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Sharpen your mental skills. Your child's class teacher has a copy of these on a handy little key ring. They are designed to be used informally at the end of the day, whilst the children are lining up, in a spare minute etc and we suggest that you use them in the same way. Each box contains a mental strategy that has been taught and rehearsed regularly with your child. The cards with the green text are particularly tricky, and may contain strategies from the next year group's teaching. They are there as a guide so feel free to take a step back or to extend them as necessary. Your child might excel with some but find others hard-that's perfectly normal!

Page 5,6 At home and out and about. Mathematics is everywhere! Have a go at these activities to encourage your child to talk about their mathematics and their methods of calculation.

Page 7, 8, 9, Online... Some suggestions of websites that contain maths games for your budding mathematicians to have a go at. There are also some explanations to activities that appear on the school website.

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September... An overview of the maths that your child will be learning in their new class at the start of September. This is unique to each year group.

## Hello! <br> Allow me to introduce myself... <br> 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

Say a number and ask your child to tell you the number that is one more.

Hold up an amount of fingers and ask your child to hold up more fingers.

Say a number and ask your child to tell you the number that is one less.

Put some family members in a line and ask your child to chant the ordinal numbers.

## E.G

First, second, third, fourth etc... (Try going backwards if possible)

Give your child a starting number and ask them to count forwards in ones. Try to count backwards too!

Hold up an amount of fingers and ask your child to hold up the same amount of fingers.

Give your child some lovely touchy feely objects. Say an amount and ask your child, in pairs to count out the Objects and to say the numbers whilst doing so.

Say a number and ask your child to hold it in their head. Ask them to count on an amount. E. $G$

Hold the number 5 in your head and then count on 3 .

Hold up an amount of fingers and ask your child to hold up fewer/less fingers.

Roll one or two dice and ask children to count out the Number of dots

Say a simple number sequence,
E. $G 7,6,5,4 \ldots$

Ask your child what comes next? Ask how they know? Increase complexity of sequences over time.

Chant the days of the week with your child.

## Say a time out loud

E. G"8 O' Clock in the
morning". Ask your child to
chant and add an hour each time.
Try starting at half past the hour if appropriate.

Drop 1 pence into something mental and ask your child to count out loud a running total. Encourage them to use the word 'pence' each time.

Sit family members or friends in a circle.
Label somebody as 1 and explain that you will count round and ask your child questions such as "Who will say 7?"

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.

Ask a family member to crouch to a height of their choosing. Ask the other children to make themselves taller than the child/hold their hand higher than the child.

Draw a number line.
"Imagine that I am standing on the number 3. If I take 2 steps forwards, what number will I be standing on?"
You could try going backwards too!

Ask your child to tell you as many pairs of numbers with a total of 5 as they can.

$$
\text { E. } G 4+1,3+2
$$

Extend to other numbers when fully secure with pairs to 5).
"What's the largest number that you know?"
(Your child might say 1 million!) You say "one million and one" Encourage them to count on!

Say a number between 1 and 5 inclusive and ask your child to double it.

Say a number and ask your child to count forward in twos.
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 twos.

Stop them when they have done a few and then ask them to count back to the number they started on.

Give your child 2 numbers less than 5 as a subtraction calculation.
E. 9 "What is 5 subtract 3 ?"
"What is 4 subtract 1 ?"

Say a 2 numbers and ask your child to find the difference
"If I start at 3, how many do I need to add to make 5?"

Give your child 3 numbers and ask them to put them in order Lowest to highest or highes $\dagger$ to lowest.
As they become confident, make the numbers trickier.

Say a 2 digit number and ask your child to say the number that is one less or one more.

Say a day of the week and ask your child to tell you what day comes next.

Say a day of the week and ask your child to tell you what day comes before.

Play "Eye Spy" but use 2D shapes.
(Circle, Square, triangle, Rectangle, star)
E. G "I spy with my little eye, a rectangle shape"



## 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\%2Ovocabulary\ book.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... |
| :--- | :--- | :--- |
| $\begin{array}{l}\text { Wipeout: This game is great for speeding up addition skills, } \\ \text { practicing adding when crossing over tens boundaries and allowing } \\ \text { children to choose the most efficient strategy. }\end{array}$ | $\begin{array}{l}\text { Lower the winning total. } \\ \text { Pair up younger children } \\ \text { with an older sibling or an } \\ \text { adult. } \\ \text { Encourage jottings to aid } \\ \text { mental calculations. }\end{array}$ | $\begin{array}{l}\text { Make the total a lower num- } \\ \text { ber but then make the dice } \\ \text { rolls decimals. E. G The } \\ \text { winning total could be 5. If } \\ \text { I throw a 3, it becomes 0.3 } \\ \text { etc... Add the decimals to } \\ \text { eventually get to 5. }\end{array}$ |
| 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. |  |  |$]$| You could raise the winning |
| :--- |
| total. |

## Digit dilemmas!

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.

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. 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.

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

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.

Older children, 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?

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

For younger children, make a sequence of numbers but miss one out. Which is missing? How do you know?
E. $61,2,3,4-6,7$

23, 24,25 - 27,28

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.

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. ...order numbers (starting with ordering numbers to 20)
2. ...Count forwards and backwards to 20
3. ...use a bead string to count
4. ...read numbers quickly at sight
5. ...Count reliably at least 20 objects
6. ...learn the pairs of numbers that add up to 10
7. ... understand and remember addition facts for numbers up to 10.
8. ... partition single digit numbers. ( $E . G 6=1+5,3+3,4+2$ etc...)
