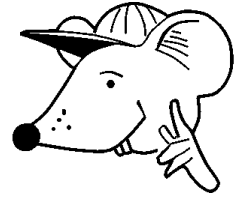




MATHEMATICS



N.S. Yr. 1 P.64

Investigate general statements

Equipment

Paper, pencil, ruler

MathSphere

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Concepts

This is an unusual module in that there is little like it found in traditional textbooks.

It asks children to investigate statements by finding as many examples as they can that satisfy it.

Eg “I can make 10 by adding two numbers” can lead to a large number of addition sums with the answer ten.

Again much of this work can be done orally, with the teacher making the statement and then the children responding with examples, leading to a child making a statement and the rest of the class finding examples – a good game to play when there is five minutes left at the end of the lesson or during the plenary.

(It should be noted that providing numerous examples of a statement does not prove that statement to be correct – an important idea when studying maths at a higher level.)

Making 7

I can make 7 by
adding two
numbers.



How many ways can you add two numbers to make 7 ?

Write them down:

Can you make 7 by adding three numbers ?

Making 9

I can make 9 by
adding two
numbers.



How many ways can you add two numbers to make 9 ?

Write them down:

Can you make 9 by adding three numbers ?

Paying for anything!

If I have two 2p coins and two 1p coins I can pay for anything from 1p up to 6p.



Is this correct?

Write down all the ways you can of paying 1p, 2p, 3p, 4p, 5p and 6p with these four coins.

I can pay 1p with

I can pay 2p with

I can pay 3p with

I can pay 4p with

I can pay 5p with

I can pay 6p with



Paying for anything!

If I have three 2p coins and two 1p coins I can pay for anything from 1p up to 8p.



Is this correct?

Write down all the ways you can of paying 1p, 2p, 3p, 4p, 5p, 6p, 7p and 8p with these five coins.

I can pay 1p with

I can pay 2p with

I can pay 3p with

I can pay 4p with

I can pay 5p with

I can pay 6p with

I can pay 7p with

I can pay 8p with

Adding ten

When I add 10 to a number
the units digit stays the
same.

Is this correct? Write some examples below:

$$10 + \square = \square$$

$$10 + \square = \square$$

$$10 + \square = \square$$

$$10 + \square = \square$$

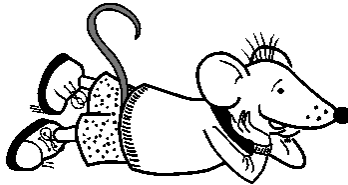
$$10 + \square = \square$$

$$10 + \square = \square$$

$$10 + \square = \square$$

$$10 + \square = \square$$

0
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

Adding in any order

I can add numbers in any order and the answer will always be the same.

$$1 + 2 = 3$$

$$2 + 1 = 3$$

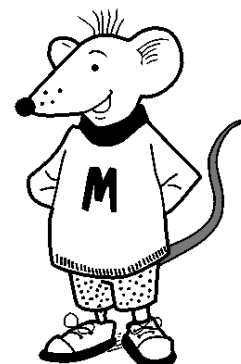
Does this always work?

Show some examples:

Now see if you can add three numbers in any order:

Making numbers

I can make four different numbers with two different digits.
Can you?



Eg with 1 and 2 I can make 11, 22, 12 and 21

You have a go:

With and I can make

With and I can make

With and I can make

With and I can make

With and I can make

With and I can make

Triangles

Help!
I'm stuck!
Let me out of
this triangle!!



Has he gone mad?
That's not a triangle.
Triangles have three
sides.

Draw four shapes which are triangles.

Colour them red.

Draw four shapes that are not triangles.

Colour them blue.

