



Canklow Woods Primary School

### Ideas for using the '100 square'

Many of these activities can be adapted for children of different abilities and ages.

**Jigsaw:** Cut up into pieces to make a jigsaw for the children to reassemble. Increase the number of pieces to make it harder. Cut along the lines, not through the numbers.

**Cover-up:** Child 1 covers up one or more squares using counters. Child 2 has to guess which numbers are hidden under the counters.

**Race to 100:** Give the children a copy of a blank 100 square. Time how long it takes them to fill in the numbers. Repeat on a regular basis to see if they can improve on their time.

**Missing numbers:** Provide children with pieces of the 100 square with only some of the numbers filled in. They have to think about the patterns to fill in the empty spaces.

#### Squares:

3	4
13	14

Draw a 2 by 2 square on the hundred square.  
Add the numbers in opposite corners.  
What do you notice? Is it the same for different 2 by 2 squares?  
Now multiply the numbers in opposite corners.  
What do you notice this time? Is it always true?

**Differences:** Choose two 0 – 9 cards and write down the two 2-digit numbers you can make (with 3 and 7, you can make 37 and 73). Find the difference between your two numbers and colour your answers on a hundred square. Explain any patterns you can see.

**Predictions:** Cover the multiples of 3 up to 30. Use the pattern to predict whether the number 52 will be in the sequence. Try predicting other numbers. How do you know? How could you check your answer? Repeat the activity using different multiples.

**Total 100:** Find pairs of numbers on the hundred square that total 100. How many different pairs can you find? How could you organise your answers so that you know you have found all of the possible ways? Which are the two 'unhappy' numbers because they do not have a partner.

**Digit sums:** Use red counters to cover numbers on the hundred square whose digits add up to 10. Explain the patterns that you notice? Use a different colour counter to cover numbers whose digits add up to 9, 8, 7 etc. Can you explain what is happening each time?

**Consecutive numbers:** Circle three numbers next to each other in a row. Find their total. Repeat for other groups of three consecutive numbers. What do all of the answers have in common? Try to explain why this happens.

**Make a track:** Cut a hundred square into rows, and then stick it together as a number track. Can you decide where to cut it to turn it back into a hundred square? Explain why you know.

**Hidden numbers:** Cover the numbers 1 to 99 on a hundred square with counters. Spin two 0 – 9 dice and make a 2-digit number. Work out which counter the number is hidden under. If you are right, keep the counter. If you are wrong, put the counter back down. How many counters can you collect in 5 minutes? Play again and try to beat your record.

**Spirals:** Fill in the numbers on a blank hundred square in a spiral pattern. Cover up some of the numbers. Can a partner tell you which numbers are covered? Can you make a different spiral pattern next time?

**L-shapes:**

22	
32	
42	43

Draw an L-shape on the hundred square (3 down, 2 across). Find the difference between the two shaded numbers. Repeat with other L-shapes on the hundred square. What do you notice about the differences? Can you explain why?

**Square numbers:** Predict how many square numbers you think there are on a hundred square. Circle them to find out how close your estimate is. Describe any patterns you see. Which two square numbers have a difference of 20, 40, 60? Do you think there is a pair of square numbers with a difference of 80?

**Coordinates:** Each child needs a hundred square. Label the columns of the grid A–H and the rows 1–10. Child 1 puts crosses on their grid to make a letter or shape e.g. H, and they then read out the coordinates. Child 2 marks the squares with a cross. Check to see if the same pattern is made on both squares.

**Common multiples:** Circle the multiples of 3 and cross the multiples of 4. What do you notice about the numbers that are circled and crossed? What do these numbers have in common? Do you know what the next few numbers in the pattern would be?

**Crosses:**

	4	
13	14	15
	24	

Draw a 3 by 3 cross on the hundred square. Add the four numbers around the edge. Can you see a relationship to the middle number? Repeat for other crosses. Explain what you have noticed to a friend.

**Favourite numbers:** Choose your favourite number from the hundred square. Make up 5 statements about it e.g. it is a multiple of 5, it is a square number etc. Can someone else guess your number correctly? If not, let them ask a question to help them.