

What's your

# Lucky Number?

A MATH RESEARCH PROJECT: GRADING CRITERIA

Completed Research Pages:	30 pts.
Poster Rough Draft:	10 pts.
Peer Evaluations x 3:	10 pts.
Poster Final Draft:	30 pts.
Self-Evaluation:	10 pts.
Overall EFFORT:	10 pts.
<b>Total Points Possible:</b>	<b>100 pts.</b>

**\*All of these items should be turned in together. If you'd like my feedback before you begin your final draft, please come see me. Teachers can provide peer evaluations, if they want to. ☺**

Name: \_\_\_\_\_

Due Date: \_\_\_\_\_

# What's your **LUCKY NUMBER?**

## A MATH RESEARCH PROJECT

### Directions:

- Choose any 2-digit number (11 – 99).
- Answer all the attached research questions about your number. Use the internet to help you find things you don't know.
- Create a poster that displays everything you learned about your number in a creative and colorful way.

## How will I be graded?

### **Number Sense (10 points)**

- Mean, Median & Mode
- Slope Intercept Form
- Coordinate Plane
- Algebraic Expressions
- Exponents
- Scientific Notation
- 2 Word Problems
- Multiplying by a Decimal
- Dividing by a Fraction

### **Geometry (2 points)**

- Angle
- Polygon

### **Measurement (5 points)**

- Length Conversion
- Weight Conversion
- Time Conversion
- Area
- Volume

### **Fun Stuff (3 points)**

- Athletes
- Celebrities
- Events
- Book, Songs, or Movies
- Other cool stuff!

### **Presentation (10 points)**

- Neatness
- Color
- Creativity
- Spelling
- Punctuation

**Final Grade - 30 points**

Name: \_\_\_\_\_

Due Date: \_\_\_\_\_

MY LUCKY NUMBER:

research

*The number 78 has been used as an example.*

Part 1: Number Sense (10 points)

1) Create a data set of 5 or more numbers so that your number is the mean, median, OR mode.

2) Using your number, write an equation in slope-intercept form and identify the slope and y-intercept.

3) Draw a coordinate plane and graph your number where the first number = x and the second number = y. (x, y)

4) Create an algebraic expression where your number is the solution. Solve your problem and show your work. (Ex:  $3x + 36 = 78$ ,  $x = 14$ )

5) Use the first number in your number as the base number and raise it to the power of the second number. (Ex:  $7^8 = 5,764,801$ )

6) Multiply your number 1,000,000 and then write it in scientific notation. (Ex:  $78,000,000 = 7.8 \times 10^7$ )

7) Write a word problem that includes your number. Include the answer.

***Denise made 78 friendship bracelets. She sold each bracelet for \$3. How much money did Denise earn selling bracelets? \$234***

8) Write a word problem with your number as the answer.

***Max earned \$35 babysitting on Monday and \$43 babysitting on Tuesday. How much did Max earn babysitting? \$78***

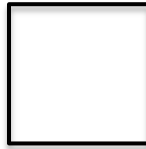
9) Multiply your number by 6.573 and solve. Show your work.

10) Divide your number by  $\frac{5}{7}$  and solve. Show your work.

Name: \_\_\_\_\_

Due Date: \_\_\_\_\_

MY LUCKY NUMBER:



RESEARCH

*The number 78 has been used as an example.*

### Part 2: Geometry (2 points)

- 1) Draw an angle with your number in degrees. Then find the supplement of the angle.



- 2) Is there a name for a polygon with this number of sides? If not, make one up!

*70 sides- heptacontagon*

*8 sides- octagon*

*78 sides- heptacontaoctagon*

### Part 3: Measurement (5 points)

- 1) Write any length measurement conversion involving your number.

*78 feet = 936 inches*

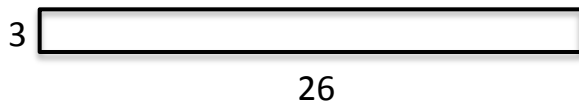
- 2) Write any weight measurement conversion involving your number.

*78 kilograms = 78,000 grams*

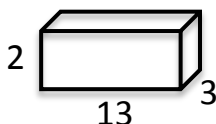
- 3) Write any time measurement conversion involving your number.

*78 years = 28,470 days*

- 4) Draw a rectangle with an area of your number.



- 5) Draw a rectangular prism with a volume of your number. Volume = length x width x height



Name: \_\_\_\_\_

Due Date: \_\_\_\_\_

MY LUCKY NUMBER:

# research

*The number 78 has been used as an example.*

## Part 4: Fun Stuff! (3 points)

1) Do any famous athletes wear your number on their jersey?

*Number 78- Richmond Webb, Bruce Smith  
Bobby Bell, Anthony Munoz*

2) What celebrities were born in this year?

*Born in 1978- Kobe Bryant, Rachel McAdams, Usher,  
Ashton Kutcher, Tia and Tamera Mowery*

3) What celebrities are this age?

*Celebrities who are 78 years old- Christopher Lloyd,  
Ian McKellen, Jon Voight, Gary Paulsen,*

4) What events happened in this year?

*In 1978- Smallpox eradicated, First in vitro birth  
In 1878- Thomas Edison patents the phonograph*

5) Do any songs, movies, books, or TV shows include your?

*Movies- The 78 Project Movie, 78/52*

6) What else is cool about your number?

*There are 78 cards in a tarot deck.  
78 total gifts are given in the song 'The 12 days of  
Christmas.'  
The Monaco Grand Prix completes 78 laps.  
78 is an abundant number which means the sum of  
its factors (other than 78) is greater than 78.  
 $1 + 2 + 3 + 6 + 13 + 26 + 39 = 90$*

# **Rough Draft of Poster (10 pts)**

Before you begin your poster on large paper, please sketch out a rough draft of how you will lay out your poster to include all of the grading criteria.

# What's your **LUCY NUMBER?**

PEER EVALUATION FOR: \_\_\_\_\_

Evaluator's Name:

Glow:

Grow:

Something cool I learned about this number:

Evaluator's Name:

Glow:

Grow:

Something cool I learned about this number:

Evaluator's Name:

Glow:

Grow:

Something cool I learned about this number:

**PEER EVALUATION FOR:** \_\_\_\_\_

Evaluator's Name:

**Glow:**

**Grow:**

Something cool I learned about this number:

Evaluator's Name:

**Glow:**

**Grow:**

Something cool I learned about this number:

Evaluator's Name:

**Glow:**

**Grow:**

Something cool I learned about this number:



# What's your **LUCKY NUMBER?**

A MATH RESEARCH PROJECT: **SELF-EVALUATION**

Student Name: \_\_\_\_\_

Final Grade: 130

**Number Sense: \_\_\_/10 points**

- Expanded Form
- Word Form
- Base Ten Form
- Factors
- Multiples
- Prime or Composite
- 2 Word Problems
- $\times 1,000$
- $\div 100$

**Geometry: \_\_\_/2 points**

- Angle
- Polygon

**Measurement: \_\_\_/5 points**

- Length Conversion
- Weight Conversion
- Time Conversion
- Area
- Volume

**Fun Stuff: \_\_\_/3 points**

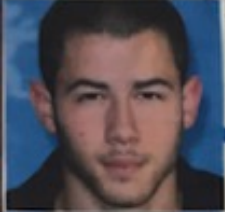
- Athletes
- Celebrities
- Events
- Book, Songs, or Movies
- Other cool stuff!

**Presentation \_\_\_/10 points**

- Neatness
- Color
- Creativity
- Spelling
- Punctuation

Comments:

Celebrities who are 24 yrs old. ↓



Nick Jonas



Odell Beckham Jr.



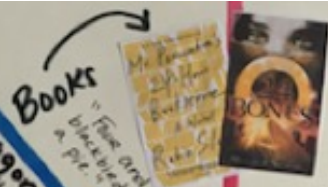
Selena Gomez



Demi Lovato

**Icositetragon**  
 Polygon with 24 sides

24 Miles = 126,720 feet  
 24 Tons = 48,000 pounds  
 24 years = 8,760 days  
 24 hours = 1 day



**Books**

"Five and twenty in black and white" a p.e. - Nursery rhyme

$24 = 100 = 0.24$   
 $24 \times 1,000 = 24,000$

**Factors of 24**  
 1, 2, 3, 4, 6, 8, 12, 24  
 24 is the smallest number with 8 factors.

**Multiples of 24**  
 24, 48, 72, 96, 120, 144, 168, 192, 216, 240...

Q: Godie walked 3 miles per day for 8 days. How far did Godie walk in all?  
 A: Godie walked 24 miles.



The 24 Olympics will take place in Paris or Los Angeles.

**24**  
 twenty-four  
 2014  
 2024

24 is a **composite number** because it has more than two factors.  
 24 is also the **sum of prime twins**  $11 + 13 = 24$

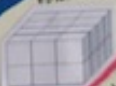
24 Points in a game of backgammon

Q: Steven ordered 24 calculators for his Math club. Each calculator cost \$17. How much did Steven spend in all?  
 A: Steven spent \$408.

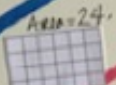


**TV Show**

24 is the atomic number of Chromium



Volume = 24



Area = 24

Interstate 24 runs from Maxton, IL to Chattanooga, TN.



100% pure gold = 24 Carats



A popular gym

**Athletes who wear #24**



Kobe Bryant



Tim Lincecum



Shaun Lynch



Ken Griffey Jr.