Supporting the learning of
MATHS AT HOME

A guide to learning in the AUTUMN terms.

Year Six   Autumn

Favourite food

Ask your child the cost of a favourite item of food.

Ask them to work out what 7 of them would cost, or 8, or 9.

How much change would there be from £50?

Repeat with his / her least favourite food.

What is the difference in cost between the two?

Sale of the century

When you go shopping, or see a shop with a sale on, ask your child to work out what some items would cost with:

50% off
25% off
10% off
5% off

Ask your child to explain how she worked it out.

TV addicts

Ask your child to keep a record of how long he / she watches TV each day for a week. Then ask him / her to do this.

Work out the total watching time for the week.

Work out the average watching time for a day

(that is, the total time divided by 7).

Instead of watching TV, you could ask them to keep a record of time spent eating meals, or playing outdoors, or anything else they do each day. Then work out the daily average.

Four in a line

Draw a 6 x 7 grid.
Fill it with numbers under 100.

Take turns.

Roll three dice, or roll one dice three times.

Use all three numbers to make a number on the grid.

You can add, subtract, multiply or divide the numbers,

e.g. if you roll 3, 4 and 5, you could make 3 x 4 – 5 = 7,

54 ÷ 3 = 18, (4 + 5) x 3 = 27, and so on.

Cover the number you make with a coin or counter.

The first to get four of their counters in a straight line wins.

Rhymes

Make up rhymes together to help your child to remember the harder times-tables facts, e.g.
6 x 7 = 42 phew! 7 x 7 = 49 fine! 6 x 8 = 48 great!

INTRODUCTION
Autumn

At North Nibley C of E Primary we are always looking for ways to help you help your children. This booklet contains a number of games and ideas to support the learning taking place within school.

You can help by talking to your children about the maths you use everyday. You can ask them to help you work out things in real stuations. They can;

tell you the time

weigh items, add up the cost and count change when shopping

talk with you about numbers on buses, cars and road signs

measure out ingredients in the kitchen

use catalogues to see if you or they can afford things

check the amount of fuel you are putting in the car.

Talk to your children about the mental and written methods they are using in school. If you don't recognise these methods please don't insist that your child changes what they are doing. Instead encourage your child to explain their method to you.

How you can help your child at home

It is important that you talk and listen to your child about their work in maths. It will help your child if they have to explain it to you.

Be positive about maths, even if you don't feel confident about it yourself.

Remember, you are not expected to teach your child maths, but please share, talk and listen to your child.

A lot of maths can be done using everyday situations and will not need pencil and paper methods.
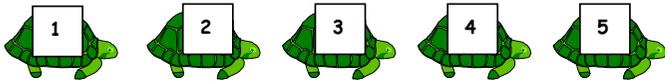
Play games and have fun with Maths!

Reception   Autumn

Counting and putting numbers in order

Use old magazines, comics or greetings cards.
Cut out pictures of animals, or anything else your child is
interested in. Label the animals 1 to 5.

Shuffle the animals. Put them in order from 1 to 5.

Remove one animal. Ask your child which number is
missing. Repeat with other numbers and more than one
missing number.

Ask your child to say what number comes before or after a
number you choose.

When your child can do this, repeat with numbers 1 to 10.

Recognising numbers

Choose a number for the week, e.g. 2.
Encourage your child to look out for this number all the time.

Can your child see the number 2 anywhere?

at home	- in the kitchen
	- on pages in a book
in the street	- on doors
	- on car number plates
	- on buses
while out shopping	- on the shop till
	- on shelves
	- in shop windows

Find two apples, toys, spoons, straws, sweets, etc.

Make patterns, such as two knives, two forks, two spoons, two
knives, two forks, two spoons…
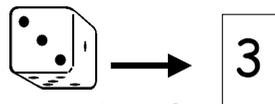
Practise writing the number 2.

Choose a different number each week

Dice game

Use a 'dotted' dice and write the numbers 1 to 6 on a sheet of
paper (or use the numbered animals).

Throw the dice. Can your child guess how many dots there are?
Check by counting.

Ask your child which number on the paper matches the dots on
the dice.

Year Five   Autumn

How much?

While shopping, point out an item costing less than £1.

Ask your child to work out in their head the cost of 3 items.

Ask them to guess first. See how close they come.

If you see any items labelled, for
example, '2 for £3.50', ask them to
work out the cost of 1 item for you,
and to explain how they got the answer.

Times tables

Say together the six times table forwards, then backwards.
Ask your child questions, such as:

Nine sixes?	How many sixes in 42?
Six times four?	Forty-eight divided by six?
Three multiplied by six?	Six times what equals sixty?

Repeat with the seven, eight and nine times tables.

Decimal number plates

Each choose a car number plate with three digits.

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Choose two of the digits, e.g. 4 and 6. Make the smallest and largest
numbers you can, each with 1 decimal places, e.g. 4.6 and 6.4.

Now find the difference between the two decimal numbers, e.g. 6.4 – 4.6 = 1.8.

Whoever makes the biggest difference scores 10 points.

The person with the most points wins.

Play the game again, but this time score 10 points for the smallest
difference, or 10 points for the biggest total.

Finding areas and perimeters

> *Perimeter = distance around the edge of a shape*
> *Area of a rectangle = length x breadth (width)*

Collect 5 or 6 used envelopes of different sizes.

Ask your child to estimate the perimeter of each one to the nearest
centimetre. Write the estimate on the back.

Now measure. Write the estimate next to the measurement.

How close did your child get?

Now estimate then work out the area of each envelope.

Were perimeters or areas easier to estimate? Why?

You could do something similar using an old newspaper, e.g.

Work out which page has the biggest area used for photographs.

Choose a page and work out the total area of news stories or adverts on that page.

Year Four   Autumn

Number game 1

You need about 20 counters or coins.

Take turns. Roll two dice to make a two-digit number, e.g. if you roll a 4 and 1, this could be 41 or 14.

Add these two numbers in your head. If you are right, you win a counter. Tell your partner how you worked out the sum.

The first to get 10 counters wins.

Now try subtracting the smaller number from the larger one.

Number game 2

Put some dominoes face down.

Shuffle them.

Each choose a domino.

Multiply the two numbers on your domino.

Whoever has the biggest answer keeps the two dominoes.

The winner is the person with the most dominoes when they have all been used.

Number game 3

Use three dice.
If you have only one dice, roll it 3 times.

Make three-digit numbers, e.g. if you roll 2, 4

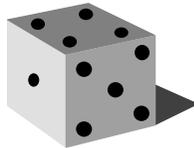and 6, you could make 246, 264, 426, 462, 624 and 642.

Ask your child to round the three-digit number to the nearest multiple of 10. Check whether it is correct, e.g.

76 to the nearest multiple of 10 is 80.

134 to the nearest multiple of 10 is 130.

(A number ending in a **5** always **rounds up**.)

Roll again. This time round three-digit numbers to the nearest 100.

Tables

Practise the 3x, 4x and 5x tables. Say them forwards and backwards.
Ask your child questions like: What are five threes?   What is 15 divided by 5?
Seven times three?
How many threes in 21?

$8 \times 3 = 24$ $24 \div 3 = 8$

Measuring

Use a tape measure that shows centimetres.

Take turns measuring lengths of different objects, e.g. the length of a sofa, the width of a table, the length of the bath, the height of a door.

Record the measurement in centimetres, or metres and centimetres if it is more than a metre, e.g. if the bath is 165 cm long, you could say it is 1m 65cm (or 1.65m).

Write all the measurements in order.

Year One   Autumn

Secret numbers

Write the numbers 0 to 20 on a sheet of paper.

Ask your child secretly to choose a number on the paper. Then ask him / her some questions to find out what the secret number is, e.g.

Is it less than 10?

Is it between 10 and 20?

Does it have a 5 in it?

0123456789

He / she may answer only yes or no.

Once you have guessed the number, it is your turn to choose a number. Your child asks the questions.

For an easier game, use numbers up to 10. For a harder game, use only 5 questions, or use bigger numbers.
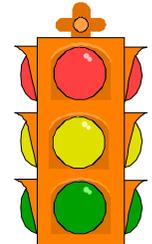
Shape activity

At home, or when you are out, look at the surface of shapes.

Ask your child – what shape is this plate, this mirror, the bath mat, the tea towel, the window, the door, the red traffic light, and so on.

Choose a shape for the week, e.g. a square.

How many of these shapes can your child spot during the week, at home and when you are out?

**Dice game**

You need a 1–6 dice, paper and pencil.

Take turns.

Choose a number between 1 and 10 and write it down.

Throw the dice and say the dice number.

Work out the difference between the chosen number and the dice number, e.g. if you wrote down a 2 and the dice shows 5, the difference is 3.

You could also draw a number line to help your child to see the difference between the two numbers.

0 1 2 3 4 5 6 7 8 9 10
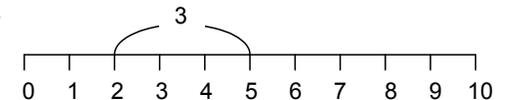
How old?

Start with your child's age. Ask your child:

How old will you be when you are 1 year older?

How old were you last year?

How old will you be 10 years from now?   ... and so on.

Year Two   Autumn

Number facts
You need a 1–6 dice.

Take turns. Roll the dice. See how quickly you can say the number to add to the number on the dice to make 10, e.g.

and **6**

If you are right, you score a point.

The first to get 10 points wins.

You can extend this activity by making the two numbers add up to 20, or 50.

How heavy?
You will need some kitchen scales that can weigh things in kilograms.

Ask your child to find something that weighs close to 1 kilogram.

Can he / she find something that weighs exactly 1 kilogram?

Find some things that weigh about half a kilogram.

Out and about
During a week, look outside for 'thirties' numbers, such as 34 or 38, on house doors, number plates, bus stops, etc. How many can you spot? What is the biggest one you can find?

31 39 36 35 33

Next week, look for 'fifties' numbers, or 'sixties'…

How much?
Once a week, tip out the small change from a purse. Count it up with your child.

Year Three   Autumn

Number games
Roll two dice. Make two-digit numbers, e.g. if you roll a 6 and 4, this could be 64 or 46. If you haven't got two dice, roll one dice twice. Ask your child to do one or more of the activities below.

Count on or back from each number in tens.

Add 19 to each number in their head. (A quick way is to add 20 then take away 1.)

Subtract 9 from each number. (A quick way is to take away 10 then add back one.)

Double each number.

Can you tell the time?
Whenever possible, ask your child to tell you the time to the nearest 5 minutes. Use a clock with hands as well as a digital watch or clock.
Also ask:

What time will it be one hour from now?

What time was it one hour ago?

Time your child doing various tasks, e.g.

getting ready for school;

tidying a bedroom;

saying the 5 times, 10 times or 2 times table…

Ask your child to guess in advance how long they think an activity will take. Can they beat their time when they repeat it?
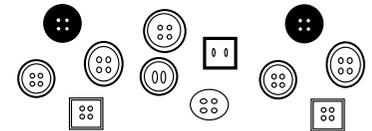
Fractions
Use 12 buttons, or paper clips or dried beans or…

Ask your child to find **half** of the 12 things.

Now find one **quarter** of the same group.

Find one **third** of the whole group.

Repeat with other numbers.

Order, order!
Each of you should draw 6 circles in a row.

Take turns.

Roll two dice and make a two-digit number (see Number games).

Write the number in one of your circles. Once the number is written in a circle you cannot change it or move it!

The first to get all six of their circle numbers in order wins.