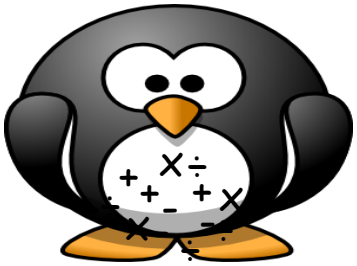
Moulton CEVC Primary School

Helping your child at home with maths

(Year 2)



Contents

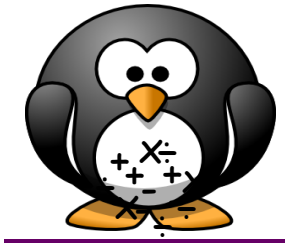
Hello!

Allow me to introduce myself…

I'm Pascal the Penguin! I love mathematics and it would be great if you do too.

Welcome to your mathematical home help ideas! If you find yourself with a few spare minutes at home, have a go at some of these activities. As always, I have placed a strong emphasis on mental strategies and mathematical talk because confident and able mathematicians need to have these in abundance!

Don't forget, your class teacher and Mrs Shipp would love to hear about the things that you do at home so don't forget to go and tell them or better still, write it in your reading record too.



Sharpen Your Mental Skills

Ask your child, as quickly as they can, to recall all pairs of numbers with a total of 10. E. G 3 + 7	Ask your child, as quickly as they can, to recall all pairs of numbers with a total of 20. E. G 13 + 7	Say a multiple of 10 (a number that ends in zero) and ask your child to calculate how many they need to add to make 100. E. G Adult: "70" Child: "30"	Ask your child to recall facts from the 2 times table: E. G "What is 6 multiplied by 2?" "What is 4 times 2?"
Ask your child to recall facts from the 10 times table: E. G "What is 6 multiplied by 10?" "What is 4 times 10?"	Ask your child a division fact related to the 2 times table. E. G "What is 6 divided by 2?" "How many 2s in 6?" "How many groups of 2 in 6?"	Say a number less than or equal to 10 and ask your child to double it.	Say an even number less than or equal to 10 and ask your child to halve it.
Say a doubling statement "I know that 6+ 6 = 12" Then ask a near double Question: "What is 6+7?"	Say a number and ask your child to quickly add 9. (They should add 10 and then subtract 1)	Say a number and ask your child to quickly add 11. (They should add 10 and then add1)	Say a number and ask your child to quickly add 19. (They should add 20 and then subtract 1)

Say a number and ask your child to quickly add 19 (They should add 20 and then Subtract 1)

Say a number and ask your child to count forward in ones. Stop them when they have done a few and then ask them to count back to the number they started on.

Say a number and ask your child to count forward in tens. Stop them when they have done a few and then ask them to count back to the number they started on.

Say 2 numbers that are quite close together and ask your child to find the difference.
E. G
"How many do I need to add to 18 to make 23?"
"What's the difference between 18 and 23?"

Say a number less than 10 and ask your child to partition it in as many ways as they can.
E. G 8 = 6+2, 5+3, 4+4 etc...

Ask your child to add together two numbers that do not cross 10
E. G 3+6, 5+2, 3+5 etc...

Ask your child to add together a teens number and a single digit number that do not cross 20
E. G 13+5, 13+2, 16+3 etc...

Ask your child to subtract a single digit number from a teen number but do not cross 10
E. G 18-5, 14-2, 16-3 etc...

Ask your child to add **or** subtract a 1 digit number to a 2 digit number but do not cross over the tens boundary.
E. G 68-3, 75+4, 39-5 etc...

Ask your child to add or subtract a single digit number form a multiple of 10.
E. G 30+5, 40-7, 20+3, 60-5 etc...

Ask your child to add a multiple of 10 to a 2 digit Number.
E. G 37+20, 51+30, 45+40 etc...

Ask your child to add 10 to a 2 digit number
E. G
37+10, 45+10, 28+10 etc...

Ask your child to add together two numbers that are less than 20

E. G

13+4, 9+4, 16+3

Say a multiple of 100 (a number that ends in 00) and ask your child to calculate how many they need to add to make 1000.

E. G Adult: "700"

Child: "300"

Say a multiple of 5 (a number that ends in 0 or 5) and ask your child to calculate how many they need to add to make 100.

E. G Adult: "65"

Child: "35"

Ask your child to recall facts from the 5 times table:

E. G "What is 6 multiplied by 5?"

"What is 5 times 10?"

"What is the product of 3 and 5?"

Ask your child to add two 2-digit numbers by partitioning into tens and units first.

E. G

32 + 46

30+40=70

2+6=8

70+8=78

Ask your child to subtract a 2 digit number from a 2 digit number by partitioning one number.

E. G

57-23

57-20= 37

37-3=34

Say a doubling statement

"I know that 13+ 13 = 26"

Then ask a near double Question:

"What is 13+14?"

Look for similar calculations.

Adult:

"If I know that 2+2 = 4, what else do I know?"

Child:

"200+200=400 etc…"

Give your child a simple multiplication fact and ask them to give you a corresponding division fact.

E. G "5x2=10"

"10÷2 = 5"

Ask your child a division fact related to the 5 times table.

E. G

"What is 15 divided by 5?"

"How many 5s in 15?"

"How many groups of 5 in 15?"

Give your child a simple addition fact and ask them to give you a corresponding subtraction fact.

E. G "11+3=14"

"14-3 = 11"

Give your child three 1, 2 and 3 digit numbers and ask them to put them in order.

E. G

" Can you order 17, 7 and 107 from smallest to largest?"

At home and out and about.

Look at numbers on car number plates. Add or multiply them together. Older children could try multiplying or dividing them by 10 and add together to make it tricky.

At the shops, ask your child to find the cheapest/most expensive item.
Is it in pounds or pence?

Ask your child what time they think their TV programme is due to finish. Older children could see how long that program is on during 1 week.

When you're out and about, see if you can find all digits 0-9.

Find two places on a road sign. *Which is the closest? By how many miles is it closer?*

Choose some family members and friends. Find the sum of their ages.
(Or multiply them together if you're an older child!)

Grow a plant and measure how much it grows and how long it takes to grow. You could record the measurements using a table or a graph. Younger children could draw a Picture of the plant at different stages and sizes. Also, measure out the water needed to water the plant.

Ask your child to lay the table. They could count out the cutlery as they go . Older children could answer questions. *"How many knives, forks and spoons would I need in total if I had 24 dinner guests?"*

Allow your child to cook and bake!
Let them look at the cost of the ingredients and then weight them out.

Ask your child to sort items, such as food, into any criteria. Ask them to explain their reasons. Then you do the same!

Give your child some store cupboard items and ask them to put them into weight/capacity order. Ask them to look carefully at the units that are used. *Are they grams or Kgs? L or Ml?*

When you take your child to the shop, ask them to calculate how much change you are due. Your child could help you to find the notes or coins needed to pay.

Use an egg timer when cooking. Ask your child to estimate when they think it will ring.

At home and out and about.

Snakes and ladders, card games, dominoes and other such traditional games are great for maths and reasoning skills.

There are lots of card games in toy shops. (The Early Learning Centre have some lovely games). Your child could earn some money and then buy a treat to play with the family.

Mark the birthdays of friends and family on a calendar. *What day is your birthday on? What day will it be in two days' time?*

Older children could calculate the percentage or fractions of ingredients in a recipe.

Ask your child to imagine/draw a mobile phone key pad. *What do the corner digits add up to?* *What do the numbers on the middle line add up to?* Younger children could practise typing in imaginary phone numbers.

How many 2D shapes can you see whilst on your travels? *Can you describe their properties?*

How many 3D shapes can you see whilst on your travels? *Can you describe their properties?*

Ask your child to cut things (such as cake) into equal sections and use the correct terms. *Cut it in half. Cut it into quarters.*

Look together at a phone number. *What's the largest digit? Smallest? What's the total of the digits? Can you write the digits in order?*

Older children, can you spot any percentage signs when out and about? *Why are they used?*

Set your child a money problem. *Can you make 10p using exactly 3 coins? What is the largest amount of money I could make with 6 coins? What is the minimum amount of coins that I would need to make 19p?*

Use Google to find an interesting maths problem. Solve it and then bring it in to share in September.

Online Fun!

Maths Activities websites

http://www.maths-games.org/counting-games.html
http://www.ictgames.com/payForIt/index.html
http://resources.woodlands-junior.kent.sch.uk/maths/
http://www.mathplayground.com/games.html
http://www.counton.org/games/
http://www.topmarks.co.uk/
http://www.kenttrustweb.org.uk/kentict/content/games/ *(particularly good for KS1 and reception)*
http://www.primarygames.co.uk/
http://www.bbc.co.uk/bitesize/ks1/maths/
http://www.bbc.co.uk/bitesize/ks2/maths/
http://www.primaryinteractive.co.uk/maths.htm
http://www.oxfordowl.co.uk/maths/treasure/games/

http://www.kmprimary.leics.sch.uk/MainFolder/Images/MathsInfo/Maths%20vocabulary%20book.pdf
(This booklet shows the vocabulary that children will learn in each year group.)

Online Fun!

I have added some activities to the website under each class section. Feel free to print them. Most of them only require a dice to play. I have put a suggested age range on each game but below, I have suggested how you could make each game easier or trickier.

Game	Make it easier by…	Make it harder by…
Wipeout: This game is great for speeding up addition skills, practicing adding when crossing over tens boundaries and allowing children to choose the most efficient strategy.	Lower the winning total. Pair up younger children with an older sibling or an adult. Encourage jottings to aid mental calculations.	Make the total a lower number but then make the dice rolls decimals. E. G The winning total could be 5. If I throw a 3, it becomes 0.3 etc… Add the decimals to eventually get to 5. Make the total larger but make the dice rolls multiples of 10. E. G. the wining total could be 500. If I roll a 6, it could be worth 60.
Count on: This game helps children to learn their addition pairs to 10 and to calculate the difference between two numbers.	You could lower the winning total.	You could raise the winning total.
The hundred square: Lots of ideas to help your child with calculation.	Ideas are on the sheet.	

Digit dilemmas!

I have added some digit cards to the website for you to print off. Below are some activities that you could try with the digit cards.

Lay the digit cards face down. Whoever chooses the highest number wins. You could each choose two digits and see who could make the highest number. Older children could see who could make the highest decimal number?

Print off several copies and place them face down. Play a pairs game and look for bonds to 10.

For younger children, make a sequence of numbers but miss one out. *Which is missing? How do you know?*
E.G 1, 2, 3, 4 __6, 7
23, 24,25__ 27, 28

Choose two or three cards. *How many different numbers could you make using just those digits?* Predict how many before you try.

Choose two or three cards and find their product. (Multiply them together). *Can you find two other numbers that you could multiply together and get the same answer? Why? Why not?*

Say a number to your child and ask them to make the number with the cards as quickly as you can. You could make the number as high or as low as you want or extend to decimal numbers.

Choose two or three cards. Give your child clues about the number you have made.
My number is prime
My number is larger than 30 etc
Make is as easy or as hard as you want.

Choose two cards (or two pairs of two cards) and work out the difference between the numbers. (Subtract the smaller from the larger)

Use some of the digits to make the start of a sequence. E. G 2, 4…
What might come next? Why 6? Why 8? Are there any other Possibilities? Can you explain the rule?

Next year you will be learning to...

1. ...explain how you solve problems
2. ...read and write numbers to 1000 and put them in order
3. ...partition a number into hundreds, tens and ones
4. ...explain how the digits in a number change when you count in 10s or 100s
5. ...find the sum and difference of any pair of numbers to 20
6. ...add and subtract multiples of 10 or 100 in your head
7. ...add and subtract one-digit and two-digit numbers in your head
8. ...explain how to put three-digit numbers in order