Guess My Number

Challenge your family to **guess your number, by asking up to 20 questions,** to which you are only allowed to **answer Yes or No**. Don't tell them your number until the end of the game. Make sure you pick a sensible number. Here is an example: (My number is 1346). Is your number odd? Have 3 digits in it? Is it a thousand number? Are the hundreds less than 500? Is it in the 4 times table? Is it divisible by 2? etc

Sequences/ Outdoor Maths

Fibonacci Sequence. The **Fibonacci Sequence** is the **series** of **numbers**:
0, 1, 1, 2, 3, 5, 8, 13, 21, 34 ... The next **number** is found by adding up the two **numbers** before it. (So 0+1=1, 1+1=2, 1+2=3, 2+3=5, 3+5=8 and so on**)**
It is possible to find the **Fibonacci sequence in nature**: It can be seen in the given **number** of petals of flowers. Most have three (like lilies and irises), five (parnassia, rose hips) or eight (cosmea), 13 (some daisies), 21 (chicory), 34, 55 or 89 (asteraceae). Can you find flowers in your outdoor spaces which link to the Fibonacci sequence? Can you make up any of your own sequences?

3D Shapes

Collect 1 of each 3D shape you know from around your house or use clean items from your home recycling:
Cube, Cubiod, Sphere, Triangular Prism, Square or Triangular based pyramid etc.

Become the teacher and explain to your family the **properties of each shape: faces, edges and vertices** (corners).

Now try to find a rucksack or some sort of bag to put all the items in and play the **'Guess My Shape'** Game. Get the player to feel in the bag and describe what they touch. How many faces, edges and vertices does it have? You can make up other similar games with the shapes.

Word Problem

Robert has to make and deliver 42 school lunches each day. He starts work at 8am and finishes after the last lunch has been dropped off.

It takes Robert 3 minutes to prepare each lunch and 5 minutes to deliver each one. When does Robert finish work? (Remember how many minutes are in an hour when calculating this problem.)

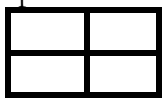
Numeracy Home Learning Challenges (Second Level)

Name: _____(3)

Class: _____

Make 160

Choose four of these digits. Each one must be different. Put one digit in each box. This makes two 2-digit numbers reading across and two 2-digit numbers reading down. Add up all four of the numbers.

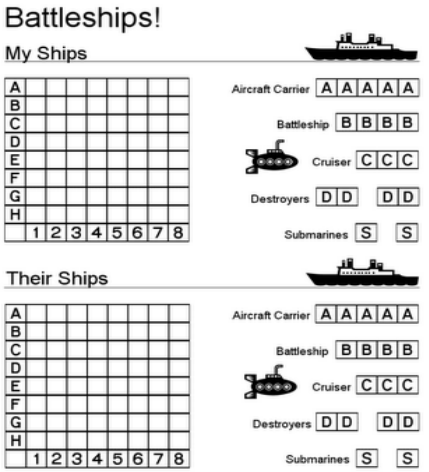


1 2 3 4 5 6 7 8 9 0

Crafty Co-ordinates

To play Battleships with a family member: each draw 2 grids like the ones shown below. Without looking at each other's, draw your boats onto your own grid where ever you want to place them.

Once you are ready, take it in turns to call out a grid reference: (C, 4). If you land on one of their ship's coordinates, then they say 'Hit', if not, they say 'Miss'. Keep playing until one of you have 'Hit' all coordinates of your opposition.



Other Curricular Area Challenges

Science

On a sunny day and with a little bit of help, **measure the length of your shadow** in the morning and then **again at 2 more times** throughout the day. What do you notice? (You could just mark it if you can't measure it.)

Art

Draw a hundred square. Use 4 colours to make a design. Now write down the fraction of each colour. E.g 20 squares are blue: Blue = 20/100 = 10/50 = 1/5
Simplify the fraction. Can you find the percentage and the decimal amount too? 20/100 = 20% = 0.20

RME

Ramadan is an Islamic religious festival **that lasts for about a month**: This year it runs from **22nd April – 24th May**. During Ramadan, Muslim people fast (do not eat) from sunrise to sunset. This is approximately **from 5.37am to 8.51pm**. Can you work out how many days people fast for and how long in hours and minutes this will be?