## Parent Volunteers

If you would like to volunteer and are able to come in at a regular time each week to provide support could you please inform the office.

Information for parents who would like to volunteer to assist in Maths lessons at Hove Junior School.

Classroom helpers make a big difference in improving standards. Even if you're not helping in your child's class, research shows that having a parent who volunteers improves a child's experience of school.

Another way you can help is by offering your skills. For example, your work experience may be useful to share with pupils at some point in the curriculum again, not necessarily in your child's year.

Essentially, if you are asked to work with a child/small group of children on a task, the teacher will communicate what the objective is and what s/he is aiming for in the session.

If you came to any of the Maths workshops we have been running recently, you will have heard us emphasising the need for all children to have a sound understanding of the following;

- PLACE VALUE games will aid all mental calculations. By 'place value' we mean knowing the value of each digit in any number. For example, in the number 728 , we know the 2 is in the 'Tens' column and therefore is worth 20 . Its place determines its value
- NUMBER FACTS games [including times tables games] as well as 'bonds/compliments' games to any number are great. The key 'bonds' being bonds to 10,20 and 100 e.g. knowing $4+6=10$ helps with knowing $14+6=$ 20 as well as $40+60=100$. As well as this, knowing what bonds to make all other numbers e.g. 7 will help too. So the number sentence $25+7=32$ can be done mentally as $25+5+2$ quickly. This works just as well for subtraction. So, 25-7 could be thought of $25-5-2=18$
- REAL LIFE SITUATIONS including the use of images and models as well as using 'real life' resources. E.g. using a variety of coins, going to a shop, buying an item with an exact amount.
- DOUBLING/HALVING activities. These form the basis of the key strategy for mental maths involving multiplication and division. They will help children see the patterns in numbers. E.g. if you can double then you know your $2 x$ table, therefore if you can double again you know your $4 x$ table and so on.
- TIMES TABLES [to $12 \times 12$ ] Children are urged to know their times tables as soon as possible because they will need to use what they know about a multiplication fact and apply it to another situation. E.g. Knowing $8 \times 5=40$, they can work out $80 \times 50$.

When working with children in Maths, it is important to assume nothing. Children are experts at convincing adults they know or understand something. It's only when we fully question the children that we can unpick what they actually do know and how we can build upon that to get them to a point where they use what they know to stimulate thought and begin to work out what they don't know.

An example of this is highlighted above in our 'Number Facts' section; children can use what they know about $4+6=10$ to perhaps work out $40+60=100$. Making connections and links is crucial and we see that the 'gaps' are lessened when children are encouraged to stop and think [for at least 10 seconds] before reasoning about how they will answer a question.

As a helper, one of the very best things you can do is facilitate the learning through key questioning. By this, I mean asking questions that gently force children to explain fully, to reason and to make connections. In Maths, using resources so they can see what is happening, is important if a child has misconceptions.

I have listed some 'question stem' examples [at the end] It's a long list but, really, just gives you an idea of the sorts of things to ask and encourage children to think, reflect, explain and - importantly- use what they know.

Positive praise, especially saying what a child has done well with you, will give them confidence and really is invaluable. Feel free to give them a marble or two and tell them you will tell their teacher how fantastic they are.

As well as this though, if a child is difficult and behavior is an issue, tell the teacher. Working with a parent helper is seen as a treat by the children so if any of the children are rude, not listening, be mean or disrespectful to you or another child, please use your discretion and send them back to the teacher if need be.

If possible, it would be much appreciated if you could jot down who you worked with and any brief feedback/comments for the teacher. There may not be an opportunity to actually speak to the teacher if they are dealing with a child or on playground duty etc.

We cannot thank you enough for giving up some of your time to come and help at our school. Your support is much appreciated and really makes a difference. Please do not hesitate to ask the class teacher a question, should you be unsure of what you are doing.

Many thanks, All of us at Hove Junior School :)

## 'Question Stems'

Below are some examples of question starters that may be of use if you are stuck for ideas on how to get children to explain their thinking and problem solve. Many of these question stems are not just for Maths, they can be used in any circumstances you feel are appropriate.

## 1. Starter questions

These take the form of open-ended questions, which focus the children's thinking in a general direction and give them a starting point. Examples:

How could you sort these. $\qquad$
How many ways can you find to ....... ?
What happens when we $\qquad$ ?
What can be made from....?
How many different . $\qquad$ can be found?

## 2. Questions to stimulate mathematical thinking

These questions assist children to focus on particular strategies and help them to see patterns and relationships. This aids the formation of a strong conceptual network. The questions can serve as a prompt when children become 'stuck'. Examples:

What is the same?
What is different?
Can you group these $\qquad$
Can you see a pattern?
How can this pattern help you find an answer?
What do think comes next? Why?
Is there a way to record what you've found that might help us see more patterns?
What would happen if....?

## 3. Assessment-style questions

Questions such as these ask children to explain what they are doing or how they arrived at a solution. They allow you to see how the children are thinking, what they understand and what level they are operating at. Obviously they are best asked after the children have had time to make progress with the problem, to record some findings and perhaps achieved at least one solution.
Examples:
What have you discovered?
How did you find that out?

Why do you think that?
What made you decide to do it that way?

## 4. Final discussion questions

These questions draw together the efforts of the class and prompt sharing and comparison of strategies and solutions. This is a vital phase in the mathematical thinking processes. It provides further opportunity for reflection and realisation of mathematical ideas and relationships. It encourages children to evaluate their work. Examples:

Who has the same answer/ pattern/ grouping as this?
Who has a different solution?
Are everybody's results the same?
Why/why not?
Have we found all the possibilities?
How do we know?
Have you thought of another way this could be done?
Do you think we have found the best solution?


