-3^{\circ} \mathrm{C}$
(D) $9^{\circ} \mathrm{C}$
36. Michele can long jump a length of 1 meter. How many centimeters can she jump?
(A) 12
(C) 10
(B) 1000
(D) 100
37. Antonio wants to measure the amout of water his fish tank can hold. What unit of measure should he use?
(A) ounces
(C) liters
(B) meters
(D) kilometers
38. A bag of pretzels weighs between one and two pounds. Which of these could be the weight of the pretzels? ( 1 pound $=16$ ounces)
(A) 10 ounces
(C) 24 ounces
(B) 14 ounces
(D) 36 ounces
39. Grant is making hot chocolate for his class. He wanted to buy a gallon of milk but the store only has quarts. How many quarts should he buy?
(A) 2 quarts
(C) 6 quarts
(B) 4 quarts
(D) 8 quarts
40. Malcolm is on an after-school bowling team. The team bowls once every week. His scores for the first 3 weeks were 98,107 , and 101. What was his average (mean) score?

(A) 107
(C) 101
(B) 102
(D) 99
41. Carrey has 173 crayons. How many crayons does she have to the nearest hundred?
(A) 100
(C) 170
(B) 150
(D) 200
42. William has a choice of either a hamburger, hot dog, or chicken for dinner and juice, milk, or soda to drink. How many different combinations can he make?
(A) 1
(C) 3
(B) 6
(D) 9
43. 50 blue balls and 50 red balls are in a box. What would make it more likely that you would pick a blue ball if you picked up 1 ball from the box?
(A) Make all the balls heavier.
(B) Make all the balls bigger.
(C) Change the red balls to yellow balls.
(D) Take out some red balls first.
44. Janet, Thomas, and Hannah each ran one part of a relay race. The time it took them to run each part of the race is shown below.


How many seconds did it take Janet, Thomas, and Hannah to run the race from start to finish?
(A) 36
(B) 37
(C) 46
(D) 47
45. Lynn's family went on vacation. They drove to their aunt's house. The chart below shows how many miles they drove each day.
MILES TRAVELED

| Day | Miles |
| :---: | :---: |
| Monday | 326 |
| Tuesday | 164 |
| Wednesday | 268 |
| Thursday | 145 |
| Friday | 199 |

Use front-end estimation to determine about how many miles they travel in 5 days.
(A) 1,100
(C) 900
(B) 800
(D) 1,000
46. Which dotted line is a line of symmetry?
(A)

(C)

(B)

(D)

47. Sneezy, Dopey, and Grumpy each collected 9 sticks of firewood. How much total firewood did they collect all together?
(A) 3 sticks
(C) 12 sticks
(B) 9 sticks
(D) 27 sticks
48.


What figure is pictured above?
(A) Cone
(C) Cylinder
(B) Cube
(D) Pyramid
49. Look at the following pattern.
$18,15,12,9,6$
How is the next number found?
(A) divide by 3
(C) multiply by 2
(B) subtract 2
(D) subtract 3
50. Ivan is going to the mall. If it takes him 15 minutes to drive there and 15 minutes to drive back. He wants to spend 2 hours at the mall but he has to be home by 2:30 to watch his younger sister. What is the latest time he can leave his house and be back by 2:30?
(A) $12: 15$
(C) $11: 15$
(B) $11: 30$
(D) 12:00

## Answer Key

1. C
2. $\qquad$
. $\qquad$
3. $\qquad$
4. A
5. A
6. B
7. $\qquad$
8. C
9. $\qquad$
10. C
11. C
12. $\qquad$
13. B
14. A
15. $\qquad$
16. B
17. B
18. $\qquad$
19. $\qquad$
20. $\qquad$
21. $\qquad$
22. $\qquad$
23. $\qquad$
24. $\qquad$
25. $\qquad$
26. $\qquad$
27. $\qquad$
28. $\qquad$
29. $\qquad$
30. $\qquad$
31. $\qquad$
32. $\qquad$
33. $\qquad$
34. $\qquad$
35. $\qquad$
36. $C$
37. C
38. B
39. $\qquad$
40. D
41. D
42. $\qquad$
43. C
44. B
45. $\qquad$
46. D
47. C
48. $\qquad$
49. D

## Eduware Genealogy by Question <br> Displaying UNIT CHAPTER TOPIC SUBTOPIC QUESTION ID

1. 2. Mathematical Reasoning / A. Draw conclusions about mathematics / 1. Factor \& product relationships / a. Factor \& product relationships : 0000809
1. 2. Mathematical Reasoning / A. Draw conclusions about mathematics / 2. Statements using: "and", "or", "not" / a. Statements using: "and", "or", "not" : 0001947
1. 2. Mathematical Reasoning / A. Draw conclusions about mathematics / 3. Draw diagrams for problems / a. Draw diagrams for problems: 0001398
1. 2. Mathematical Reasoning / B. Analyze mathematical situations / 4. Money as related to fractions and decimals / a. Money : 0000021
1. 2. Mathematical Reasoning / C. Justify their answers \& solution processes / 2. Justify answers with estimation \& checking /a. Justify by estimation and checking : 0000920
1. 2. Mathematical Reasoning / A. Draw conclusions about mathematics / 2. Statements using: "and", "or", "not" / a. Statements using: "and", "or", "not" : 0000007
1. 2. Mathematical Reasoning / C. Justify their answers \& solution processes / 1. Verify an answer to a problem / a. Verify an answer to a problem : 0001904
1. 2. Number and Numeration / A. Use numbers to count objects \& measure distance / 1. Read \& write whole numbers / a. Read \& write whole numbers : 0000685
1. 2. Mathematical Reasoning / D. Simple conclusions through logical reasoning / 1. Solve problems with diagrams, charts, \& tables / a. Problems with diagrams, charts, \& tables : 0000855
1. 2. Mathematical Reasoning / D. Simple conclusions through logical reasoning / 1. Solve problems with diagrams, charts, \& tables / a. Problems with diagrams, charts, \& tables: 0000634
1. 2. Mathematical Reasoning / D. Simple conclusions through logical reasoning / 3. Identify missing/extra info. in problems / a. Identify missing/extra info. in problems : 0000864
1. 2. Number and Numeration / A. Use numbers to count objects \& measure distance / 3. Relate fractions \& decimals to money / a. Relate fractions \& decimals to money : 0001386
1. 2. Number and Numeration / A. Use numbers to count objects \& measure distance / 4. Use of fractions \& decimals in daily life / a. Use of fractions \& decimals in daily life : 0001156
1. 2. Number and Numeration / A. Use numbers to count objects \& measure distance / 4. Use of fractions \& decimals in daily life / a. Use of fractions \& decimals in daily life : 0001611
1. 2. Number and Numeration / B. Number relationships w/ concrete materials / 3. Prime numbers / a. Prime numbers : 0001653
1. 2. Number and Numeration / C. Relate counting to grouping \& to place value / 1. Place value concepts / a. Place value concepts: 0001737
1. 2. Number and Numeration / D. Order of integers, fractions \& decimals / 3. Decimals / a. Decimals to hundredths : 0000938
1. 2. Mathematical Reasoning / B. Analyze mathematical situations / 3. Symmetry or patterning in number tables / a. Symmetry or patterning in number tables : 0001895
1. 2. Number and Numeration / E. Ratio and percent problems in actual situations / 1. Percents / a. Percents that are multiples of $5: 0001961$
1. 2. Number and Numeration / E. Ratio and percent problems in actual situations / 2. Ratio in real world situations / a. Ratio in real world situations : 0000807
1. 3. Operations / A. Add, subtract, multiply, \& divide whole numbers / 1. Add. and sub. of integers / a. Add. \& sub. of integers : 0001354
1. 3. Operations / A. Add, subtract, multiply, \& divide whole numbers / 3. Multiply $2 \& 3$ digit numbers / a. Multiply $2 \& 3$ digit numbers : 0001305
1. 3. Operations / A. Add, subtract, multiply, \& divide whole numbers / 4. Multiplication by multiples of 10 / a. Multiplication by multiples of 10 : 0000896
1. 3. Operations / A. Add, subtract, multiply, \& divide whole numbers / 5. Division of $2 \& 3$ digit numbers / a. Division of $2 \& 3$ digit dividends : 0001594
1. 3. Operations / B. Select the correct operation to solve a problem / 1. Using diagrams \& charts / a. Diagrams \& charts : 0001767
1. 3. Operations / B. Select the correct operation to solve a problem / 5. Breaking problem into parts / a. Break problem into parts : 0000083
1. 3. Operations / C. Know single digit add., sub., mult., div. facts / 3. Multiplication \& division facts through 144 / a. Multiplication \& division through 144 : 0001821
1. 4. Modeling/Multiple Representation / A. Materials to model spatial relations / 1. Properties of plane figures / b. Triangles : 0000106
1. 4. Modeling/Multiple Representation / A. Materials to model spatial relations / 1. Properties of plane figures / c. Circles : 0001024
1. 4. Modeling/Multiple Representation / A. Materials to model spatial relations / 1. Properties of plane figures / d. Other polygons : 0000376

## Eduware Genealogy by Question

31. 4. Modeling/Multiple Representation / A. Materials to model spatial relations / 4. *Transformations / b. *Reflection : 0000961
1. 4. Modeling/Multiple Representation / B. Tables, charts, \& graphs / 2. Graphs \& charts of real-world data / a. Graphs \& charts of real-world data : 0000548
1. 4. Modeling/Multiple Representation / E. Materials for processes \& geometric concepts / 2. Common plane \& solid geometric figures / a. Common plane \& solid geometric figures : 0001253
1. 4. Modeling/Multiple Representation / B. Tables, charts, \& graphs / 2. Graphs \& charts of real-world data / a. Graphs \& charts of real-world data : 0001712
1. 4. Modeling/Multiple Representation / D. Use variables to predict changes over time / 1. Temperatures \& heights over time / a. Temperatures \& heights over time : 0000618
1. 5. Measurement / A. Understand that measurement is approximate / 1. Identify appropriate metric units / a. Appropriate metric units: 0001624
1. 5. Measurement / B. Select appropriate measurement tools / 1. Select proper (non)standard measurements / a. Proper (non)standard measurements : 0001595
1. 5. Measurement / C. Measured attributes: area, volume, time, weight / 3. Measurement problems: Weight / a. Measurement problems: Weight : 0001103
1. 5. Measurement / D. Estimate/find measurements / 2. Compare equivalent measures / a. Equivalent measures : 0000497
1. 5. Measurement / F. Use statistical methods to interpret data / 1. Materials for the concept of average / a. The concept of average : 0000624
1. 6. Uncertainty / D. Develop a wide variety of estimation skills / 1. Round numbers / a. Round numbers: 0001856
1. 6. Uncertainty / E. Determine the reasonableness of results / 1. The number of possible combinations / a. The number of possible combinations: 0001272
1. 6. Uncertainty / F. Predict experimental probabilities / 2. Likelihood of events / a. The likelihood of events : 0001211
1. 5. Measurement / C. Measured attributes: area, volume, time, weight / 1. Measurement problems: Time / a. Measurement problems: Time : 0000645
1. 6. Uncertainty / D. Develop a wide variety of estimation skills / 2. Estimating add., sub., mult., div. / a. Estimating add., sub., mult., div. : 0001815
1. 4. Modeling/Multiple Representation / E. Materials for processes \& geometric concepts / 4. Lines of symmetry / a. Lines of symmetry : 0000726
1. 7. Patterns/Functions / G. Discover patterns in nature, art, music, \& lit. / 5. Relate children's literature to mathematics / a. Relate children's literature to mathematics : 0000174
1. 7. Patterns/Functions / F. Relationships of 2D \& 3D shapes / 2. Identify different 3-D shapes / d. Cylinders : 0000109
1. 7. Patterns/Functions / B. Represent \& describe mathematical relationships / 5. Relationships of add., sub., mult., div. / a. Explore relationships of add., sub., mult., div : 0001598
1. 7. Patterns/Functions / B. Represent \& describe mathematical relationships / 2. Terms at most \& at least / a. Terms at most and at least : 0001827

## State Genealogy by Question Displaying STANDARDS QUESTION ID

1. Grades 3-5: A. Number Sense Concepts and Operations / 5: The student understands and applies theories related to numbers. / MA.A.5.2.1 Understands and applies basic number theory concepts including primes composites factors and multiples. : 0000809
2. (none) 0001947
3. Grades 3-5: D. Algebraic Thinking / 2: The student uses expressions equations inequalities graphs and formulas to represent and interpret situations. / MA.D.2.2.1 Represents a given simple problem situation using diagrams models and symbolic expressions translated from verbal phrases or verbal phrases translated from symbolic expressions etc. : 0001398
4. Grades 3-5: A. Number Sense Concepts and Operations / 1: The student understands the different ways numbers are represented and used in the real world. / MA.A.1.2.1 Names whole numbers combining 3-digit numeration (hundreds tens ones) and the use of number periods such as ones thousands and millions and associates verbal names written word names and standard numerals with whole numbers fractions decimals
Grades 3-5: A. Number Sense Concepts and Operations / 1: The student understands the different ways numbers are represented and used in the real world. / MA.A.1.2.3 Understands concrete and symbolic representations of whole numbers fractions decimals and percents in real-world situations. / : 0000021
5. Grades 3-5: A. Number Sense Concepts and Operations / 4: The student uses estimation in problem solving and computation. / MA.A.4.2.1 Uses and justifies different estimation strategies in a real-world problem situation and determines the reasonableness of results of calculations in a given problem situation.
Grades 3-5: D. Algebraic Thinking / 1: The student describes analyzes and generalizes a wide variety of patterns relations and functions. / MA.D.1.2.2 Generalizes a pattern relation or function to explain how a change in one quantity results in a change in another. /
Grades 3-5: E. Data Analysis and Probability / 3: The student uses statistical methods to make inferences and valid arguments about real-world situations. / MA.E.3.2.2 Uses statistical data about life situations to make predictions and justifies reasoning. / : 0000920
6. (none) 0000007
7. Grades 3-5: A. Number Sense Concepts and Operations / 4: The student uses estimation in problem solving and computation. / MA.A.4.2.1 Uses and justifies different estimation strategies in a real-world problem situation and determines the reasonableness of results of calculations in a given problem situation.
Grades 3-5: D. Algebraic Thinking / 1: The student describes analyzes and generalizes a wide variety of patterns relations and functions. / MA.D.1.2.2 Generalizes a pattern relation or function to explain how a change in one quantity results in a change in another. /
Grades 3-5: E. Data Analysis and Probability / 3: The student uses statistical methods to make inferences and valid arguments about real-world situations. / MA.E.3.2.2 Uses statistical data about life situations to make predictions and justifies reasoning. / : 0001904
8. Grades 3-5: A. Number Sense Concepts and Operations / 1: The student understands the different ways numbers are represented and used in the real world. / MA.A.1.2.1 Names whole numbers combining 3-digit numeration (hundreds tens ones) and the use of number periods such as ones thousands and millions and associates verbal names written word names and standard numerals with whole numbers fractions decimals
Grades 3-5: A. Number Sense Concepts and Operations / 1: The student understands the different ways numbers are represented and used in the real world. / MA.A.1.2.3 Understands concrete and symbolic representations of whole numbers fractions decimals and percents in real-world situations. / :0000685
9. Grades 3-5: D. Algebraic Thinking / 2: The student uses expressions equations inequalities graphs and formulas to represent and interpret situations. / MA.D.2.2.1 Represents a given simple problem situation using diagrams models and symbolic expressions translated from verbal phrases or verbal phrases translated from symbolic expressions etc. : 0000855
10. Grades 3-5: D. Algebraic Thinking / 2: The student uses expressions equations inequalities graphs and formulas to represent and interpret situations. / MA.D.2.2.1 Represents a given simple problem situation using diagrams models and symbolic expressions translated from verbal phrases or verbal phrases translated from symbolic expressions etc. : 0000634
11. (none) 0000864
12. Grades 3-5: A. Number Sense Concepts and Operations / 1: The student understands the different ways numbers are represented and used in the real world. / MA.A.1.2.1 Names whole numbers combining 3-digit numeration (hundreds tens ones) and the use of number periods such as ones thousands and millions and associates verbal names written word names and standard numerals with whole numbers fractions decimals
Grades 3-5: A. Number Sense Concepts and Operations / 1: The student understands the different ways numbers are represented and used in the real world. / MA.A.1.2.3 Understands concrete and symbolic representations of whole numbers fractions decimals and percents in real-world situations. /
Grades 3-5: A. Number Sense Concepts and Operations / 1: The student understands the different ways numbers are represented and used in the real world. / MA.A.1.2.4 Understands that numbers can be represented in a variety of equivalent forms using whole numbers decimals fractions and percents. / : 0001386
13. Grades 3-5: A. Number Sense Concepts and Operations / 1: The student understands the different ways numbers are

## State Genealogy by Question

represented and used in the real world. / MA.A.1.2.1 Names whole numbers combining 3-digit numeration (hundreds tens ones) and the use of number periods such as ones thousands and millions and associates verbal names written word names and standard numerals with whole numbers fractions decimals
Grades 3-5: A. Number Sense Concepts and Operations / 1: The student understands the different ways numbers are represented and used in the real world. / MA.A.1.2.3 Understands concrete and symbolic representations of whole numbers fractions decimals and percents in real-world situations. / : 0001156
14. Grades 3-5: A. Number Sense Concepts and Operations / 1: The student understands the different ways numbers are represented and used in the real world. / MA.A.1.2.1 Names whole numbers combining 3-digit numeration (hundreds tens ones) and the use of number periods such as ones thousands and millions and associates verbal names written word names and standard numerals with whole numbers fractions decimals
Grades 3-5: A. Number Sense Concepts and Operations / 1: The student understands the different ways numbers are represented and used in the real world. / MA.A.1.2.3 Understands concrete and symbolic representations of whole numbers fractions decimals and percents in real-world situations. / : 0001611
15. Grades 3-5: A. Number Sense Concepts and Operations / 5: The student understands and applies theories related to numbers. / MA.A.5.2.1 Understands and applies basic number theory concepts including primes composites factors and multiples. : 0001653
16. Grades 3-5: A. Number Sense Concepts and Operations / 1: The student understands the different ways numbers are represented and used in the real world. / MA.A.1.2.1 Names whole numbers combining 3-digit numeration (hundreds tens ones) and the use of number periods such as ones thousands and millions and associates verbal names written word names and standard numerals with whole numbers fractions decimals
Grades 3-5: A. Number Sense Concepts and Operations / 1: The student understands the different ways numbers are represented and used in the real world. / MA.A.1.2.3 Understands concrete and symbolic representations of whole numbers fractions decimals and percents in real-world situations. / : 0001737
17. Grades 3-5: A. Number Sense Concepts and Operations / 1: The student understands the different ways numbers are represented and used in the real world. / MA.A.1.2.2. Understands the relative size of whole numbers commonly used fractions decimals and percents. : 0000938
18. Grades 3-5: D. Algebraic Thinking / 1: The student describes analyzes and generalizes a wide variety of patterns relations and functions. / MA.D.1.2.1 Describes a wide variety of patterns and relationships through models such as manipulatives tables graphs rules using algebraic symbols.
Grades 3-5: D. Algebraic Thinking / 1: The student describes analyzes and generalizes a wide variety of patterns relations and functions. / MA.D.1.2.2 Generalizes a pattern relation or function to explain how a change in one quantity results in a change in another. /
Grades 3-5: E. Data Analysis and Probability / 1: The student understands and uses the tools of data analysis for managing information. / MA.E.1.2.3 Analyzes real-world data to recognize patterns and relationships of the measures of central tendency using tables charts histograms bar graphs line graphs pictographs and circle graphs generated by appropriate technology including calculators / : 0001895
19. (none) 0001961
20. (none) 0000807
21. (none) 0001354
22. Grades 3-5: A. Number Sense Concepts and Operations / 3: The student understands the effects of operations on numbers and the relationships among these operations selects appropriate operations and computes for problem solving. / MA.A.3.2.2 Selects the appropriate operation to solve specific problems involving addition subtraction and multiplication of whole numbers decimals and fractions and division of whole numbers. : 0001305
23. (none) 0000896
24. Grades 3-5: A. Number Sense Concepts and Operations / 3: The student understands the effects of operations on numbers and the relationships among these operations selects appropriate operations and computes for problem solving. / MA.A.3.2.2 Selects the appropriate operation to solve specific problems involving addition subtraction and multiplication of whole numbers decimals and fractions and division of whole numbers. : 0001594
25. Grades 3-5: A. Number Sense Concepts and Operations / 3: The student understands the effects of operations on numbers and the relationships among these operations selects appropriate operations and computes for problem solving. / MA.A.3.2.2 Selects the appropriate operation to solve specific problems involving addition subtraction and multiplication of whole numbers decimals and fractions and division of whole numbers.
Grades 3-5: D. Algebraic Thinking / 2: The student uses expressions equations inequalities graphs and formulas to represent and interpret situations. / MA.D.2.2.1 Represents a given simple problem situation using diagrams models and symbolic expressions translated from verbal phrases or verbal phrases translated from symbolic expressions etc. / : 0001767
26. Grades 3-5: A. Number Sense Concepts and Operations / 3: The student understands the effects of operations on numbers and the relationships among these operations selects appropriate operations and computes for problem solving. / MA.A.3.2.2 Selects the appropriate operation to solve specific problems involving addition subtraction and multiplication of whole numbers decimals and fractions and division of whole numbers. : 0000083
27. Grades 3-5: A. Number Sense Concepts and Operations / 3: The student understands the effects of operations on numbers

## State Genealogy by Question

and the relationships among these operations selects appropriate operations and computes for problem solving. / MA.A.3.2.2 Selects the appropriate operation to solve specific problems involving addition subtraction and multiplication of whole numbers decimals and fractions and division of whole numbers. : 0001821
28. (none) 0000106
29. (none) 0001024
30. (none) 0000376
31. Grades 3-5: C. Geometry and Spatial Sense / 2: The student visualizes and illustrates ways in which shapes can be combined subdivided and changed. / MA.C.2.2.1 Understands the concepts of spatial relationships symmetry reflections congruency and similarity.
Grades 3-5: C. Geometry and Spatial Sense / 2: The student visualizes and illustrates ways in which shapes can be combined subdivided and changed. / MA.C.2.2.2 Predicts illustrates and verifies which figures could result from a flip slide or turn of a given figure. / : 0000961
32. Grades 3-5: E. Data Analysis and Probability / 1: The student understands and uses the tools of data analysis for managing information. / MA.E.1.2.1 Solves problems by generating collecting organizing displaying and analyzing data using histograms bar graphs circle graphs line graphs pictographs and charts. : 0000548
33. (none) 0001253
34. Grades 3-5: E. Data Analysis and Probability / 1: The student understands and uses the tools of data analysis for managing information. / MA.E.1.2.1 Solves problems by generating collecting organizing displaying and analyzing data using histograms bar graphs circle graphs line graphs pictographs and charts. : 0001712
35. (none) 0000618
36. Grades $3-5$ : B. Measurement / 2: The student compares contrasts and converts within systems of measurement (both standard/nonstandard and metric/customary). / MA.B.2.2.2 Selects and uses appropriate standard and nonstandard units of measurement according to type and size.
Grades 3-5: B. Measurement / 4: The student selects and uses appropriate units and instruments for measurement to achieve the degree of precision and accuracy required in real-world situations. / MA.B.4.2.1 Determines which units of measurement such as seconds square inches dollars per tankful to use with answers to real-world problems. /:0001624
37. Grades $3-5$ : B. Measurement / 2: The student compares contrasts and converts within systems of measurement (both standard/nonstandard and metric/customary). / MA.B.2.2.2 Selects and uses appropriate standard and nonstandard units of measurement according to type and size.
Grades 3-5: B. Measurement / 4: The student selects and uses appropriate units and instruments for measurement to achieve the degree of precision and accuracy required in real-world situations. / MA.B.4.2.1 Determines which units of measurement such as seconds square inches dollars per tankful to use with answers to real-world problems. /
Grades 3-5: B. Measurement / 4: The student selects and uses appropriate units and instruments for measurement to achieve the degree of precision and accuracy required in real-world situations. / MA.B.4.2.2 Selects and uses appropriate instruments and technology including scales rulers thermometers measuring cups protractors and gauges to measure in real-world situations. / : 0001595
38. Grades $3-5$ : B. Measurement / 1: The student measures quantities in the real world and uses the measures to solve problems. / MA.B.1.2.1 Uses concrete and graphic models to develop procedures for solving problems related to measurement including length weight time temperature perimeter area volume and angle.
Grades 3-5: B. Measurement / 1: The student measures quantities in the real world and uses the measures to solve problems. / MA.B.1.2.2 Solves real-world problems involving length weight perimeter area capacity volume time temperature and angles. /:0001103
39. Grades 3-5: B. Measurement / 2: The student compares contrasts and converts within systems of measurement (both standard/nonstandard and metric/customary). / MA.B.2.2.1 Uses direct (measured) and indirect (not measured) measures to calculate and compare measurable characteristics. : 0000497
40. Grades 3-5: E. Data Analysis and Probability / 1: The student understands and uses the tools of data analysis for managing information. / MA.E.1.2.2 Determines range mean median and mode from sets of data.
Grades 3-5: E. Data Analysis and Probability / 1: The student understands and uses the tools of data analysis for managing information. / MA.E.1.2.3 Analyzes real-world data to recognize patterns and relationships of the measures of central tendency using tables charts histograms bar graphs line graphs pictographs and circle graphs generated by appropriate technology including calculators /
Grades 3-5: E. Data Analysis and Probability / 3: The student uses statistical methods to make inferences and valid arguments about real-world situations. / MA.E.3.2.1 Designs experiments to answer class or personal questions collects information and interprets the results using statistics (range mean median and mode) and pictographs charts bar graphs circle graphs and line graphs. / : 0000624
41. (none) 0001856
42. (none) 0001272
43. (none) 0001211
44. (none) 0000645
45. (none) 0001815

## State Genealogy by Question

46. Grades 3-5: C. Geometry and Spatial Sense / 2: The student visualizes and illustrates ways in which shapes can be combined subdivided and changed. / MA.C.2.2.1 Understands the concepts of spatial relationships symmetry reflections congruency and similarity. : 0000726
47. (none) 0000174
48. (none) 0000109
49. Grades 3-5: A. Number Sense Concepts and Operations / 3: The student understands the effects of operations on numbers and the relationships among these operations selects appropriate operations and computes for problem solving. / MA.A.3.2.1 Understands and explains the effects of addition subtraction and multiplication on whole numbers decimals and fractions including mixed numbers and the effects of division on whole numbers including the inverse relationship of multiplication : 0001598
50. (none) 0001827

## Eduware Genealogy by Category

1: 1. Mathematical Reasoning\A. Draw conclusions about mathematics $\backslash 1$. Factor \& product relationshipsla. Factor \& product relationships - (1)
2: 1. Mathematical Reasoning\A. Draw conclusions about mathematics\2. Statements using: "and", "or", "not"la. Statements using: "and", "or", "not" - (2, 6)
1: 1. Mathematical Reasoning\A. Draw conclusions about mathematics\3. Draw diagrams for problemsla. Draw diagrams for problems - (3)
1: 1. Mathematical Reasoning\B. Analyze mathematical situations\3. Symmetry or patterning in number tablesla. Symmetry or patterning in number tables - (18)
1: 1. Mathematical Reasoning\C. Justify their answers \& solution proces\1. Verify an answer to a problemla. Verify an answer to a problem - (7)
1: 1. Mathematical Reasoning\B. Analyze mathematical situations\4. Money as related to fractions and decimla. Money - (4) 2: 1. Mathematical Reasoning\D. Simple conclusions through logical reas\1. Solve problems with diagrams, charts, \&la. Problems with diagrams, charts, \& table - $(9,10)$
1: 1. Mathematical Reasoning\D. Simple conclusions through logical reas\3. Identify missing/extra info. in problemla. Identify missing/extra info. in problem - (11)
1: 1. Mathematical Reasoning\C. Justify their answers \& solution proces $\backslash 2$. Justify answers with estimation \& checkla. Justify by estimation and checking - (5)
1: 2. Number and Numeration\A. Use numbers to count objects \& measurel1. Read \& write whole numbersla. Read \& write whole numbers - (8)
1: 2. Number and Numeration\A. Use numbers to count objects \& measurel3. Relate fractions \& decimals to moneyla. Relate fractions \& decimals to money - (12)
2: 2. Number and Numeration\A. Use numbers to count objects $\&$ measure\4. Use of fractions $\&$ decimals in daily lila. Use of fractions \& decimals in daily li - $(13,14)$
1: 2. Number and Numeration\B. Number relationships w/ concrete materil3. Prime numbersla. Prime numbers - (15)
1: 2. Number and Numeration\C. Relate counting to grouping \& to place\1. Place value conceptsla. Place value concepts - (16)
1: 2. Number and Numeration\D. Order of integers, fractions \& decimals\3. Decimalsla. Decimals to hundredths - (17)
1: 2. Number and Numeration\E. Ratio and percent problems in actual sil1. Percentsla. Percents that are multiples of 5 - (19)
1: 2. Number and Numeration\E. Ratio and percent problems in actual sil2. Ratio in real world situationsla. Ratio in real world situations - (20)
1: 3. Operations\A. Add, subtract, multiply, \& divide whole\1. Add. and sub. of integersla. Add. \& sub. of integers - (21)
1: 3. Operations\A. Add, subtract, multiply, \& divide whole\3. Multiply 2 \& 3 digit numbersla. Multiply 2 \& 3 digit numbers - (22)
1: 3. Operations\A. Add, subtract, multiply, \& divide whole\4. Multiplication by multiples of 10la. Multiplication by multiples of 10 -
(23)

1: 3. Operations\A. Add, subtract, multiply, \& divide whole\5. Division of $2 \& 3$ digit numbersla. Division of $2 \& 3$ digit dividends (24)

1: 3. Operations $\backslash \mathrm{B}$. Select the correct operation to solve al1. Using diagrams \& chartsla. Diagrams \& charts - (25)
1: 3. Operations\B. Select the correct operation to solve al5. Breaking problem into partsla. Break problem into parts - (26)
1: 3. Operations IC. Know single digit add., sub., mult., dil3. Multiplication \& division facts throughla. Multiplication \& division through 144-(27)
1: 4. Modeling/Multiple Representation\A. Materials to model spatial relations 11 . Properties of plane figures\b. Triangles - (28)
1: 4. Modeling/Multiple Representation\A. Materials to model spatial relations\1. Properties of plane figureslc. Circles - (29)
1: 4. Modeling/Multiple Representation\A. Materials to model spatial relations\1. Properties of plane figuresld. Other polygons - (30)
1: 4. Modeling/Multiple Representation\A. Materials to model spatial relations\4. *Transformations\b. *Reflection - (31)
2: 4. Modeling/Multiple Representation\B. Tables, charts, \& graphs\2. Graphs \& charts of real-world datala. Graphs \& charts of real-world data - $(32,34)$
1: 4. Modeling/Multiple Representation\D. Use variables to predict changes over t t 1 . Temperatures \& heights over timela. Temperatures \& heights over time - (35)
1: 4. Modeling/Multiple Representation\E. Materials for processes \& geometric conl2. Common plane \& solid geometric figuresla. Common plane \& solid geometric figures - (33)
1: 4. Modeling/Multiple Representation\E. Materials for processes \& geometric con\4. Lines of symmetryla. Lines of symmetry (46)

1: 5. Measurement\A. Understand that measurement is approxim\1. Identify appropriate metric unitsla. Appropriate metric units (36)

1: 5. Measurement\C. Measured attributes: area, volume, timel1. Measurement problems: Timela. Measurement problems: Time (44)

1: 5. Measurement\C. Measured attributes: area, volume, timel3. Measurement problems: Weightla. Measurement problems:
Weight - (38)
1: 5. Measurement\D. Estimate/find measurements\2. Compare equivalent measuresla. Equivalent measures - (39)

## Eduware Genealogy by Category

1: 5. MeasurementlF. Use statistical methods to interpret dal1. Materials for the concept of averagela. The concept of average (40)

1: 5. Measurement|B. Select appropriate measurement tools11. Select proper (non)standard measurementla. Proper (non)standard measurements - (37)
1: 6. Uncertainty\D. Develop a wide variety of estimation skl1. Round numbersla. Round numbers - (41)
1: 6. UncertaintylD. Develop a wide variety of estimation skl2. Estimating add., sub., mult., div.la. Estimating add., sub., mult., div. (45)

1: 6 . Uncertainty 1 . Determine the reasonableness of results11. The number of possible combinationsla. The number of possible combinations - (42)
1: 6. Uncertainty\F. Predict experimental probabilities\2. Likelihood of eventsla. The likelihood of events - (43)
1: 7. Patterns/FunctionsIF. Relationships of 2D \& 3D shapes 2 . Identify different 3-D shapesld. Cylinders - (48)
1: 7. Patterns/Functions\B. Represent \& describe mathematical relat\5. Relationships of add., sub., mult., div\a. Explore relationships of add., sub., mu - (49)
17. Patterns/Functions|B. Represent \& describe mathematical relat|2. Terms at most \& at leastla. Terms at most and at least - (50)

1: 7. Patterns/Functions\G. Discover patterns in nature, art, music\5. Relate children's literature to mathemala. Relate children's literature to mathema - (47)

## State Genealogy by Category

6 from Grades 3-5: A. Number Sense Concepts and Operations / 1: The student understands the different ways numbers are represented and used in the real world. / MA.A.1.2.1 Names whole numbers combining 3-digit numeration (hundreds tens ones) and the use of number periods such as ones thousands and millions and associates verbal names written word names and standard numerals with whole numbers fractions decimals - $(4,8,12,13,14,16)$
1 from Grades 3-5: A. Number Sense Concepts and Operations / 1: The student understands the different ways numbers are represented and used in the real world. / MA.A.1.2.2. Understands the relative size of whole numbers commonly used fractions decimals and percents. - (17)
6 from Grades 3-5: A. Number Sense Concepts and Operations / 1: The student understands the different ways numbers are represented and used in the real world. / MA.A.1.2.3 Understands concrete and symbolic representations of whole numbers fractions decimals and percents in real-world situations. - (4, 8, 12, 13, 14, 16)
1 from Grades 3-5: A. Number Sense Concepts and Operations / 1: The student understands the different ways numbers are represented and used in the real world. / MA.A.1.2.4 Understands that numbers can be represented in a variety of equivalent forms using whole numbers decimals fractions and percents. - (12)
1 from Grades 3-5: A. Number Sense Concepts and Operations / 3: The student understands the effects of operations on numbers and the relationships among these operations selects appropriate operations and computes for problem solving. / MA.A.3.2.1 Understands and explains the effects of addition subtraction and multiplication on whole numbers decimals and fractions including mixed numbers and the effects of division on whole numbers including the inverse relationship of multiplication - (49)
5 from Grades 3-5: A. Number Sense Concepts and Operations / 3: The student understands the effects of operations on numbers and the relationships among these operations selects appropriate operations and computes for problem solving. / MA.A.3.2.2
Selects the appropriate operation to solve specific problems involving addition subtraction and multiplication of whole numbers decimals and fractions and division of whole numbers. - (22, 24, 25, 26, 27)
2 from Grades 3-5: A. Number Sense Concepts and Operations / 4: The student uses estimation in problem solving and computation. / MA.A.4.2.1 Uses and justifies different estimation strategies in a real-world problem situation and determines the reasonableness of results of calculations in a given problem situation. $-(5,7)$
2 from Grades 3-5: A. Number Sense Concepts and Operations / 5: The student understands and applies theories related to numbers. / MA.A.5.2.1 Understands and applies basic number theory concepts including primes composites factors and multiples.

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1 from Grades 3-5: B. Measurement / 1: The student measures quantities in the real world and uses the measures to solve problems. / MA.B.1.2.1 Uses concrete and graphic models to develop procedures for solving problems related to measurement including length weight time temperature perimeter area volume and angle. - (38)
1 from Grades 3-5: B. Measurement / 1: The student measures quantities in the real world and uses the measures to solve problems. / MA.B.1.2.2 Solves real-world problems involving length weight perimeter area capacity volume time temperature and angles. - (38)
1 from Grades 3-5: B. Measurement / 2: The student compares contrasts and converts within systems of measurement (both standard/nonstandard and metric/customary). / MA.B.2.2.1 Uses direct (measured) and indirect (not measured) measures to calculate and compare measurable characteristics. - (39)
2 from Grades 3-5: B. Measurement / 2: The student compares contrasts and converts within systems of measurement (both standard/nonstandard and metric/customary). / MA.B.2.2.2 Selects and uses appropriate standard and nonstandard units of measurement according to type and size. - $(36,37)$
2 from Grades 3-5: B. Measurement / 4: The student selects and uses appropriate units and instruments for measurement to achieve the degree of precision and accuracy required in real-world situations. / MA.B.4.2.1 Determines which units of measurement such as seconds square inches dollars per tankful to use with answers to real-world problems. - $(36,37)$ 1 from Grades 3-5: B. Measurement / 4: The student selects and uses appropriate units and instruments for measurement to achieve the degree of precision and accuracy required in real-world situations. / MA.B.4.2.2 Selects and uses appropriate instruments and technology including scales rulers thermometers measuring cups protractors and gauges to measure in real-world situations. - (37)
2 from Grades 3-5: C. Geometry and Spatial Sense / 2: The student visualizes and illustrates ways in which shapes can be combined subdivided and changed. / MA.C.2.2.1 Understands the concepts of spatial relationships symmetry reflections congruency and similarity. - $(31,46)$
1 from Grades 3-5: C. Geometry and Spatial Sense / 2: The student visualizes and illustrates ways in which shapes can be combined subdivided and changed. / MA.C.2.2.2 Predicts illustrates and verifies which figures could result from a flip slide or turn of a given figure. - (31)
1 from Grades 3-5: D. Algebraic Thinking / 1: The student describes analyzes and generalizes a wide variety of patterns relations and functions. / MA.D.1.2.1 Describes a wide variety of patterns and relationships through models such as manipulatives tables graphs rules using algebraic symbols. - (18)
3 from Grades 3-5: D. Algebraic Thinking / 1: The student describes analyzes and generalizes a wide variety of patterns relations and functions. / MA.D.1.2.2 Generalizes a pattern relation or function to explain how a change in one quantity results in a change in another. - $(5,7,18)$

## State Genealogy by Category

4 from Grades 3-5: D. Algebraic Thinking / 2: The student uses expressions equations inequalities graphs and formulas to represent and interpret situations. / MA.D.2.2.1 Represents a given simple problem situation using diagrams models and symbolic expressions translated from verbal phrases or verbal phrases translated from symbolic expressions etc. - ( $3,9,10,25$ )
2 from Grades 3-5: E. Data Analysis and Probability / 1: The student understands and uses the tools of data analysis for managing information. / MA.E.1.2.1 Solves problems by generating collecting organizing displaying and analyzing data using histograms bar graphs circle graphs line graphs pictographs and charts. - $(32,34)$
1 from Grades 3-5: E. Data Analysis and Probability / 1: The student understands and uses the tools of data analysis for managing information. / MA.E.1.2.2 Determines range mean median and mode from sets of data. - (40)
2 from Grades 3-5: E. Data Analysis and Probability / 1: The student understands and uses the tools of data analysis for managing information. / MA.E.1.2.3 Analyzes real-world data to recognize patterns and relationships of the measures of central tendency using tables charts histograms bar graphs line graphs pictographs and circle graphs generated by appropriate technology including calculators - $(18,40)$
1 from Grades 3-5: E. Data Analysis and Probability / 3: The student uses statistical methods to make inferences and valid arguments about real-world situations. / MA.E.3.2.1 Designs experiments to answer class or personal questions collects information and interprets the results using statistics (range mean median and mode) and pictographs charts bar graphs circle graphs and line graphs. - (40)
2 from Grades 3-5: E. Data Analysis and Probability / 3: The student uses statistical methods to make inferences and valid arguments about real-world situations. / MA.E.3.2.2 Uses statistical data about life situations to make predictions and justifies reasoning. - $(5,7)$

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