

Individual Tuition Plan

Pupil Information

Name: _____

School: _____

Year Group: 6 KS2 Numeracy Current level: 3c Target level: 3a/b

Tutoring Information

Name of Tutor: _____

Time and location of tutoring: In school Wednesdays 4.45 – 5.45pm

Start date: Wednesday 7th October Number of sessions: _____

The following targets have been set and agreed by the class teacher/tutor/pupil and parent:

Target	What to teach	Success criteria
Strengthen mental maths strategies	Maths games using mental strategies. Timed maths strategies	Increased accuracy/score on timed mental maths tests
Accurately convert measurements of weight, length and capacity	How to change m-> cm or km, g-> Kg, ml ->L, using the correct operations. Equivalent measurements	Shows understanding of relationship between g/kg, l/ml, mm/cm/m/km
Assorted word problems to consolidate the application of mathematical concepts	How to identify the important part of the problem and what the question is actually asking. Choosing the correct operation to solve the problem	Can identify and apply necessary mathematical operation required for successful completion.

We have discussed this Individual Tuition Plan and agree to the targets set.

Pupil/date: _____

Parent/date: _____

Teacher/date: _____

Tutor/date: _____

Tuition Plan Record

Name: _____ School: _____

Year Group 6 Time of tutoring: 4.45 – 5.45 pm Subject: Numeracy No. of sessions: ____

Date	What taught and homework given	Comments
7.10.09 4.45pm	Mental +/- starter. 3 minutes Progress test 1 for baseline 1/20 Very slow w/poor maths facts. Needs place value work	Very reliant on fingers for calculation
14.10.09	Mental start \times/\div 3 minutes Factors and multiplication review – v tenuous Angle game + w/money	V wk tables and # facts Not sure of odd and even #s
21.10.09	0 in 3 mins w/xs using 10s and 100s 0/10 Column subtraction review – still hard across 2 columns but improving. Taught 10 and 100 ‘trick’ for multiplying. Word problems 1-5	Needs maths facts!!! Self conscious about work; recognises own weakness
4.11.09	3 minute warm up w/xs using 10s and 100s. Some awareness from last session but not much Identifying and writing out square #, maths facts to 20 Fractions of numbers - difficult	Has been doing SATs papers Lots of careless errors – seems tired.
11.11.09	Review 4 # ops. Still some confusion with column – but self correcting X out step by step – long method 4 large #s. Good place value use of 0s Confusion with \div so intro to repeat sub. Also review of short division method.	Time work
18.11.09	Missing # work w/addition columns and subtraction columns – difficulty seeing it Angle game and domino investigations Trying to see about making 10s to add/subtract	Homework: 1-5 Doubles and doubles Plus 1 to learn
25.11.09	Angle game – warm up. Review class SATs papers - # questions. Non-calculation. Using empty ... line and jumps of 10 Recognises reverse ops but not always accurate workings Lot of guessing	
2.12.09	5pd warm up – 8 number questions - took 10 minutes instead of 4 mins guidelines # questions from practice SATs Jotting down multiples to help her improve her accuracy	

C does a lot of guessing for questions even when an approach has been modelled and repeated several times. Test situations caused paralyses (mentally)

Poor maths facts cause needless errors

Mainly conc. On maths facts and 4 ops. So not much measurement work.

For success, has to learn multiples/tables – keep writing out

Difficulty identifying parts of problem for word questions.

Review of _____ Numeracy Tutoring

Duration: _____

Target Areas set out for C were:

Strengthen mental maths strategies

Accurately convert measurements of weight, length and capacity

Assorted word problems to consolidate the application of mathematical concepts.

C began her tutoring sessions rather defensively and apprehensively although it quickly became apparent that she was concerned about getting things wrong and not being able to do the work. C initial session began with a 5 minute timed warm up, of 10 non-calculator questions that covered the four number operations, since completing mental maths work within set time frames was identified as being one of her challenges. It was immediately evident that C was uncomfortable in a timed situation because her maths facts were very weak which resulted in the non-completion of 10 questions within the 5 minute time frame and a low level of accuracy for those attempted. C was heavily dependent on her fingers for maths facts and had little or no knowledge of any tables other than 2s, 5s and 10s.

During these sessions C has worked hard as we have carried out a lot of work, oral and written, to help her identify and learn: number doubles up to $20 + 20$; fact families to 20; adding and subtracting using the empty number line; multiples of 3, 4 and 6 with some work on 7s and 8s; finger tricks for 9s and number patterns for 9s and 11s; multiplying by 10s and 100s; prime numbers; square numbers; producing and using multiplication squares. Whilst still using her fingers to count on, and for some tables, C is now less reliant on them and can write out her multiples fairly quickly. When she remembers to write them down and use them she can solve problems with a higher level of accuracy. In a similar 10 question speed assessment at the end of the 8 sessions C rate of question completion was still slow but better than it had been in the initial session.

In addition to improving mental maths strategies, C clearly needed to consolidate her number operations, particularly column subtraction across zeros, multiplication and division, so she did a significant amount of work in this area. C can successfully work out multiplication problems using chunking and the grid method. She can also solve division problems using repeat subtraction and short division using the bus stop method. However, C needs to remember to write out her multiples rather than guessing in order to complete accurate multiplication and division work. C has become very good at identifying operation reversals in order to find missing numbers but her weak maths facts sometimes lead to errors of calculation.

The biggest challenge that C has faced while carrying out word problems with number operations has been her tendency to rush and guess. When she reads the questions carefully and highlights or underlines the relevant information she is more successful.

Due to the amount of time we spent on arithmetic work, C did very little work with converting metric measurements although we did use them as examples of ways to multiply and divide with 10s and 100s. However, based on a measurement assessment, C has not yet fully understood when to select each operation independently although if it is noted on the page she can carry out the correct operation successfully.

Working thorough a variety of word problems and practice SATs questions, C has shown that she is very good at reading tables and charts and extracting information from them in order to answer the questions.

Areas for C to continue working on:

- Look carefully when subtracting to make sure to 'borrow' when the bottom number is larger than the top number.
- Practise writing out multiples of 3s, 4s, 6s, 7s and 8s
- Memorise halves and doubles for numbers to 20
- If calculators are allowed, use one. This will increase the accuracy rate
- Don't panic if a test is timed!! Concentrate on the questions that you can do and do them really well. Check the answer to make sure it's a sensible answer for the question.

C has worked very hard during these sessions to improve her skills in an area that she clearly finds challenging. I hope C remembers that teachers and other adults are always there to help her when she is unsure because everyone wants her to succeed.

I wish C all the best for the rest of Year 6 and hope she remembers that she can do more than she thinks she can.

7 December 2009

cc. Head, Teacher, Parent