

SANTA'S WORKSHOP



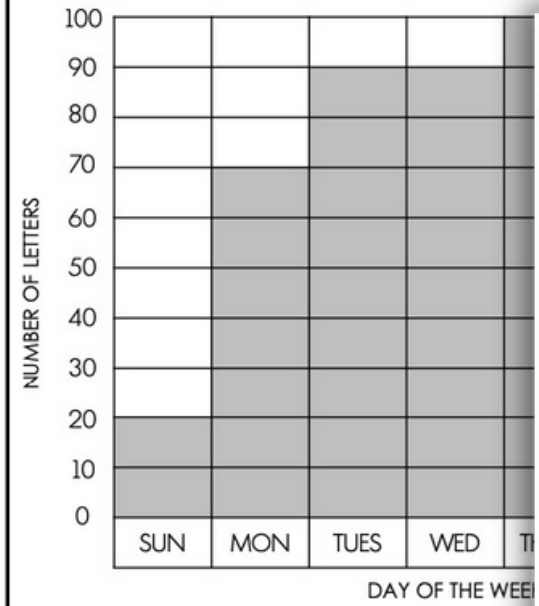
MATH PROJECT



LETTERS TO SANTA

Each day, a bag of letters is delivered to the North Pole from children around the world. Look at the letters that were delivered this week.

NUMBER OF LETTERS DELIVERED THIS WEEK

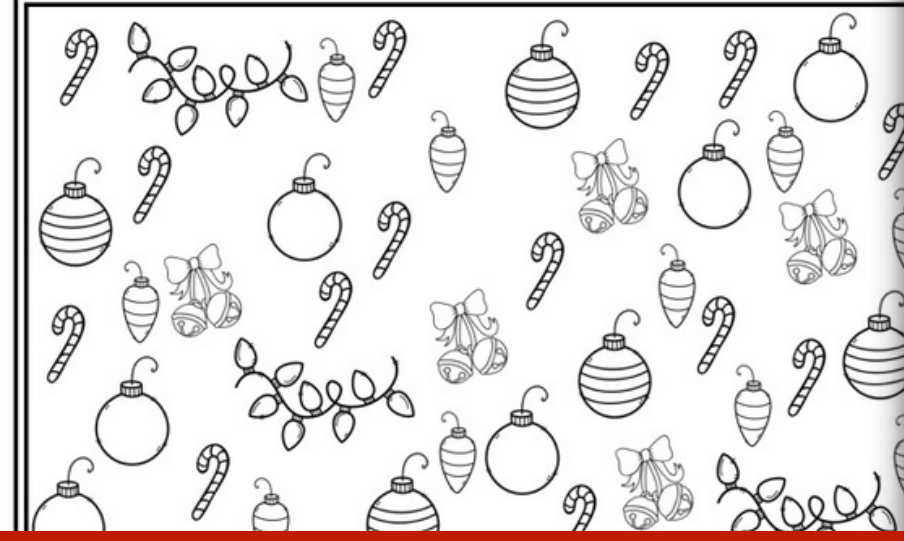


Use the graph to answer the questions:

1. How many letters were delivered from M...

DECORATING THE TREE

It's time to decorate the tree in Santa's Workshop! Each of the pictures below represents 2 items. How many decorations are there?



DECORATING THE WORKSHOP

It's workshop decorating day! The base ten blocks represent the number of each decoration in the workshop.

CANDY CANES		BELLS	
LIGHTS		BOWS	

Write the number of each decoration:

	IN WORD FORM	AS AN ADDITION SENTENCE	AS A SUBTRACTION SENTENCE

This **Christmas Math Project** is designed to help your students practice essential skills like

addition
subtraction
graphing & data interpretation
logic
time
area

with a fun holiday theme that will keep them begging for more!



DECORATING THE TREE
 It's time to decorate the tree in Santa's Workshop! Each of the pictures below represents 2 items. How many decorations are there?

TOY MAKING
 The elves make thousands of toys every day in the workshop. Use the picture graph to figure out how many toys each elf made today.

Elf Name	Number of Toys Made (Each picture represents 5 toys.)
Lucky	
Snowflake	
Jingles	
Sparkle	
Holly	

How many toys did each elf make?
 Snowflake _____ Jingles _____ Sparkle _____
 Holly _____ Lucky _____

Use the graph to answer each question:
 1. Snowflake's goal is to make 38 toys. How many more does she need to make?
 2. _____
 3. _____

COUNTING THE TOYS
 Each array represents the number of toys. How many are there?
 How many? Write a number sentence.

ELF JOKES
 The elves at Santa's Workshop love to laugh and tell funny jokes.

A: 75	H: 40	O: 35	V: 80
B: 60	I: 90	P: 88	W: 15
C: 10	J: 54	Q: 51	X: 33
D: 32	K: 72	R: 100	Y: 70
E: 65	L: 25	S: 22	Z: 31
F: 48	M: 95	T: 50	
G: 86	N: 67	U: 18	

THE NICE LIST
 Santa has looked through the Nice List and decided what each child will receive. Use the clues to figure it out.

	Skateboard	Reading Lamp	Toy Tow Truck	Skipping Rope	Invisible Ink
Alex					
Jenna					
Andre					
Cecile					
Melissa					

1. Melissa does not like skateboarding.
 2. Andre has asked Santa for a reading lamp or an invisible ink pen.
 3. Cecile loves to read and has asked Santa for books, bookmarks and a reading lamp.
 4. Alex has a skate park near his house and will be getting something he can use there.
 5. Jenna will not be getting a toy tow truck.

Write the name of each person beside the gift they will receive.

Skateboard _____
 Reading Lamp _____

NORTH POLE PROBLEMS
 Santa does a 45 minute practice run to make sure his sleigh flies well. If he begins flying at 6:20 pm, at what time will he finish?

START END

Santa needs 25 carrots to feed the reindeer before flying on Christmas Eve. There are 10 carrots in each package. How many packages of carrots will he need?

Mrs. Claus is baking cookies for Santa and the elves. She makes 3 dozen sugar cookies and 5 dozen gingerbread cookies. How many sugar cookies does she make?

Thirteen different math tasks are included.

Your students will...



DECORATING THE TREE

It's time to decorate the tree in Santa's Workshop! Each of the pictures below represents 2 items. How many decorations are there?

Decoration	Quantity	Word Form

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Find the number of decorations on the tree
Skills: skip-counting, tally marks, word form

Figure out how many toys each elf made today
Skills: picture graphs, 1:5 correspondence, interpreting data

TOY MAKING

The elves make thousands of toys every day in the workshop. Use the picture graph to figure out how many toys each elf made today.

Elf Name	Number of Toys Made (Each picture represents 5 toys.)
Lucky	
Snowflake	
Jingles	
Sparkle	
Holly	

How many toys did each elf make?
 Snowflake _____ Jingles _____ Sparkle _____
 Holly _____ Lucky _____

Use the graph to answer each question:
 1. Snowflake's goal is to make 38 toys. How many more does she need to make? _____
 2. How many toys did Holly and Lucky make in all? _____

Use the arrays to count the toys
Skills: arrays, addition/subtraction, comparing, problem-solving

ELF WORK TIMES

There are elves working all day and all night in Santa's Workshop! The clocks below show when each elf's shift begins. Write the times.

Scout : am	Kringle : pm	Buddy : am	Snowy : pm
Max : p	Bernard : am	Crasher : pm	Buzz : pm

Order the elves from earliest shift to latest shift.

Bernard's shift is 7 hours long. At what time will he finish? _____

Calculate the beginning of each elf's shift
Skills: time to 5 minutes, ordering

Answer the questions:

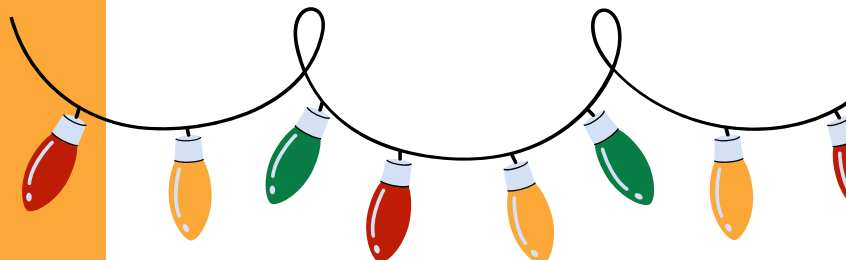
- How many more than ? _____
- How many and altogether? _____
- How many more to make 100? _____
- How many toys are there altogether? _____

5. The elves' goal is to double the number of made so far. How many do they want to have? _____

COUNTING THE TOYS

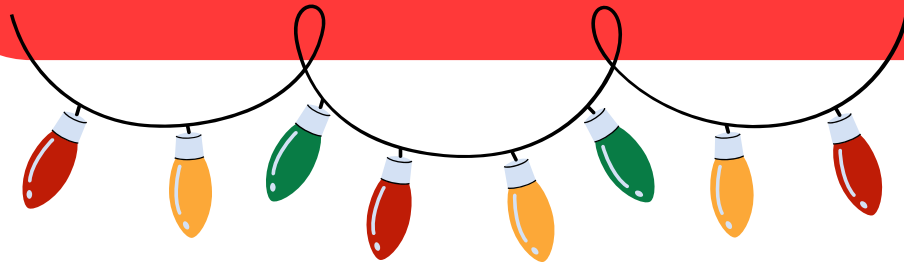
Each array represents the number of toys. How many are there?

		How many? Write a number sentence.
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Work with the Christmas numbers

Skills: even/odd, Venn diagrams

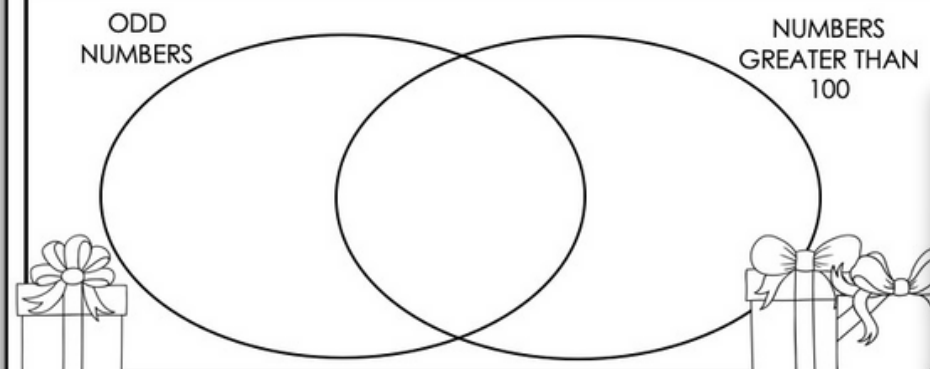


EVEN OR ODD?

Look at the numbers below. Shade the even numbers RED and the odd numbers GREEN.

The number of presents that Mrs. Claus made today 27	The number of elves in the workshop right now 134	The number of dolls the elves made today 105
The number of soccer balls that need to be made 256	The number of minutes until Christmas 110	The number of elves needed to decorate the workshop 35
The number of snowmen outside 103	The number of snowflake ornaments 177	The number of toys that Lucky elf makes per hour 51

Now write the numbers in the Venn diagram.



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NORTH POLE PROBLEMS

Santa does a 45 minute practice run to make sure his sleigh flies well. If he begins flying at 6:20 pm, at what time will he finish?



END

Santa has to feed the reindeer before flying on Christmas. There are 10 carrots in each package. How many packages of carrots does he need?

Mrs. Claus is baking cookies for Santa and the elves. She makes 3 dozen sugar cookies and 5 dozen gingerbread cookies. How many sugar cookies does she make?



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THE NICE LIST

Santa has looked through the Nice List and decided what each child will receive. Use the clues to figure it out.

	Skateboard	Reading Lamp	Toy Tow Truck	Skipping Rope	Invisible Ink Pen
Alex					
Jenna					
Andre					
Cecile					
Melissa					

- Melissa does not like skateboarding.
- Andre has asked Santa for a reading lamp or a toy tow truck.
- Cecile loves to read and has asked Santa for a reading lamp.
- Alex has a skate park near his house and will use it.
- Jenna will not be getting a toy tow truck.

Write the name of each person beside the gift.

Skateboard _____

Reading Lamp _____

Toy Tow Truck _____

Skipping Rope _____

Invisible Ink Pen _____

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Use the clues to figure out each child's gift

Skills: logic

Solve the problems that occur at the North Pole

Skills: elapsed time, addition, problem-solving

ELF JOKES

The elves at Santa's Workshop love to laugh and tell funny jokes.

A: 75	H: 40	O: 35	V: 80
B: 60	I: 90	P: 88	W: 15
C: 10	J: 54	Q: 51	X: 33
D: 32	K: 72	R: 100	Y: 70
E: 65	L: 25	S: 22	Z: 31
F: 48	M: 95	T: 50	
G: 86	N: 67	U: 18	

What did one snowman say to the other snowman?

$20+12$ $15+20$ $50+20$ $20+15$ $9+9$ $1+1$ $5+10$
 $5+5$ $50+25$ $50+50$ $80+20$ $12+23$ $25+25$ $12+10$?

What is an elf's favorite kind of music?

$8+7$ $30+70$ $40+35$ $4+4$ $85+10$ $10+8$ $12+10$ $80+10$ $2+8$

What do sheep say to each other at Christmas time?

$85+10$ $50+15$ $90+10$ $50+50$ $40+30$ $6+4$ $20+20$ $60+40$ $50+40$ $20+2$ $35+15$ $75+20$ $20+55$ $12+10$
 $25+25$ $10+25$ $40+25$ $5+10$ $30+35$

What did Mrs. Claus say to Santa when she looked up in the sky?

Solve the elves' hilarious jokes


Skills: addition within 100

CHRISTMAS DINNER

It's almost Christmas and the elves are in charge of buying the supplies for the North Pole Christmas Dinner! Can you help them get everything they need?

ITEM	PRICE	ITEM	PRICE
Turkey	\$20	Bread (1 loaf)	\$2
Ham	\$13	Potatoes (1 bag)	\$4
Meatballs (1 package)	\$10	Vegetables (1 package)	\$4
Cranberry Jelly (1 tin)	\$3	Dessert (1 tray)	\$7

Suppose the elves have \$50 to spend. What could they buy?



Help the elves get everything they need for Christmas dinner
Skills: addition, money

Interpret the graph to find the number of letters delivered this week
Skills: bar graph, tally chart, interpreting data

WORKSHOP DESIGNS

Santa's Workshop is being renovated! Can you help design the workshop layout?

The workshop must include the following areas:

Toy Storage	28 square units
Building Supplies	16 square units
Tool Bench	12 square units
Building Table #1	30 square units
Building Table #2	36 square units

Can you think of two areas of 12 square units?

Can you think of two areas of 12 square units?

Design new layouts for the workshop renovation
Skills: area in square units, critical thinking

LETTERS TO SANTA

Each day, a bag of letters is delivered to the North Pole from children around the world. Look at the letters that were delivered this week.

NUMBER OF LETTERS DELIVERED THIS WEEK

DAY OF THE WEEK	SUN	MON	TUES	WED	THURS	FRI	SAT
NUMBER OF LETTERS	20	70	90	100	100	80	50

Use the graph to answer the questions:

- How many letters were delivered from Monday to Wednesday?
- How many more letters were delivered on Friday than on Saturday?

I used this in my second grade math enrichment group. The kids had a blast solving problems for Santa's workshop. They beg to work on their enrichment projects.

DECORATING THE WORKSHOP

It's workshop decorating day! The base ten blocks represent the number of each decoration in the workshop.

CANDY CANES

BELLS

LIGHTS

BOWS

Write the number of each decoration:

	IN WORD FORM	AS AN ADDITION SENTENCE	AS A SUBTRACTION SENTENCE

Interpret the data from Elf Game Day
Skills: time in minutes and seconds, addition

ELF GAME DAY

It's not all work at Santa's Workshop – the elves make time for fun and games too! Today is Elf Game Day!

The first event is the gift wrapping race. Here are the results:

Elf Name	Time To Complete the Race
Ralph	54 seconds
Blitz	1 minute 23 seconds
Chip	
Snowball	
Buddy	1 m

Order the elves in order from first place (fastest)

the questions:

- How many seconds did it take for Blitz to finish the race?
- Which elves finished the race in less than one minute?
- If Chip began the race at 10:13 am, at what time did he finish?
- How many seconds did it take for Buddy to finish the race?

The next event is the Elf Obstacle Course. Each team of elves get points for the obstacles that they complete. Here are the points for each obstacle:

Obstacle	Points	Obstacle	Points
A	25	F	30
B	10	G	5
C	18	H	40
D	20	I	25
E	22	J	2

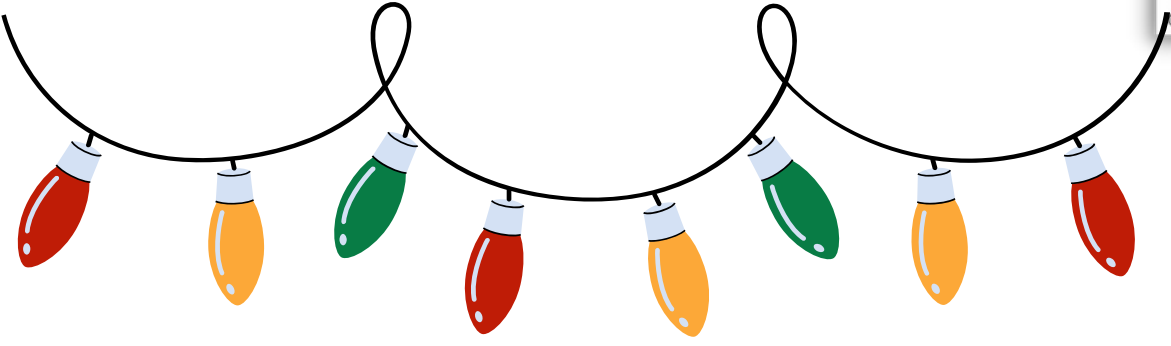
Look at the obstacles that each elf team completed. Figure out the total points for each team.

TEAM NAME	OBSTACLES COMPLETED	TOTAL POINTS
Team Snow Angel	A, B, D, H, J	
Team Candy Cane	B, C, D, E, H, I	
Team Cotton Candy	E, F, J	
Team Holly	C, G, H	
Team Jingle Bells	A, B, C, D, E	

- Which team got the most points? _____
- Order the teams from least points to most points: _____

Find the number of decorations in the workshop
Skills: base ten representation, word form, addition, subtraction

This is an amazing resource. My students had a blast solving all of the challenges. It was an amazing enrichment project. Thank you.

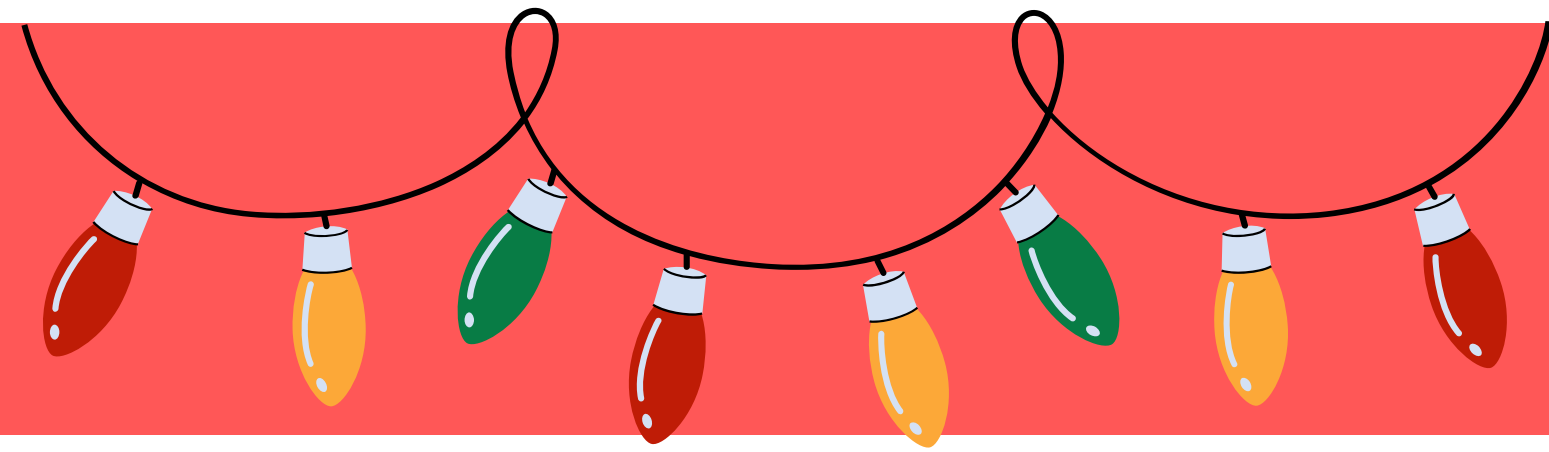




And more!

“ I used this resource as a fun and festive review package during the last two weeks before winter break. It kept my students engaged and excited about math, while also saving me a lot of time during such a busy time of the year! ”

Ideas for Use



Make a Christmas project booklet for each student. Have students use the tasks as early finisher activities throughout December.

Use the individual tasks as center activities throughout the month. Place one task at each center.

Use as activities for a substitute teacher.

Keep your students engaged and motivated during that chaotic last week before holidays by allowing them to work on these activities in partners.

Ready to **simplify**
your Christmas
math planning this
year?



SANTA'S WORKSHOP



MATH PROJECT

LETTERS TO SANTA
Each day, a bag of letters is delivered to the North Pole from children around the world. Look at the letters that were delivered this week.

NUMBER OF LETTERS DELIVERED THIS WEEK

100							
90							
80							
70							
60							
50							
40							
30							
20							
10							
0							
	SUN	MON	TUE	WED	THURS	FRI	SAT

Use the graph to answer the questions below.

- How many letters were delivered to the North Pole from Sunday to Wednesday?
- How many letters were delivered to the North Pole from Thursday to Saturday?

DECORATING THE TREE
It's time to decorate the tree in Santa's Workshop! Each of the below represents 2 items. How many decorations are there?

Decoration	How many?	Word Form	Total
?			
?			
?			
?			
?			
?			
?			
?			
?			
?			

DECORATING THE WORKSHOP
It's workshop decorating day! The base ten blocks represent the number of each decoration in the workshop.

DEcoration	Base Ten Blocks	Number
CANDY CANES	[Base ten blocks]	
BELLS	[Base ten blocks]	
SOCKS	[Base ten blocks]	
BOYS	[Base ten blocks]	

Write the number of each decoration:

IN WORD FORM	AS AN ADDITION SENTENCE	AS A SUBTRACTION SENTENCE



**BEST SUITED
TO GRADES
2-3**

SHELLEY GRAY