

School Supply List Sixth Grade: 2019-2020

Folders:

*plastic 2 pocket folders

- Math: Yellow
- Science: Blue
- Reading: Red
- Writing: Black
- Geography: Green

Binders and Notebooks

Math: 1.5 inch binder with plain white fill paper

Science: 5 subject blue notebook

Reading: Red spiral or composition notebook

Writing: Black 1.5 inch binder with plain white lined filler paper; 5 dividers

Geography: Green spiral or composition notebook.

For the Pencil Case

- 3 packages of # 2 pencils (Ticonderoga or Dixon) Please put your name on each box, teacher will hold for you.
- A 4-pack of highlighters (all different colors)
- Colored pencils
- 1 package of cap erasers for pencils
- Scissors
- 2 packages of glue sticks
- Small hand-held pencil sharpener (with a closed bottom to collect pencil shavings)
- 2 red pens
- white out

Optional but greatly appreciated:

- Post-It sticky notes (these will be used often)
- 2 boxes of tissues
- 1 container hand sanitizer
- Headphones for computers
- One package disinfecting wipes
- One roll of white paper towels
- One gallon size zip lock bag (students will store their extra materials in their labeled bag, and will refill pencil case as necessary)



Comments

- **Extra supplies** will be stored in bags (labeled with your child's name) in the classroom for your child to access when replacements are needed.
- Please **DO NOT BUY** assignment book/agenda, Trapper Keeper, or book covers.

ENJOY THE SUMMER ☺



Dear Parents and Students,

Welcome to the 2019-2020 school year at the J.G. Pyne Arts Magnet! We welcome and encourage parental contact. It is important for parents, teachers and students to unite as a team with common goals. Our goal is to provide a quality education in a safe and happy learning environment.

Parent and teacher communication is vital to achieving this goal. Email communication is a great way to touch base regarding your child's progress or to set up an appointment to discuss any concerns you may have. Telephone calls cannot be received during class time, but will be returned as soon as possible.

Please include your child's first and last name in the subject heading of your email.

Contact information:

Ms. Reynolds: room 2014 (Math & Science) nreynolds@lowell.k12.ma.us
Mrs. Urbine room 2015 (ELA & Social Studies) kurbine@lowell.k12.ma.us
Main Office: Tel # 978-937-7639

We are excited to start the school year!

Looking forward to a great year!
Ms. Reynolds & Mrs. Urbine

Pyne Arts Magnet Summer 2016 Mathematics Packet for Rising 6th Graders

How well does your child know his or her "math facts" for multiplication and division of whole numbers from 0-12? Being able to retrieve these quickly and from memory is key to your child's success in middle school math and beyond. This is the most important math preparation your child can do this summer.

In addition, please have your child complete the enclosed math packet. This packet reviews key concepts that your child has already learned. This packet will be collected on the first day of school and will be graded.

Students should display all of their work neatly in the space provided or on attached paper. All computations should be done without a calculator!

Here are some helpful websites you may find useful if your child "gets stuck" on the summer packet or would like to do some additional work online.

<http://www.math.com/>

<http://www.freemathhelp.com/algebra-help.html> (This has text and video lessons.)

<http://mathforum.org/library/drmath/drmath.middle.html>

<http://calculationnation.nctm.org/> (educational math games)

<http://www.khanacademy.org/> <http://www.funbrain.com/cgi-bin/shtml.cgi?A1=../algebra/index.html>

<http://www.math-play.com/One-Step-Equation-Game.html>

<http://www.math-play.com/integers-game.html> (integer games)

<http://www.math-play.com/Integers-Jeopardy/Integers-Jeopardy.html>

"Thinker" problems: <http://mathcounts.org/potwarchive>

I look forward to working with your child during the 2015-2016 school year!

Have a great summer, Ms. Reynolds

Email: nreynolds@lowell.k12.ma.us

1/5

X	0	1	2	3	4	5	6	7	8	9	10	11	12
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Please complete all multiplication grids
and memorize your facts!

2/5

X	0	1	2	3	4	5	6	7	8	9	10	11	12
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Please complete all multiplication grids
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3/5

X	0	1	2	3	4	5	6	7	8	9	10	11	12
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4/5-

Please complete all multiplication grids
and memorize your facts!

5/5

X	0	1	2	3	4	5	6	7	8	9	10	11	12
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Please complete all multiplication grids
and memorize your facts!

*Please show all work in the space provided or attach neatly on separate paper.
No calculator!*

Place Value

- 1) Sylvia works at a bakery. On Monday, she baked 388 cookies. On Tuesday, Sylvia baked 200 less cookies than on Monday. How many cookies did Sylvia bake on Tuesday?
 - a. 178
 - b. 288
 - c. 188
 - d. 88

- 2) Which of these numerals is equivalent to $5000+400+2$?
 - a. 5420
 - b. 5402
 - c. 5,000,400,002
 - d. 5,400,002

- 3) Which means the same as 7500?
 - a. 75 hundreds
 - b. 75 ones
 - c. 75 tens
 - d. 75 thousands

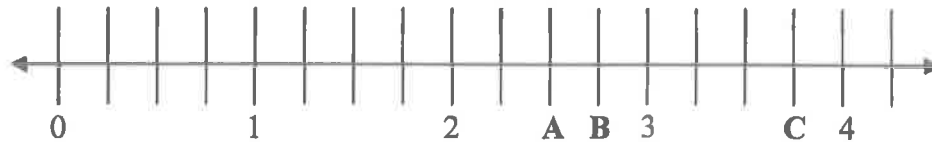
- 4) Which sum has the value of 524?
 - a. 5 tens + 24 ones
 - b. 5 hundreds + 24 tens
 - c. 5 hundreds + 2 tens + 4 ones
 - d. 4 hundreds + 24 tens

- 5) Which sum has the value of 8943?
 - a. 8 thousands + 9 hundreds + 43 tens
 - b. 8 thousands + 94 tens + 3 ones
 - c. 7 thousands + 9 hundreds + 43 tens
 - d. 7 thousands + 19 hundreds + 43 tens

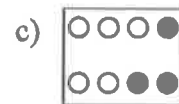
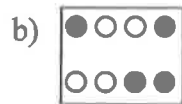
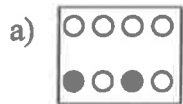
- 6) In which number does 5 have the least value?
 - a. 5346
 - b. 582
 - c. 8532
 - d. 7852

Pictorial Representation of Numbers

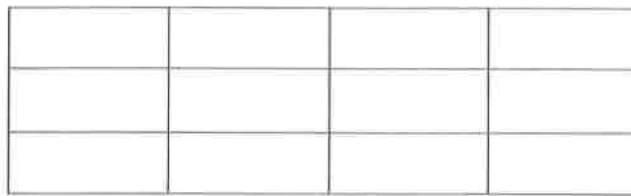
1) Which letter indicates $2\frac{3}{4}$ on the number line?



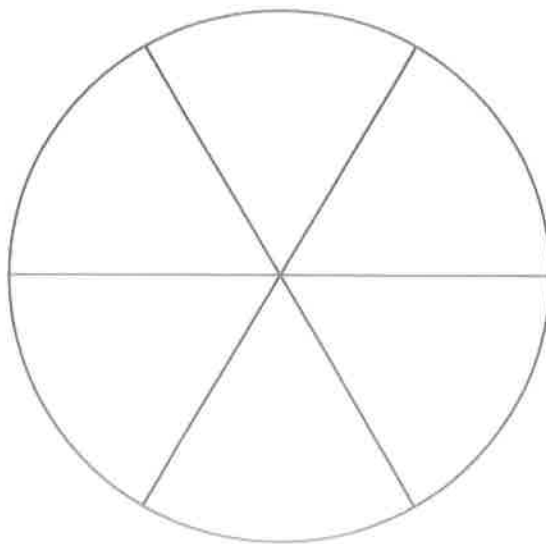
2) Which of the following shows $\frac{3}{8}$?



3) Shade $\frac{3}{4}$ of the rectangle.

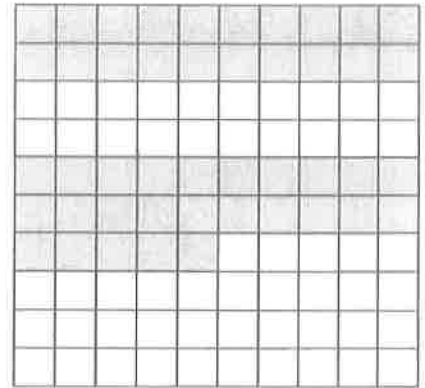
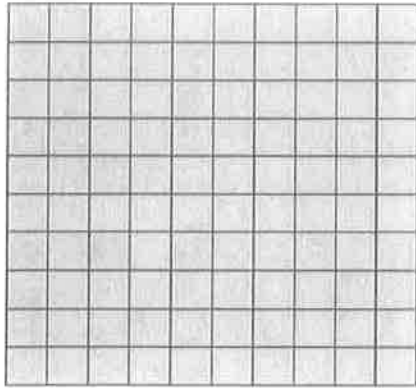


4) Shade $\frac{2}{3}$ of the following circle.



5) What decimal number is represented by the shaded part?

■ = 0.01



Equivalent Decimals, Fractions, and Percents

- 1) Sarah competed in 9 out of 12 gymnastics meets. Which of the following is another way to describe this?
- a. Sarah competed in $\frac{1}{2}$ of the meets.
 - b. Sarah competed in $\frac{3}{4}$ of the meets.
 - c. Sarah competed in $\frac{2}{3}$ of the meets.
 - d. Sarah competed in $\frac{1}{4}$ of the meets.

- 2) Which improper fraction is equivalent to $2\frac{3}{4}$?
- a. $\frac{5}{4}$
 - b. $\frac{14}{4}$
 - c. $\frac{11}{4}$
 - d. $\frac{9}{4}$

- 3) Barry baked 10 cookies of different shapes as shown below. What decimal number is equivalent to the percentage of heart-shaped cookies in the batch?



- a. 3
- b. 3.3
- c. 0.3
- d. 0.7

Rounding of Numbers

- 1) The town of Springfield has 6875 cars. Round this number to the nearest thousand.
- 2) There are 8951 people at the game. Round this to the nearest thousand.
- 3) Jane buys 8.54 pounds of cat food. Round this weight to the nearest pound.

Models for Operations

- 1) James packed 96 books in twelve boxes. He packed an equal number of books in each box. Which operation can be used to find the number of books in each box?
 - a) Subtract 12 from 96
 - b) Divide 96 by 12
 - c) Multiply 96 by 12
 - d) Add 96 and 12

Computation with Whole Numbers and Decimals

- 1) $73.4 + 38.27 =$
- 2) Solve: $\$2.14 + \$0.80 + \$12.03 =$
- 3) Solve: $\$32.28 - \$4.35 =$
- 4) Multiply $\$20.00 \times 10$ by moving the decimal.
 - a. $\$20.00$
 - b. $\$2.00$
 - c. $\$2000.00$
 - d. $\$200.00$
- 5) Solve $363 \times 0.6 =$
- 6) Solve $\$60.26 \div 23 =$

Fraction Work

1) Write as an improper fraction: $5\frac{3}{8}$

2) Write as an improper fraction: $6\frac{11}{12}$

3) Write as a mixed number: $\frac{109}{11}$

4) Write as a mixed number: $\frac{37}{4}$

5) Solve. Write your answer as a mixed number: $9\overline{)43}$

6) Solve. Write your answer as a mixed number: $6\overline{)46}$

Computation with Fractions

1) $\frac{1}{3} + \frac{5}{9} =$

2) $3\frac{4}{7} + \frac{5}{8} =$

3) $7\frac{2}{3} + 5\frac{1}{3} =$

4) $4 - 2\frac{1}{2} =$

5) $\frac{3}{5} - \frac{1}{4} =$

6) $11\frac{1}{9} - 8\frac{5}{6} =$

Word Problems

- 1) Three dozen doughnuts at the coffee shop costs \$19.80. Each doughnut costs the same amount. What is the cost of one doughnut?

- 2) A package of 15 computer disks costs \$47.25. If each disk costs the same amount, how much did each disk cost?

- 3) Jenn bought 3 shirts that cost \$12.95 each. She gave the clerk a \$50 bill to pay for the shirts. How much change should Jenn receive?

Numerical Estimation Strategies

- 1) There were 3,823 people at the Westport Arts Festival on Saturday. On Sunday, 5,139 people attended. To get a good ESTIMATE of how many people attended altogether for both days, which expression would be best to use?
- a. $4,000 + 5,000$
 - b. $3,000 + 5,000$
 - c. $4,000 + 6,000$
 - d. $3,000 + 6,000$
- 2) Alvin needs to multiply 28 by 33. Which of the following gives you the best estimate for Alvin to use?
- a. 30×40
 - b. 30×30
 - c. 25×30
 - d. 20×20
- 3) To estimate the product of 423 and 913, Joe multiplies 400×900 . Is Joe's estimate GREATER than or LESS than the actual amount?
- a. Greater, because he rounded both numbers up.
 - b. Greater, because he rounded both numbers down.
 - c. Less, because he rounded both numbers up.
 - d. Less, because he rounded both numbers down.

- 4) To ESTIMATE the sum of 521 and 613, John added 500 and 600. What is the difference between the estimate and actual answer?

Estimating Solutions to Problems

- 1) David completed 100 questions on the test. His teacher said he did $\frac{2}{3}$ of them correctly. Which best describes the number of questions he answered correctly?
- A little more than 30
 - More than 60
 - A little more than 50
 - A little less than 60
- 2) Mr. Jones ordered 18 pizzas for the class party. At the end of the party $3\frac{1}{8}$ pizzas were left. Which describes the number of pizzas the class ate?
- A little more than 14
 - A little more than 15
 - A little less than 14
 - A little less than 15
- 3) Jane needs to add $7\frac{1}{8} + 4\frac{3}{4}$. To get a good estimate of this sum, which expression would be best for Jane to use?
- $7 + 4$
 - $7 + 5$
 - $71 + 44$
 - $8 + 4$
- 4) Mrs. Jones spent \$682 on groceries last month. This month she spent \$423 on groceries. ABOUT how much less did she spend on groceries this month than last month?
- \$75
 - \$100
 - \$300
 - \$1000

- 5) In June, Christy earned about \$18 for mowing lawns and \$29 for babysitting. ABOUT how much did she earn altogether?
- a. \$80
 - b. \$30
 - c. \$50
 - d. \$25

Approximating Measures

- 1) If the shorter arrow is 3 inches long, approximately how long is the other arrow?

- a. 9 in.
- b. 4 in.
- c. 6 in.
- d. 12 in.



- 2) A scale shows a weight of 10 grams. What object is most likely being weighed?
- a. Book
 - b. Pencil
 - c. Sandwich
 - d. Carton of milk

Customary and Metric Measurements

- 1) A football field is 100 YARDS long. How many FEET would you run if you ran exactly half way down the field?

Answer: _____

- 2) The 18-wheel truck is 10 meters long. How many centimeters is that?

Answer: _____

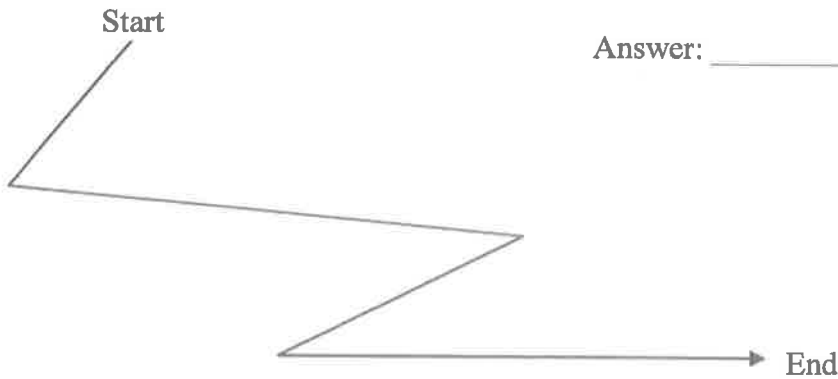
- 3) A basketball player is 209 cm tall. How many meters tall is that?

- 4) Measure the length of the pen to the NEAREST centimeter.

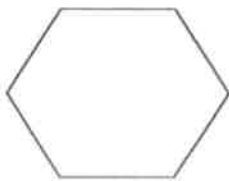


Length = _____

- 5) There is a funny path below. Each half-inch represents two yards. About how many yards do you think are represented?



- 6) Determine the PERIMETER of this figure to the nearest CENTIMETER.



Perimeter = _____

- 7) Use your ruler to determine the area of the rectangle in square inches. Measure lengths to the nearest eighth of an inch.



Area = _____

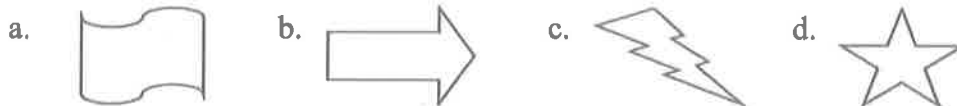
- 8) The BEST unit to measure the area of a classroom rug would be:
- a. Kilometers²
 - b. Kilometers
 - c. Meters²
 - d. Meters
- 9) The BEST unit to measure the amount of water in a bathtub would be:
- a. Cups
 - b. Gallons
 - c. Tons
 - d. Quarts
- 10) The length of a floor in a gym is best measured in
- a. Centimeters
 - b. Liters
 - c. Kilometers
 - d. Meters
- 11) Sam needed to measure the weight of his father's truck. The BEST unit to measure this would be:
- a. Ounces
 - b. Tons
 - c. Grams
 - d. Pints

Geometric Shapes and Properties

1) Which of the following shapes is NOT a quadrilateral?



2) Which of the following is NOT a polygon?



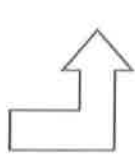
3) A rectangle with 4 equal sides is a _____.

4) In the space below, draw a parallelogram. Explain why the figure you drew is a parallelogram.

5) In the space below, draw a hexagon. Explain why the figure you drew is a hexagon.

Spatial Relationships

1) Which two figures are congruent?



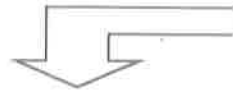
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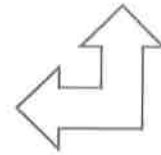
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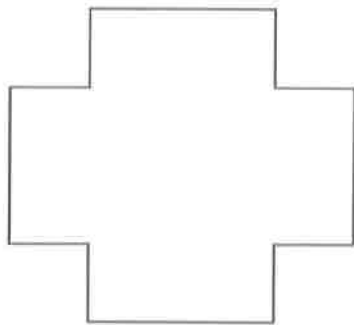
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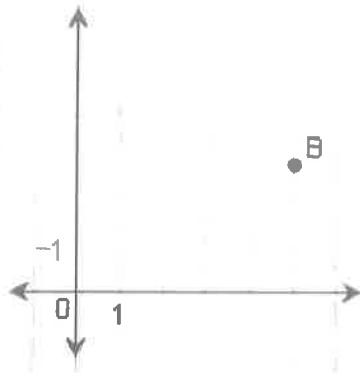
- a. 1 and 5
- b. 2 and 3
- c. 1 and 3
- d. 2 and 4

2) How many lines of symmetry does the following shape have?



3) Draw a shape that has at least one line of symmetry.

4) What is the location of point B?



- a. (3, 5)
- b. (4, 5)
- c. (5, 4)
- d. (5, 3)

Tables, Graphs and Charts

1) Ira is comparing the number of small business franchises. Draw and label a BAR graph that shows the number of each franchise shown in the table below.

Number of Franchises 1990	
McDonald's	7919
Jazzercise	4407
Dairy Queen	5214
7-Eleven	3010

2) Use the table to answer the following question.

Teacher	Number of Cans Collected in His/Her Class
Mr. Smith	652
Mr. Gomez	507
Ms. Castro	553
Ms. Powell	605

How many classes collected more than 500 cans?

- a. 1
- b. 2
- c. 3
- d. 4

- 3) Use the table to answer the following question.

Number of Students Who Bring a Packed Lunch to School

Days of the week	# of students
Monday	120
Tuesday	90
Wednesday	100
Thursday	109
Friday	70

During how many days did 100 or more students bring their lunch?

- a. 2
 - b. 3
 - c. 4
 - d. 5
- 4) Use the data from the table below to draw and label a bar graph.

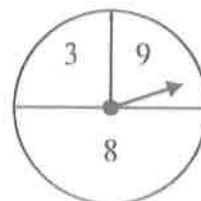
Favorite animal	# of people polled
elephant	55
tiger	30
hippo	70
wolf	60
hyena	5

Statistics and Data Analysis

- 1) Use the data from the table below to answer the following questions.

Rivers	Length in Miles
Uruguay	1,000
Bramaputra	1,800
Euphrates	2,235
Gambia	700
Salween	1,500

- a. For a social studies project Rita made a table that shows the length of several rivers in the world. She states Gambia River is about four times the length of the Euphrates River. Is Rita correct? Explain.
- b. According to Rita's chart which river is about twice the length of the Gambia River? Explain.



Probability and Combinations

- 1) Kelly and Anna take turns spinning a spinner. Kelly gets a point if the arrow lands on an even number. Anna gets a point if the arrow lands on an odd number. Is this game fair?
- No, because there are more odd numbers than even numbers.
 - No, because the outcomes are not equally likely.
 - Yes, because the half of the circle has odd numbers and half has an even number.
 - Yes, because there are 3 choices.
- 2) An ice cream sundae shop offers a choice of chocolate, vanilla, or strawberry ice cream, chocolate or caramel syrup, and nuts or no nuts on top. How many different types of sundaes can they make?

Patterns

- 1) What symbol should replace the question mark in the pattern below?



- 2) Find the next two numbers in the sequence.
3, 6, 12, 24, 48, ____, ____

Algebraic Concepts

- 1) What is the value of \hat{r} in this equation?

$$38 + \hat{r} = 99$$

- a. 51
 - b. 61
 - c. 71
 - d. 137
- 2) Identify the solution of $84 \div r = 12$.

Mathematical Applications

- 1) Brent wants to earn \$200 to buy a new skateboard. He can earn money mowing lawns. Brent can earn \$10 for each lawn he mows. He can mow at most 4 lawns per week.

How many weeks must Brent mow lawns to buy the skateboard?

- 2) A soup can display has 66 cans. There is one less can in each row than in the row below, with a single can in the top row. How many cans are in the bottom row?

- 3) Suppose a relative matches your age with dollars each birthday. You are 13. How much money have you been given over the years by this relative?

- 4) The Lewis Middle School Band is planning a bus trip to a band competition. There are 138 members in the band and each bus will hold 32 people. How many buses are needed for the trip?

Adapted from <http://bms.westport.k12.ct.us/BMSWebsite/mathcmt.htm>