Sequence and Chance Home Information Sheet

Second Level (a)

Having explored more complex number sequences, including well-known named number patterns, I can explain the rule used to generate the sequence, and apply it to extend the pattern.

MTH 2-13a

I can conduct simple experiments involving chance and communicate my predictions and findings using the vocabulary of probability.

NMU 2-22a

Over the next few weeks we are going to be learning to use numbers within 1000 to:

- Recognise sequences in which the terms are linked by one of the four operations,
  e.g. 9, 13, 17, 21....., 100, 91, 82, 73, 64....., 3, 6, 12, 24, 48……
- Follow a rule based on multiplication, division or simple fractions to generate a sequence, e.g. start with 88 and keep dividing by 2 to find subsequent terms
- Describe a sequence sufficiently to allow a partner to reproduce it
- Understand the meaning of terms such as chance, likelihood, probable, probability, certain, uncertain, possible, impossible, random, randomly
- Know how the implications of chance are used in daily routines, decision making and the media
- Understand the concept of equal chance, fifty-fifty, one in two etc.
- Use data to predict the outcome of an experiment involving chance
- Plan and carry out a simple experiment involving chance, e.g. picking a card from a pack, rolling a dice etc.

Here are some ideas of how you can help me at home!

Make snakes Ask children to draw three snakes, split into many sections, and to write a sequence in each snake, e.g. by counting on or back in steps of the same size, such as 5 at a time. For more of a challenge you could state that the fifth number in each sequence must be a particular number, e.g. 27 or 54, and say that at least one sequence must be descending.

Coin toss: Ask child to think of odds of getting a head/tail in a coin toss (50:50, half and half). Flip coin 10 times and note results: do they match theory? What if the coin is flipped 100 times?

Here are some websites that you may find useful to use with me!

http://www.bbc.co.uk/bitesize/ks2/maths/data/probability/play/ - Help the Zooks link probability language with numerical terms.

http://www.bbc.co.uk/bitesize/ks2/maths/number/number_patterns/play/ - Work out the number pattern to crack the code!

Challenge me!

Snakes and ladders Using any snakes and ladders board, which number on the dice could you roll every time to guarantee you never get a snake?

Cards What is the probability that you will get an even number? Red/black card? Face card? (Within a particular suit: out of 13. Red or black cards: out of 26. Whole pack: out of 52).