

# Year 3 Maths

---

## Number and Place Value

---

Learning From Home Activity Booklet

Statutory Requirements	Activity Sheet	Page Number	Notes
<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> <li>• count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number;</li> <li>• recognise the place value of each digit in a three-digit number (hundreds, tens, ones);</li> <li>• compare and order numbers up to 1000;</li> <li>• identify, represent and estimate numbers using different representations;</li> <li>• read and write numbers up to 1000 in numbers and words;</li> <li>• solve number problems and practical problems using these ideas.</li> </ul>	Crack the Code	2	
	Toy Shop	3	
	Happy Holidays	4	
	Spaceship Numbers	5	
	Party Time	6	
	Mr Lopez's Work	7	
	Detective Dog's Number Puzzles	8-10	
	Parent Guide to Addition and Subtraction	11	

# Crack the Code

Detective Dog is trying to crack number sequences. He needs to find the missing numbers in each code to solve the number sequence.

See the sequence below:



2 3 4 5 6 7

This sequence is going up in ones so the next numbers in the sequence would be: 8, 9 and 10. Help Detective Dog by finding the missing numbers in the sequences below.

0 4 8 12 16

0 10   40 50  70

24 32 40  56  72

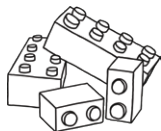
0  100 150  250

0 100   400  600  800

52 48         16

# Toy Shop

The shopkeeper must increase the price of each item by £10.  
Add £10 to the cost of each item below to calculate the new price.



building bricks **£36**

£



wax crayons **£12**

£



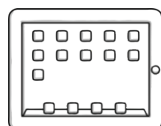
play house **£98**

£



heart house **£22**

£



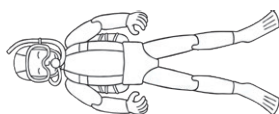
tablet **£194**

£



wooden bricks **£45**

£



diver **£26**

£



scooter **£137**

£



soldier **£17**

£



doll **£27**

£



teddy bear **£142**

£



superhero **£19**

£

**Challenge:** How much would each item cost if each item cost £10 less than the original price?

# Happy Holidays

The Happy Holidays company is having a sale on all their holidays. Each holiday has been reduced by £100. Write the new price of each holiday destination in the column entitled '£100 discount'.



Holiday destination	Original Price	£100 Discount	
Tenerife	£328		
Mallorca	£426		
Paris	£159		
Rome	£527		
Lisbon	£673		
Barcelona	£289		
Florida	£936		

In the previous year, the holidays cost £100 more. In the final column, write the title 'Previous Year'. This time, add £100 to the original holiday price to show what each holiday cost the previous year.

**Challenge:** Place a tick next to each calculation that is correct. If the calculation is incorrect, write the correct answer.

1.  $1045 - 100 = 845$

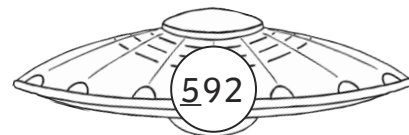
2.  $538 + 100 = 638$

3.  $937 + 100 = 1037$

4.  $703 - 100 = 630$

# Spaceship Numbers

Look at the space ships below. Write the value of the digit '5' on each spaceship. For example:



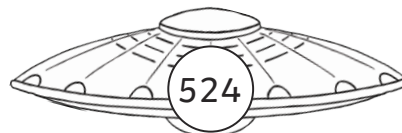
The value of the digit '5' in the number above is 500 (or 5 hundreds) because it is in the hundreds column. **Write your answers below each alien spaceship.**












Aliens live much longer than humans! In fact, some of them even live to a thousand! Look at the aliens' age in the pictures below.

**Write the value of the underlined digit in each aliens' age.**





























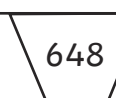


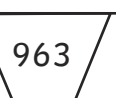
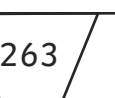
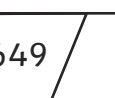
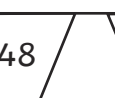
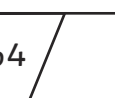




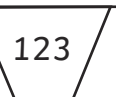
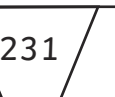
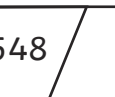
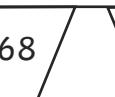
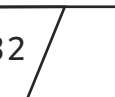





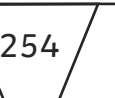
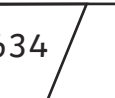
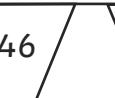
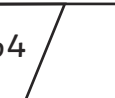



# Party Time

Below are the number of cakes eaten at different parties throughout the country. Use the **greater than** > and **less than** < symbols to help you compare the number of cakes eaten. The first one has been done for you.

	>			<input type="text"/>			<input type="text"/>	
	<input type="text"/>			<input type="text"/>			<input type="text"/>	
	<input type="text"/>			<input type="text"/>			<input type="text"/>	

At a local party, someone has made some number bunting. Place the bunting flags in the correct order, **starting with the smallest** number on the blank bunting below.

# Mr Lopez's Work

Mr Lopez has set his class some number work. They have to match each word to the correct number. **Draw a line from the words on the left to the numbers on the right.**



- Three hundred and twenty-seven
- Three hundred and seventy-two
- Five hundred and eighty-two
- Six hundred and three
- Six hundred and thirteen
- Seven hundred and forty-two
- Nine hundred and eighty-three
- Eight hundred and ninety-three

- 582
- 613
- 327
- 983
- 603
- 893
- 372
- 742

**Mr Lopez would now like you to read the following numbers and write each number in digits.** The first has been done for you.

- |                                |                                  |                                  |                      |
|--------------------------------|----------------------------------|----------------------------------|----------------------|
| 1. Four hundred and forty-six  | <input type="text" value="446"/> | 5. Nine hundred and seventy-two  | <input type="text"/> |
| 2. Six hundred and fifty-seven | <input type="text"/>             | 6. Nine hundred and eighty-nine  | <input type="text"/> |
| 3. One hundred and seven       | <input type="text"/>             | 7. Seven hundred and nine        | <input type="text"/> |
| 4. Five hundred and thirty-six | <input type="text"/>             | 8. Six hundred and seventy-three | <input type="text"/> |

**Now write the following numbers as words.** The first has been done for you:

- |         |   |         |                      |
|---------|---|---------|----------------------|
| 9. 728  | <input type="text" value="seven hundred and twenty-eight"/> | 12. 417 | <input type="text"/> |
| 10. 648 | <input type="text"/>  | 13. 195 | <input type="text"/> |
| 11. 358 | <input type="text"/>  |         |                      |



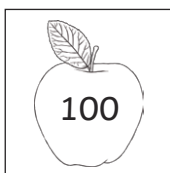
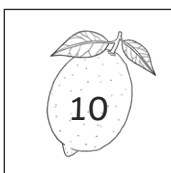
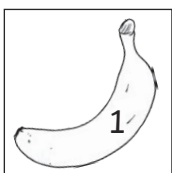
# Detective Dog's Number Puzzles

Detective Dog has returned. He would like you to complete the following puzzles using your knowledge of place value and number.


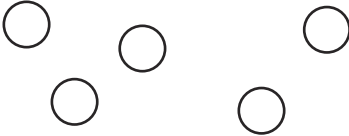



Write the number shown in each of the pictures below.

**Challenge:** Draw the number 342 using the number symbols below.



Write the value of the number represented in the grid below.

100s	10s	1s
		

The number represented is:

Using all the counters, create three more numbers in the tables below. Draw the counters in each table and write the number below.

100s	10s	1s

The number represented is:

100s	10s	1s

The number represented is:

100s	10s	1s

The number represented is:



1. Detective Dog says, "the number in the place value grid is the largest three-digit number you can make using 10 counters."

100s	10s	1s

Do you agree with Detective Dog? Explain your reasoning.

---



---



---

2. Detective Dog can express 564 in three different ways:

- 564 is made of 5 hundreds, 6 tens and 4 ones,
- 564 is made of 56 tens and 4 ones,
- 564 is made of 5 hundreds and 64 ones.

Find three different ways of expressing each of the numbers below:

**942**

---



---



---

**284**

---



---



---



# Parent Guide to Addition and Subtraction

In the Year 3 National Curriculum, children are taught to have a strong understanding of numbers up to 1000. In class, they will use place value to identify the value of each digit in a three-digit number. They will also be taught to use place value to order and sequence numbers. To develop their 'mastery' of three-digit numbers and place value, children are required to apply their knowledge of number to a range of activities. This booklet will help support your child by applying this knowledge in a range of different problems and contexts.

## Place Value

Place Value is the value we give to a digit based on its position in a number. In school, this is often taught using a 'Place Value Chart' such as the one below.

100s	10s	1s
4	7	3

The number above is 473. The position of each digit shows its value. For instance, the 3 is in the 1s column so the value is 3 ones. The 4 is in the 100s column so it is 400 or 4 hundreds. It is essential that children have a strong understanding of place value as this supports them in all other areas of the mathematics curriculum.