

Monday 8th June 2020

Place Value

Hi Yachts!

Don't forget that you can be trying all the activities on Mathletics

<https://login.mathletics.com/> - I've been keeping an eye on who's been doing lots of work on there!

Mental Maths

Choose the best option for you then solve the problem in your head:

Option 1: Why is half of 13 difficult to solve?

Option 3: What is different about 123 and 29? What is the same?

Use the RUCSAC method to solve the problems:



Read

Read the question carefully.



Underline

Underline or write down the keywords and numbers.



Choose

Choose the correct operation (+ - x or ÷) and a mental or written method of calculation (you could use diagrams).



Solve

Solve it! Make sure you follow the steps carefully.



Answer

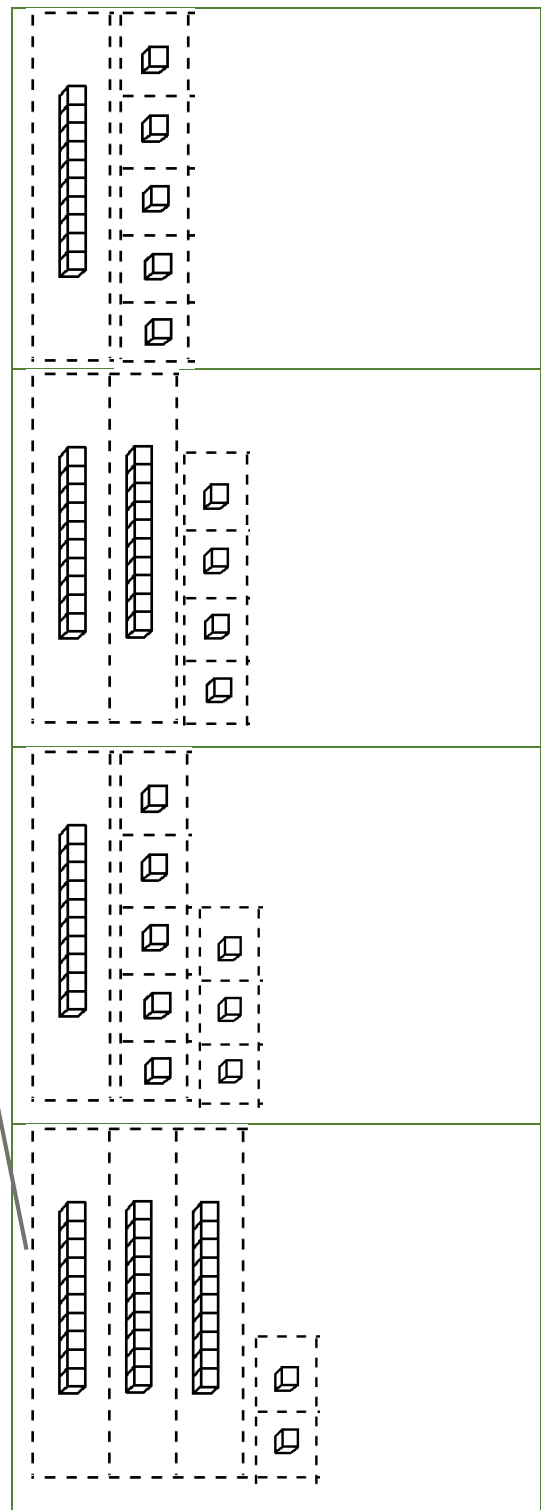
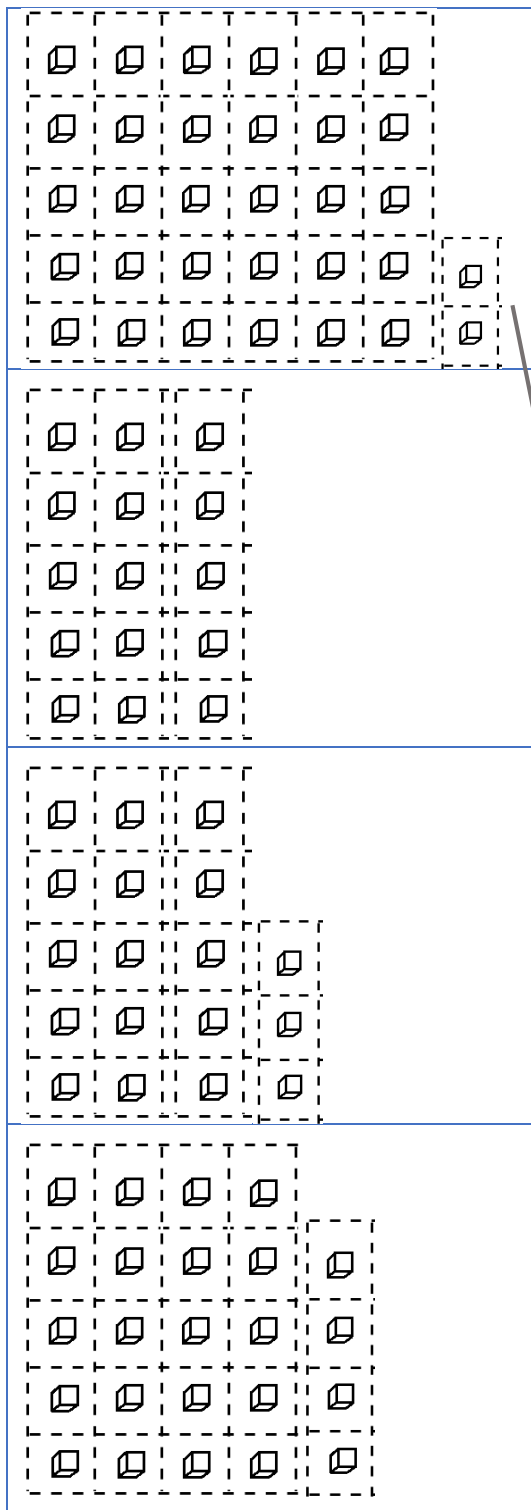
Check that you have answered the question properly. What did you need to find out in the first place?



Check

Check your answer. Use the inverse calculation or another checking technique (was it close to your estimate?)

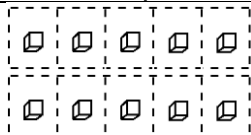

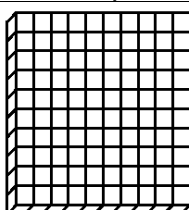
1. The pictures on the left represent numbers using only ones Dienes and the pictures on the right represent numbers using tens and ones Dienes. Can you match the pictures that show the same amount? I have given an example:



2. Can you draw these numbers as **ones Dienes** then as **tens and ones Dienes**? Think about how many tens and ones are in each number.

- a. 13
- b. 21
- c. 10
- d. 35

3. Jan says that you can exchange group A for group B. Ted says that you can exchange group A for group C.
- Who is correct?
 - Why?

Group A	Group B	Group C
		

4. If 429 can be written as:

4 hundreds, 2 tens, 9 ones

3 hundreds, 12 tens, 9 ones

2 hundreds, 22 tens, 9 ones

How could you write 783?

___ hundreds, ___ tens, ___ ones

___ hundreds, ___ tens, ___ ones

___ hundreds, ___ tens, ___ ones

5. Can you describe the pattern?

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	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

6. Now make your own pattern and describe it.

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	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Challenge

7.

The Deca Tree

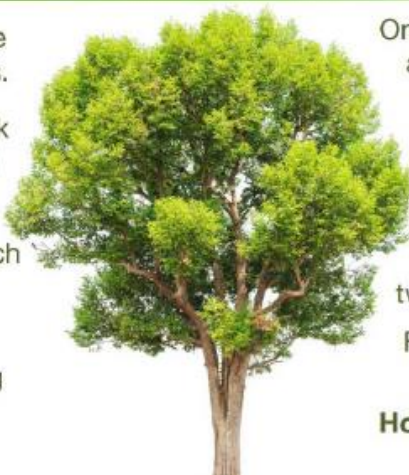


The deca tree
has 10 trunks.

On each trunk
there are 10
branches.

On each branch
there are
10 twigs.

On each twig
there are
10 leaves.



One day a woodcutter came
along and cut down one
trunk from the tree.

Then he cut off one
branch from another
trunk of the tree.

He then cut off one
twig from another branch.

Finally he pulled one leaf
from another twig.

**How many leaves were left
on the tree?**

Use this table to help you to keep track of your calculations:

	Number of leaves
1 twig	
10 twigs	
1 branch	
10 branches	
1 trunk	
10 trunks	