

Number Sense & Patterns

ABRIDGED VERSION



Counting
Numbers

Comparing
Numbers

Ordering
Numbers

KINDERGARTEN TO GRADE 1 (AGES 4-7)

Write the Number

Count the number of shapes in each group and write the correct number.





















Counting Tennis Balls

Match the groups of tennis balls to the correct number.
The first one is done for you.



8



4



6



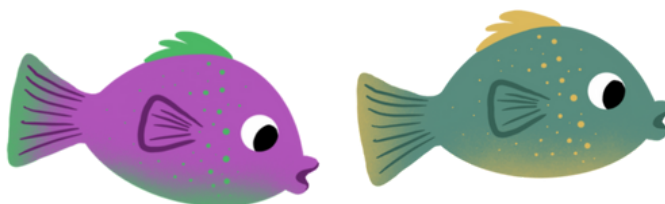
7



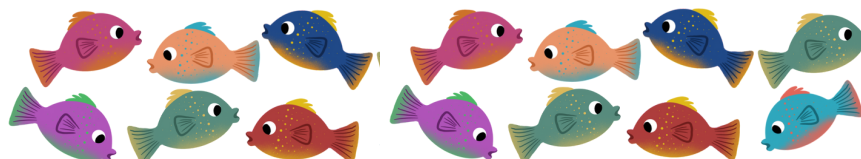
9

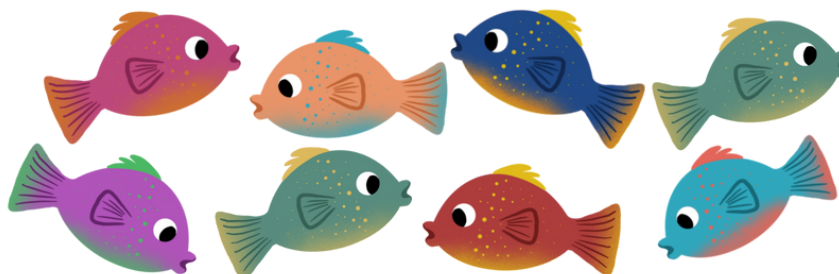
Counting Fish

Count the number of fish and write the number on the left.









Count and Colour

Colour the objects to match the number on the left.
The first one is done for you.

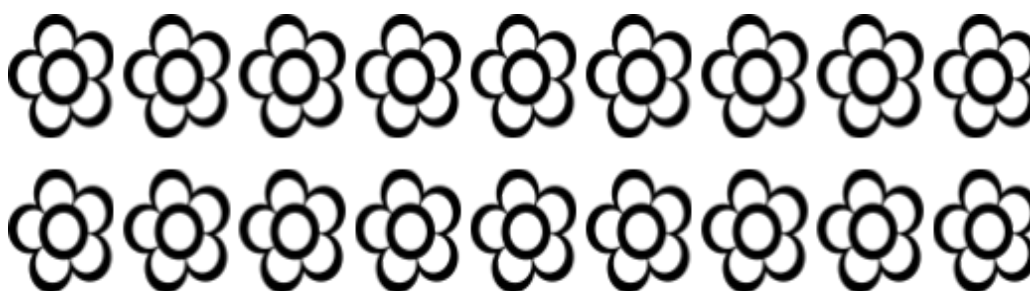
8



6



3



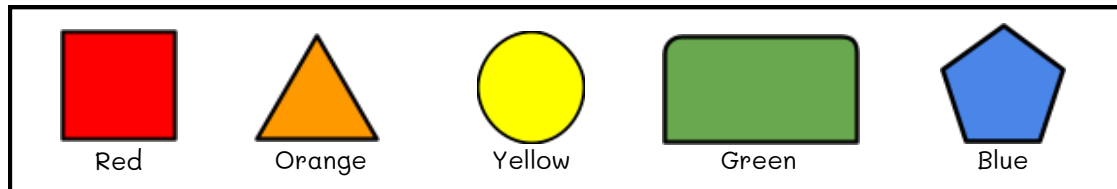
9

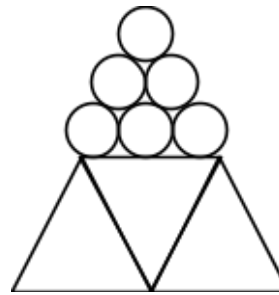


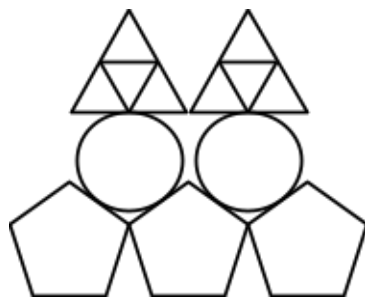
Build & Count

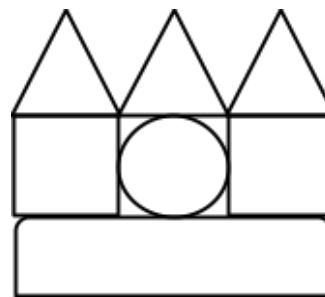
Colour each kind of block the same color as in the key. Count the total number of blocks in each box and write the number in the space provided.

Key









Spot's Rescue

Help Thomas find his dog Spot.
Draw a path from Thomas to Spot by counting from 1 to 20.



		17	18	17
		20	19	16
12	19	12	14	15
20	13	11	13	12
18	17	16	15	11
6	7	8	9	10
5	4	6	4	2
2	3	2	1	



Matching Numbers to Quantity

Draw a line between each number to the matching quantity of items.

One



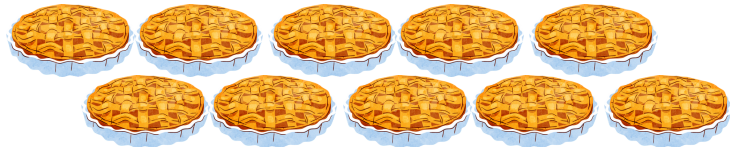
Two



Three



Four



Five



Six



Seven



Eight



Nine



Ten



Number Word Search

Find the words at the bottom in the word search.

a	t	e	n	y	i
r	h	f	o	u	r
v	r	e	v	f	h
s	e	v	e	n	g
t	e	i	g	h	t

four

three

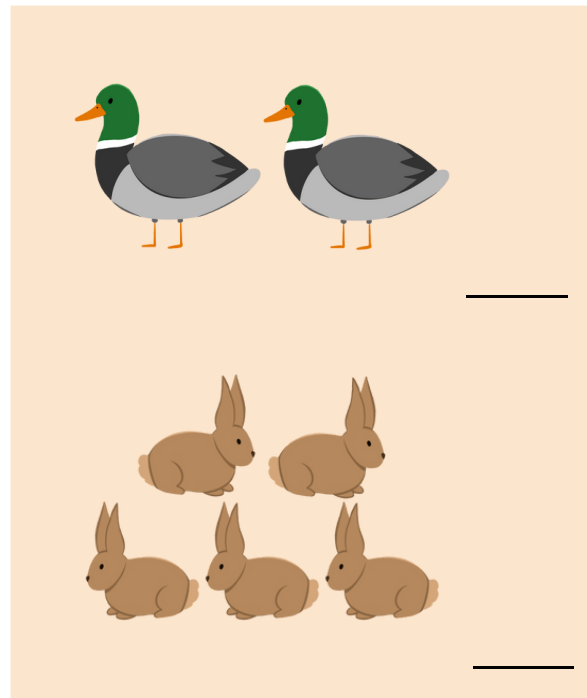
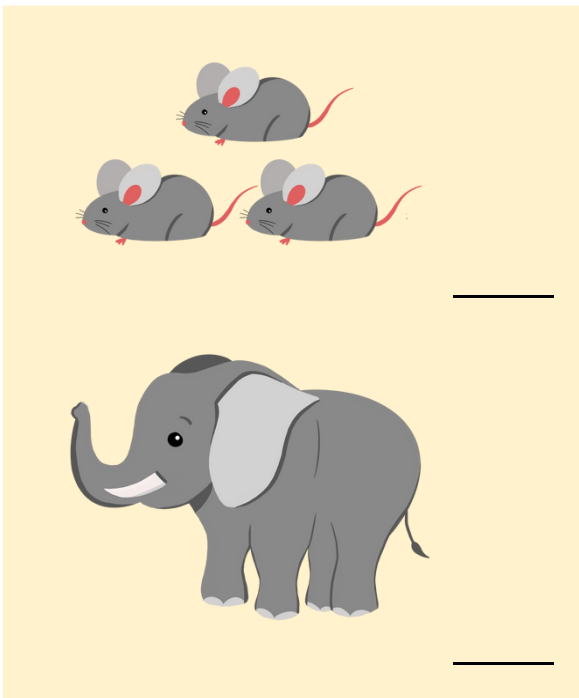
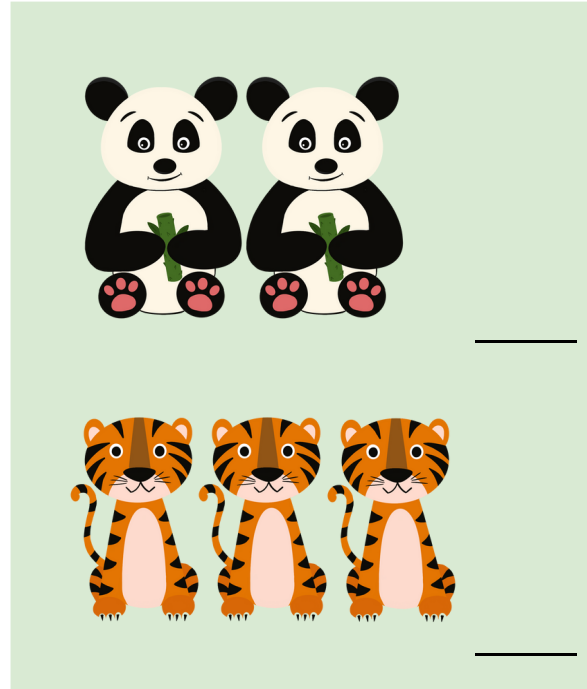
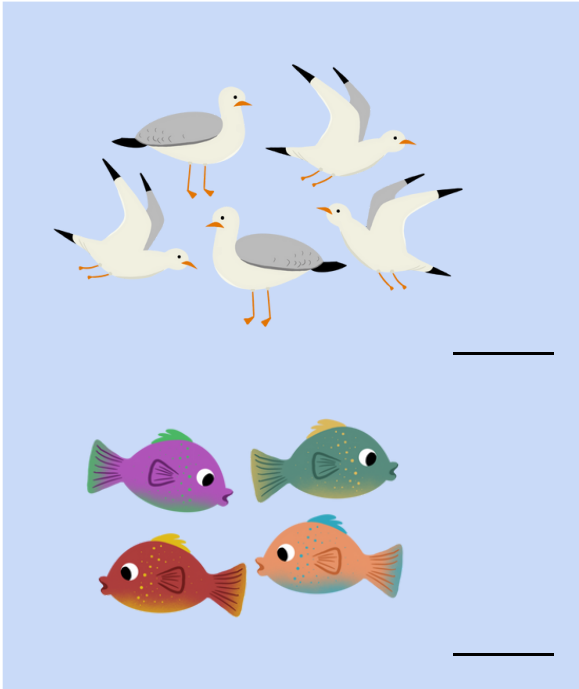
seven

eight

ten

More or Less?

For each box, count the number of different types of animals and circle the group that has the most animals.

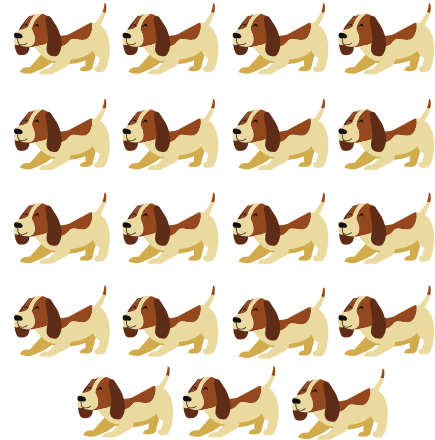


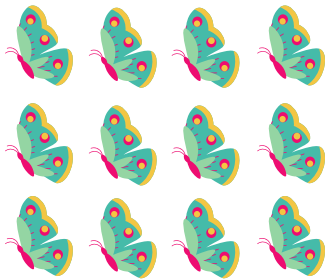
Count the Animals

Count the number of animals and circle the group that has more.

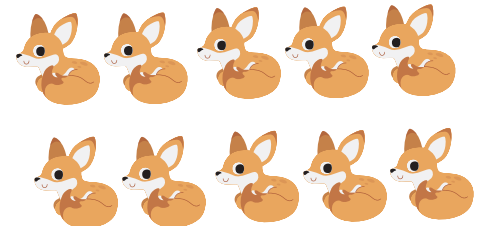


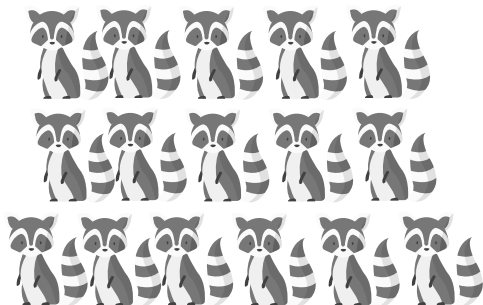
OR



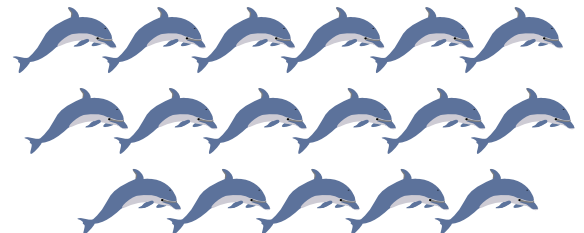


OR



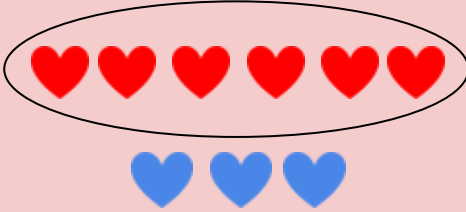
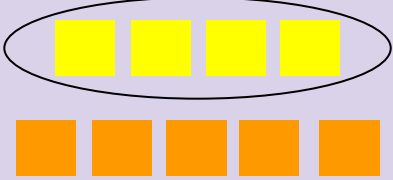


OR



Lesson: < > =

Here are the terms we use when we compare numbers and groups:

Same as, equal to, ...	More than, greater than, ...	Less than, smaller than, ...
This means that the numbers or groups have the same amount. 	This means that the number or group has a bigger value or amount than the other. 	This means that the number or group has a smaller value or amount than the other. 

When comparing numbers and quantities, we also use special symbols:

= < >

These symbols help us show that one number or quantity is equal to, more than or less than another.

= The equal sign tells us that the two numbers or quantities are the **SAME**.

 = 6

The 6 hearts are equal to the number 6.

These two signs are very easy to confuse.

> is the **greater than** sign

< is the **less than** sign

Just remember that the open end of the symbol **ALWAYS** faces the bigger number.

>

6 - 2 - 

6 candies is more than 2 candies.

 $6 > 2 \Rightarrow 6$ is **greater than** 2

<

3 - 8 - 

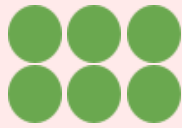
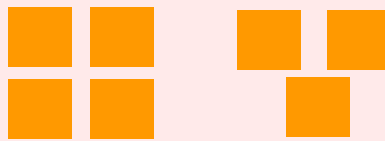
3 candies is less than 8 candies.

 $3 < 8 \Rightarrow 3$ is **less than** 8

"I always eat the bigger number!"

5 < 8 10 > 4

Now it is your turn to practice using the symbols: =, < and > .
Fill in the blank with the correct symbol.

5 < 6

—

9 — 18

7 — 7

15 — 13



— 1

Greater or Less Than Practice

For each pair, circle the correct symbol ($<$ or $>$) to show which is greater than or less than. Remember that the alligator “eats” the larger number.

 $>$   $<$ 	 $>$   $<$ 
 $>$   $<$ 	 $>$   $<$ 
 $>$   $<$ 	 $>$   $<$ 
 $>$   $<$ 	 $>$   $<$ 

Greater Than, Less Than or Equal To?

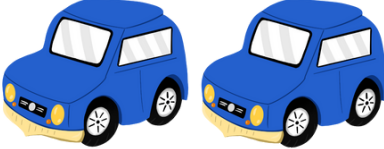
Circle the correct symbol.



12	$>$	7	5	$>$	9
	$=$			$=$	
	$<$			$<$	
3	$>$	11	15	$>$	8
	$=$			$=$	
	$<$			$<$	
10	$>$	19	4	$>$	4
	$=$			$=$	
	$<$			$<$	
13	$>$	6	20	$>$	7
	$=$			$=$	
	$<$			$<$	

Greater Than or Less Than?

Count the number of items in each box. Determine if the left side is greater than ($>$), less than ($<$) or equal to ($=$) the group on the right side. Write the correct symbol in the middle column.

Arctic Adventure

Let's go on an adventure and travel to the North Pole!

First, carefully sneak past the sleeping polar bears by ordering the numbers from **least to greatest**.



10 16 7 9 6 13 4



Next, find a safe way across the frozen lake by ordering the numbers from **greatest to least**.

8 4 11 6 2 17 16



Congratulations! You've reached the North Pole!

You find a present waiting for you from Santa Claus.

Fill in the blanks with the missing numbers to open the present.



2 3 4 _____ 6 _____ 8 _____

Counting Shapes

How many shapes are there? Write the missing numbers inside the shapes.

 1	 2	 3		
 6				 10
				
	 17			
 21			 24	
				
				

Practice Counting Numbers

Fill in the missing numbers from 1 to 30.

	2	3		
6	7			10
	12		14	
16		18	19	
21	22		24	25
	27		29	30

Hopscotch

Fill in the missing numbers from 1 to 50 to finish the game of hopscotch.

START					
1	2	17		35	36
3					
		21		39	
		23	24		42
	8	25			44
9	10			45	
11	12	29	30		48
		31			50
	16	33		FINISH	

Which Number Comes Next?

Fill in the blank with the number that comes next.

6	7	8	_____	12	13	14	_____
16	17	18	_____	21	22	23	_____
31	32	33	_____	35	36	37	_____
39	40	41	_____	47	48	49	_____

How many monkeys are in the tree? _____





There is no better way to beat the heat than going to the beach!
Get to the beach by ordering the numbers in each row from
least to greatest.

22 29 33 27 27 42

7 6 18 20 44 33

5 36 7 25 13 30



Greater Than or Less Than?

For the following pairs of numbers, determine if the number on the left is greater than or less than the number on the right, using the symbols:

>

Greater than

<

Less than

28 7870 499 2438 6380 8597 7419 2582 3

"I always eat the bigger number!"



Fun in the Sun!

There is no better way to beat the heat than going to the beach!
Get to the beach by ordering the numbers in each row from
least to greatest.

98 20 72 81 31 32

68 89 53 91 32 64

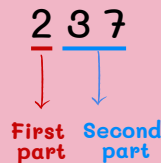
29 67 1 82 11 43



Lesson: After 100

Now we can say numbers all the way up to 999!

For numbers over 100, we break it down into 2 parts.

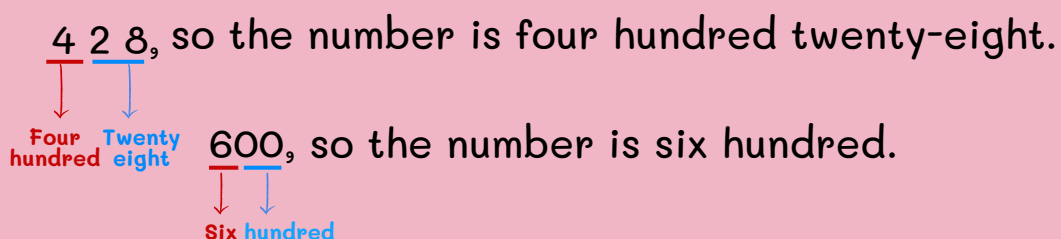


Numbers over 100 follow this pattern:

"(First part) hundred (Second part)"

If the second part is "00", the number is said **"(First part) hundred"**

Example:



Which Number Comes Next?

Fill in the blank with the number that comes next.

535 536 537 _____ 585 586 587 _____

555 556 557 _____ 100 101 102 _____

854 855 856 _____ 616 617 618 _____

470 471 472 _____ 314 315 316 _____

712 713 714 _____ 936 937 938 _____

358 359 360 _____ 543 544 545 _____

440 441 442 _____ 734 735 736 _____

Skip Count by 2s

To practice counting by 2s, continue to draw connecting lines between every other number.

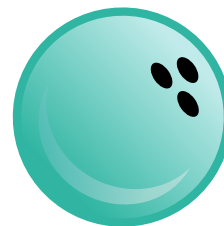
1	2	3	4	5	6
20					7
19					8
18					9
17					10
16	15	14	13	12	11

Counting by 5s

Fill in the missing numbers on the bowling balls.

If there were 4 more bowling balls, what number would be on the last bowling ball?



 Autumn Escapade

When the leaves start to change colour, there is no better time to go pumpkin picking. Find your way to the pumpkin patch by determining the pattern in each row and fill in the missing numbers.

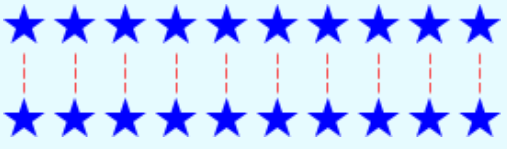
60 65 70 _____ _____ 85

40 50 60 _____ 80 _____

270 272 274 _____ _____ _____

120 125 130 _____ _____ _____



 There are 20 stars in total.	We are able to pair up all the stars together. We can also split the stars into 2 groups of 10 stars.  This means that we have an even number of stars.
--	--

What happens when we don't have a picture?

What happens when the number is too big for us to draw pictures?

13	148
As the numbers get bigger and bigger, you will get tired of drawing pictures. What we can do is look at the last number to see if it is even or odd. The number 13 ends in a 3 and 3 is an odd number. This means that 13 is an odd number.	The number 148 is TOO BIG for us to draw pictures. Let's look at the last number. 148 ends with an 8 and 8 is an even number. This means that 148 is an even number.

Try it out on your own!

Circle all the even numbers and put an **X** on all the odd numbers.

7

18

95

11

50

233

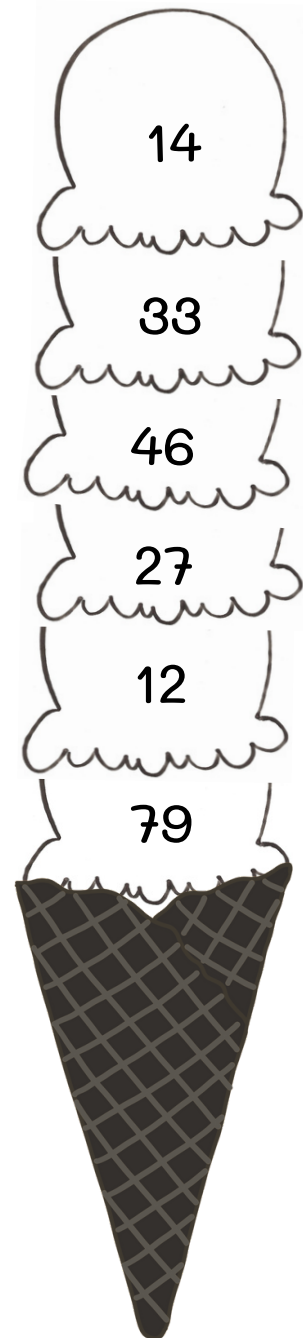
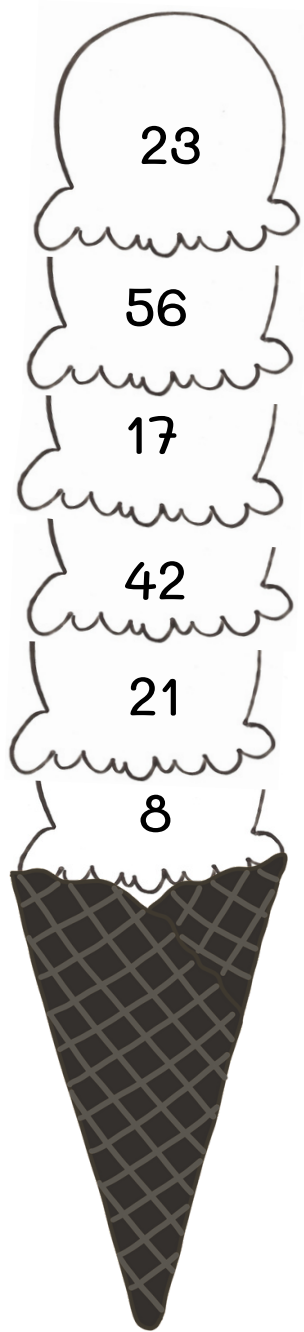
1

28

Even or Odd Ice Cream

Colour the ice cream scoops with even numbers in **pink**.

Colour the ice cream scoops with odd numbers in **brown**.

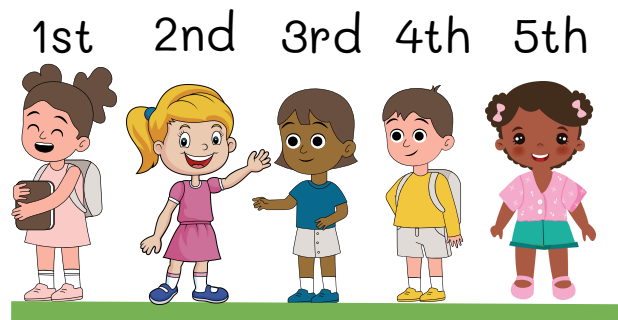


Lesson: Ordinal Numbers

I bet you're wondering what an ordinal number is.

Have you ever raced your friends in the playground to see who is the fastest? Then when everybody reached the finish line you would compare who was in first, second, third, ...and last place.

Surprise! You were using ordinal numbers and didn't even know it.



An ordinal number is a number or word that states the position or place of an object in a list.

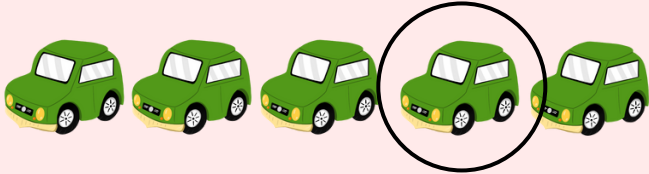
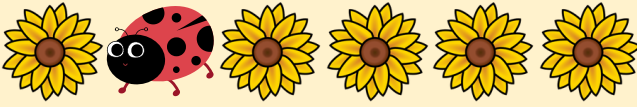
1st ⇔ First	6th ⇔ Sixth
2nd ⇔ Second	7th ⇔ Seventh
3rd ⇔ Third	8th ⇔ Eighth
4th ⇔ Fourth	9th ⇔ Ninth
5th ⇔ Fifth	10th ⇔ Tenth

Examples where we use ordinal numbers:

- Your place in a **competition** (ie. first place)
- To describe the **floors in a building** (ie. seventh floor)
- Explaining what **grade** you are in at school (ie. tenth grade)
- To describe a **birthday or anniversary** (ie. 25th anniversary or 13th birthday)

Ordinal Numbers

Let's practice using ordinal numbers!

Circle the car based on the ordinal number.	Write the ordinal number of the ladybug.
Fourth 	 Second - 2nd
First 	 _____
7th 	 _____

Ordinal Numbers

First

Second

Third

Fourth

Fifth

1st

2nd

3rd

4th

5th

In each row, write the ordinal number of the coloured object.

Writing the Alphabet

Trace the letters with the outlines provided and fill in the missing letters

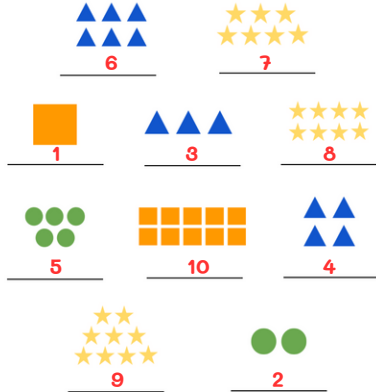
	B		D	E
F		H		
	L	M		O
			S	T
U	V	W		

Answer Key

Counting up to 20

Write the Number

Count the number of shapes in each group and write the correct number.



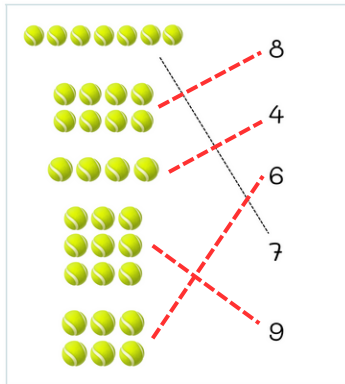
MATHPROJECT
Empowering minds

1

Counting up to 20

Counting Tennis Balls

Match the groups of tennis balls to the correct number.



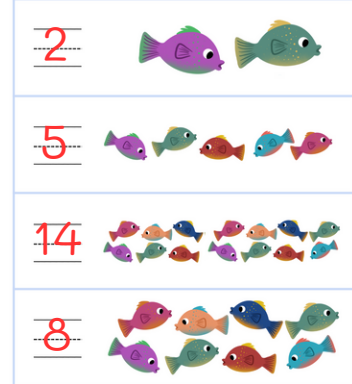
MATHPROJECT
Empowering minds

2

Counting up to 20

Counting Fish

Count the number of fish and write the number on the left.



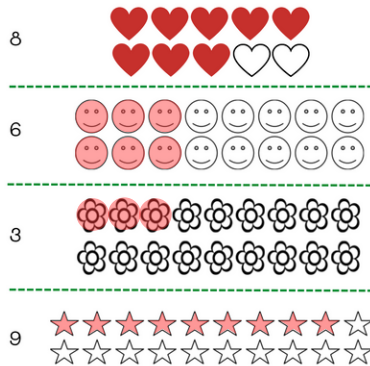
MATHPROJECT
Empowering minds

3

Counting up to 20

Count and Colour

Colour the objects to match the number on the left. The first one is done for you.



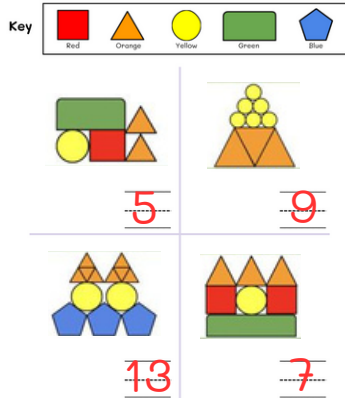
MATHPROJECT
Empowering minds

4

Counting up to 20

Build & Count

Colour each kind of block the same color as in the key. Count the total number of blocks in each box and write the number in the space provided.



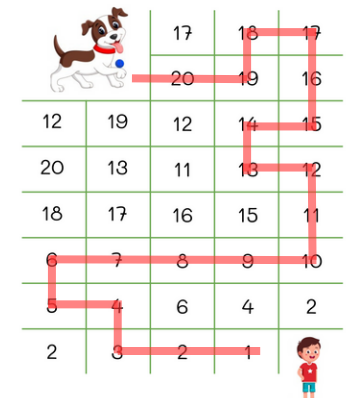
MATHPROJECT
Empowering minds

5

Counting up to 20

Spot's Rescue

Help Thomas find his dog Spot. Draw a path from Thomas to Spot by counting from 1 to 20.



MATHPROJECT
Empowering minds

6

Counting up to 20

Matching Numbers to Quantity

Draw a line between each number to the matching quantity of items.



MATHPROJECT
Empowering minds

7

Counting up to 20

Number Word Search

Find the words at the bottom in the word search.



MATHPROJECT
Empowering minds

8

Counting up to 20

More or Less?

For each box, count the number of different types of animals and circle the group that has the most animals.



MATHPROJECT
Empowering minds

9

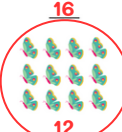
Counting up to 20

Count the Animals

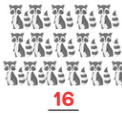
Count the number of animals and circle the group that has more.



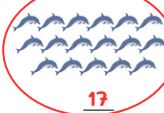
OR



OR



OR



Counting up to 20

>

6 - 2 -
6 candies is more than 2 candies.
 $6 > 2 \Rightarrow 6$ is **greater than** 2

<

8 - 6 -
8 candies is less than 6 candies.
 $3 < 6 \Rightarrow 3$ is **less than** 6



$$5 < 8 \quad 10 > 4$$

Now it is your turn to practice using the symbols: $<$, $>$ and $=$.
Fill in the blank with the correct symbol.

$5 \leq 6$	$>$	$9 \leq 18$
$7 = 7$	$15 > 13$	$= 1$

Counting up to 20

Greater or Less Than Practice

For each pair, circle the correct symbol ($<$ or $>$) to show which is greater than or less than. Remember that the alligator "eats" the larger number.

$>$	$>$
$>$	$>$
$>$	$>$
$>$	$>$

Counting up to 20

Greater Than, Less Than or Equal To?

Circle the correct symbol.



$12 > 7$	$5 > 9$
$3 > 11$	$15 > 8$
$10 > 19$	$4 > 4$
$13 > 6$	$20 > 7$

Counting up to 20

Greater Than or Less Than?

Count the number of items in each box. Determine if the left side is greater than ($>$), less than ($<$) or equal to ($=$) the group on the right side.
Write the correct symbol in the middle column.

	$>$	
	$=$	
	$<$	
	$<$	
	$<$	

Counting up to 20

Arctic Adventure

Let's go on an adventure and travel to the North Pole!

First, carefully sneak past the sleeping polar bears by ordering the numbers from **least to greatest**.



10 16 7 9 6 13 4
4 6 7 9 10 13 16

Next, find a safe way across the frozen lake by ordering the numbers from **greatest to least**.

8 4 11 6 2 17 16
17 16 11 8 6 4 2

Congratulations! You've reached the North Pole!

You find a present waiting for you from Santa Claus.
Fill in the blanks with the missing numbers to open the present.

2 3 4 5 6 7 8 9

Counting up to 50

Counting Shapes

How many shapes are there? Write the missing numbers inside the shapes.

1	2	3	4	5
6	7	8	9	10
11	12	13	14	15
16	17	18	19	20
21	22	23	24	25
26	27	28	29	30
31	32	33	34	35

Counting up to 50

Practice Counting Numbers

Fill in the missing numbers from 1 to 30.

1	2	3	4	5
6	7	8	9	10
11	12	13	14	15
16	17	18	19	20
21	22	23	24	25
26	27	28	29	30

Counting up to 50

Hopscotch

Fill in the missing numbers from 1 to 50 to finish the game of hopscotch.

START		17	18	35	36
1	2	19	20	37	38
3	4	21	22	39	40
5	6	23	24	41	42
7	8	25	26	43	44
9	10	27	28	45	46
11	12	29	30	47	48
13	14	31	32	49	50
15	16	33	34	FINISH	

Counting up to 50

Which Number Comes Next?

Fill in the blank with the number that comes next.

6 7 8 9 12 13 14 15
 16 17 18 19 21 22 23 24
 31 32 33 34 35 36 37 38
 39 40 41 42 47 48 49 50

How many monkeys are in the tree? 10



MATHPROJECT
Empowering minds

20

Counting up to 50



There is no better way to beat the heat than going to the beach!
 Get to the beach by ordering the numbers in each row from **least to greatest**.

22	29	33	27	27	42
<u>22</u>	<u>27</u>	<u>27</u>	<u>29</u>	<u>33</u>	<u>42</u>
7	6	18	20	44	33
<u>6</u>	<u>7</u>	<u>18</u>	<u>20</u>	<u>33</u>	<u>44</u>
5	36	7	25	13	30
<u>5</u>	<u>7</u>	<u>13</u>	<u>25</u>	<u>30</u>	<u>36</u>

MATHPROJECT
Empowering minds

21

Counting up to 100

Greater Than or Less Than?

For the following pairs of numbers, determine if the number on the left is greater than or less than the number on the right, using the symbols:

> Greater than < Less than

28 < 78 70 > 49

9 < 24 38 < 63

80 < 85 97 > 74

19 < 25 82 > 3



MATHPROJECT
Empowering minds

22

Counting up to 100



There is no better way to beat the heat than going to the beach!
 Get to the beach by ordering the numbers in each row from **least to greatest**.

98	20	72	81	31	32
<u>20</u>	<u>31</u>	<u>32</u>	<u>72</u>	<u>81</u>	<u>98</u>
68	89	53	91	32	64
<u>32</u>	<u>53</u>	<u>64</u>	<u>68</u>	<u>89</u>	<u>91</u>
29	67	1	82	11	43
<u>1</u>	<u>11</u>	<u>29</u>	<u>43</u>	<u>67</u>	<u>82</u>

MATHPROJECT
Empowering minds

23

Counting over 100

Which Number Comes Next?

Fill in the blank with the number that comes next.

535 536 537 538 585 586 587 588
 555 556 557 558 100 101 102 103
 854 855 856 857 616 617 618 619
 470 471 472 473 314 315 316 317
 712 713 714 715 936 937 938 939
 358 359 360 361 543 544 545 546
 440 441 442 443 734 735 736 737

MATHPROJECT
Empowering minds

25

Skip Counting

Skip Count by 2s

To practice counting by 2s, continue to draw connecting lines between every other number.

1	2	3	4	5	6
20					7
19					8
18					9
17					10
16	15	14	13	12	11

MATHPROJECT
Empowering minds

26

Skip Counting

Counting by 5s

Fill in the missing numbers on the bowling balls.

5	10	15	20	25
30	35	40	45	50
55	60	65	70	75
80	85	90	95	100

If there were 4 more bowling balls, what number would be on the last bowling ball?

120



MATHPROJECT
Empowering minds

27

Skip Counting



When the leaves start to change colour, there is no better time to go pumpkin picking. Find your way to the pumpkin patch by determining the pattern in each row and fill in the missing numbers.

60	65	70	<u>75</u>	<u>80</u>	85
40	50	60	<u>70</u>	80	<u>90</u>
270	272	274	<u>276</u>	<u>278</u>	<u>280</u>
120	125	130	<u>135</u>	<u>140</u>	<u>145</u>

MATHPROJECT
Empowering minds

28

Even and Odd Numbers

There are 20 stars in total.	We are able to pair up all the stars together. We can also split the stars into 2 groups of 10 stars. This means that we have an even number of stars.
-------------------------------------	--

What happens when we don't have a picture? What happens when the number is too big for us to draw pictures?

13	145
As the numbers get bigger and bigger, you will get tired of drawing pictures.	The number 145 is TOO BIG for us to draw pictures.
What we can do is look at the last number to see if it is even or odd.	Let's look at the last number.
The number 13 ends in a 3 and 3 is an odd number.	145 ends with an 5 and 5 is an even number.
This means that 13 is an odd number.	This means that 145 is an even number.

Try it out on your own!

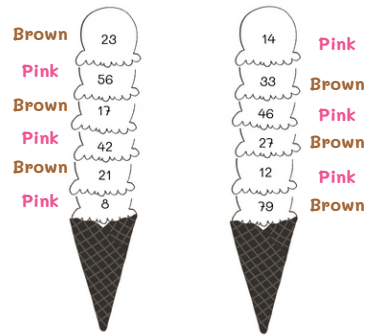
Circle all the even numbers and put an X on all the odd numbers.

MATHPROJECT
Empowering minds

29

Even or Odd Ice Cream

Colour the ice cream scoops with even numbers in **pink**.
Colour the ice cream scoops with odd numbers in **brown**.

**Ordinal Numbers**

Let's practice using ordinal numbers!

Circle the car based on the ordinal number.	Write the ordinal number of the ladybug.
Fourth 	 Second - 2nd
First 	 Third - 3rd
7th 	 Eighth - 8th

Ordinal Numbers

First 1st Second 2nd Third 3rd Fourth 4th Fifth 5th

In each row, write the ordinal number of the coloured object.

	2nd
	3rd
	5th
	4th
	1st

Writing the Alphabet

Trace the letters with the outlines provided and fill in the missing letters.

A	B	C	D	E
F	G	H	I	J
K	L	M	N	O
P	Q	R	S	T
U	V	W	X	Y
Z				

Build your child's confidence in Math!



MATHPROJECT
Empowering minds

At MathProject, we firmly believe that mastering mathematics develops the problem-solving abilities of a child. Our mission is to deliver math education that cultivates 'problem-solvers' who are capable of shaping our future!

Why Us?

- Personalized Learning Plans
- Qualified Teachers
- Interactive Sessions
- Generous Teaching Hours
- Weekly Progress Tracking
- 5-star Google Reviews



Our 100% online, virtual program welcomes students of all grade levels, from kindergarten through grade 12, from all over USA and Canada.

What our parents are saying:

My daughter has evolved a lot since she started doing the MathProject one year ago. The teachers are always very kind and patient with her. The school became very easy for her now and her grades are always above 90% in math. Besides, it is online, so no time wasted in traffic or waiting room.

- Marcello Valença

Book a FREE assessment today!



+1-844-628-4243



www.mathproject.us | www.mathproject.ca

Our Method:

1

Free Skills Assessment

Students begin by taking a **free assessment** that allows us to assess their current knowledge and skill level.

2

Customized Learning Plan

With a clear understanding of the student's current skill level, our team develops a customized study plan that will ensure each student's progress at their own pace through our curriculum while simultaneously building their confidence and mastery of the concepts.

3

Performance Reviews

Our team continuously monitors a student's progress to ensure they are mastering the concepts. We administer regular tests to verify student progress and skill retention. Parents are informed weekly of the student progress.

Competitor Analysis:

Differentiators	MathProject	Kumon	Mathnasium	Spirit of Math
Maximum Weekly Teaching Hours	1.5 to 6 hours	0.5 hours	2 to 2.5 hours	1.5 hours
Student to Teacher Ratio	3:1	Nil	5:1	20:1
Customized Learning Plan for each Student	Yes	No	Yes	No
Test Prep for Gifted Programs and Math Contests	Yes	No	No	Yes
Unlimited Access to math curriculum and worksheets	Yes	No	No	No
Daily Drop-In Sessions (for math homework help)	Yes	No	No	No
Fostering a relationship with the teacher	Yes	No	No	No
Ongoing timed Assessments and Tests	Yes	No	No	No
Performance (money-back) Guarantee*	Yes	No	No	No

Note: Terms and conditions apply on any guarantees offered. See MathProject website for details.

Book a FREE assessment today!

Call Us: 844-628-4243

www.mathproject.us | www.mathproject.ca



@mathprojectlearning



MATHPROJECT
Empowering minds

Embark on a journey of mathematical discovery with MathProject K-1 Curriculum! Designed for young learners in Kindergarten to Grade 1, this is an abridged version of the comprehensive workbook tailored to establish a solid foundation in number sense. Through vibrant and engaging activities in the comprehensive workbook, students will develop essential skills, including counting, comparing numbers, and exploring concepts like even/odd numbers, ordinal numbers, and skip counting.

Key Features of the Comprehensive Workbook:

- **Foundational Number Sense:** Focuses on providing students with a strong foundation in number sense, ensuring they develop essential skills for future mathematical concepts.
- **Visual Learning:** Thoughtfully organized, introducing young learners to associating numbers with visual representations. Through this approach, students build a visual understanding of smaller numbers first and then progress to larger numbers.
- **Counting and Comparison:** Students will practice and refine their counting skills while learning how to compare numbers. The workbook takes them from small numbers to a confident ability to compare numbers ranging from 0 to 999.
- **Skill Expansion:** Beyond basic counting and comparison, students delve into essential skills such as skip counting. This prepares them for more advanced operations like multiplication.
- **Diverse and Practical Learning:** Concepts like even/odd numbers and ordinal numbers are introduced, providing students with a diverse and practical introduction to number sense.
- **Colorful and Engaging Worksheets:** The workbook is packed with 96 pages of colorful, fun, and engaging worksheets. These activities are designed to equip young learners with the confidence they need to tackle arithmetic operations with ease.

Make learning math a joyous adventure with MathProject Curriculum. Set your young learners on the path to mathematical success by building a strong and confident foundation in number sense!



Copyright © 2024 by MathProject
www.mathproject.us | www.mathproject.ca
Phone: 1-844-628-4243