

## Maths Activities Week 6


### Day 1

Read the PowerPoint and follow the instructions.

### Day 2

**A visualisation problem:**

A model is made from cubes as shown.



How many cubes make the model?  
A part of how many cubes can you see?  
How many cubes can't you see?

If the cubes were arranged into a tower what is the most number of the square faces could you see at one time?

## Nice and Nasty Numbers

### Nice Numbers

2 players.

Each player draws 3 squares for a three-digit number:

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 A)

B) 

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Player A rolls a 10 sided die and puts the number in one of their squares.

Player B does the same.

Continue until all 6 boxes are filled.

Winner is the player who has made the largest three-digit number.

Variations:

Lowest number wins

Nearest to 500 wins

Largest even number wins

If the difference between the final numbers is less than 500, player A wins; if greater than 500, player B wins

Add a decimal point to the squares – closest to 1 wins

Digits can only be used once – e.g. if 7 is rolled a second time, roll again

Add scoring system – e.g. Largest number wins. The difference between the two numbers is the number of points scored by winner for that round.

### Nasty Numbers

When you roll the die, you can choose to either put the digit in your grid or put it somewhere in your opponent's grid.

#### Variation:

Only have one 'nasty' number each game – choose when to use it; or have 2<sup>nd</sup> roll must be put in one of opponent's squares, etc...


... the possible variations are endless... get children to make up their own...

Day 3

**Finding all possibilities:**

You have 4 equilateral triangles.

How many different shapes can you make by joining the edges together exactly?



How many of your shapes will fold up to make a tetrahedron?

## Number Detective

Calling all detectives! You will need to think creatively, use your reasoning skills and your problem solving strategies to find the mystery number from the list below.



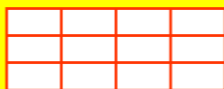
- The number has two digits.
- Both of the digits are even.
- The digit in the tens place is greater than the digit in the ones place.
- The ones digit is not in the three times table.
- The tens digit is not double the ones digit.
- The sum of the two digits is a multiple of five.

18	86
120	42
46	64
80	8
22	83

Day 4

**Finding all possibilities:**

How many oblongs (rectangles) are there altogether in this drawing?



Find the day 4 PDF and match the clock faces to the word cards.