

MARSHFIELDS SCHOOL

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S	Successful
H	Happy
A	Aspiring
P	Purposeful
E	Exciting
D	Diverse

Helping with Maths homework - A Guide for Parents



Research shows that students, who receive support from their families with homework, are more likely to perform better than those who do not. By showing an interest in work which is brought home, you are communicating the fact that school work is important and needs to be taken seriously. Encourage your child to complete homework to the best of their ability.

How can you help?

Here are some ways that you can help your child with their maths at home.

1. Learning pairs of numbers that add up to 10, then 20 and 100.
2. Learning times tables (in this order: 2, 5, 10, 3, 4, 6, 8, 9, 7).
3. Learning the value of coins:
 - a. Adding up with 1p coins, then 2p coins, and then 5p and 10p coins. Then adding a mixture of coins.
 - b. Making a certain amount, for example 23p or 95p etc.
 - c. Giving change from 20p, 50p and then a £1 and so on.
4. Looking at the capacity of (how much is in) bottles and tins in litres and millilitres. Estimate if something is more or less than a litre.
5. Look at the weight of items when you are cooking or buying products in kilograms and grams. Let them help you measure out ingredients when you are baking and cooking.
6. Measuring objects around the home in centimetres and metres using a ruler or a tape measure.
7. Keep asking them to tell you the time. We cover telling the time several times each year but it's good to keep practicing. You could ask what time a programme is on the TV and how long you have to wait before it starts, etc.
8. Encourage your child to use 'MyMaths' (www.mymaths.co.uk/index.html) to practice skills that they have learned in class. Use the web address above. The user name is 'marshfields' and the password is 'symmetry' Each student has their own log in to get to their own account from this page.



Games

Playing games is another way to practice maths skills. Yahtzee, Monopoly, Uno and Game of Life are some of the games that use mathematical skills (these are available commercially or you may already have them.) Dominoes, dice and cards are also good to develop counting and number skills. Here are a few examples of games you can play - you may want to look on the internet for others.

a. Games with dice



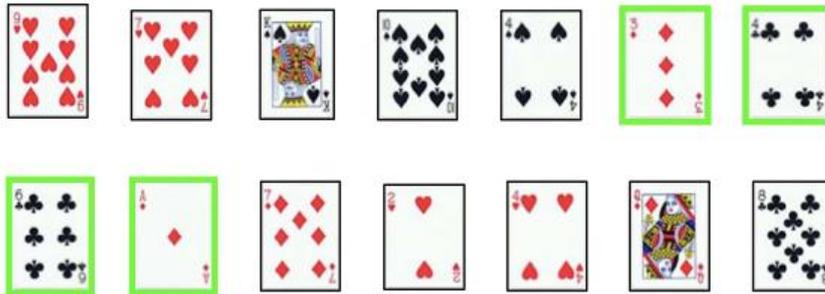
- i. Player 1 throws 2 dice and then adds up the value of each dice. Player 2 does the same. Player 1 throws again and then adds the total of his latest throw to the last score. This continues until you reach 50 or 100 or whatever you have decided.
- ii. You could play this game with 3 or more dice.
- iii. You could multiply the numbers on each dice.
- iv. You could subtract the total each time from 100 until the player gets to zero.

b. Games with cards



- i. **Solitaire** - ordering the cards down from king, queen, jack, ten, nine, etc. Alternate between red cards and black.
- ii. **Ten**. You need: 1 set of playing cards without jokers or picture cards. Play on your own or with a friend. Place 12 cards face up in a 3 rows of 4. Take turns choosing two or more cards which add to 10. Fill in the spaces with new cards. Play continues until no more sets of ten can be formed. The winner is the player who finishes with the most cards. When a player plays alone, the object of the game is to find the maximum number of cards that have a sum of ten.
- iii. **I spy sums**
 - **Players:** 2 or more **You need:** 1 Deck of cards, Ace = 11, Jack = 12, Queen = 13, King = 14, scrap paper
 - Deal out the entire deck of cards **face up** in 5 rows of 4.
 - One player challenges the other player (or player to his/her right) to find two cards next to each other,

either vertically, horizontally or diagonally, that add to make a number by saying, "I spy two cards that add to 7."

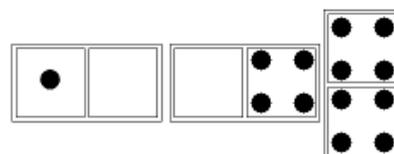


- The challenged player then looks for two cards that add to that number and picks up this pair. In this example: 3 of diamonds & 4 of clubs or 6 of clubs and Ace of diamonds
- If the second player misses any pair(s) that add to the chosen sum, then the first player may claim them. Players swap roles and continue until the table is cleared. The winner is the player with the most cards at the end of the game.
- Fill gaps as they appear.
- *Variation:* Multiply 2 cards instead of adding by saying, "I spy two cards with a product of 40."

Source: Acing Math (One Deck At A Time!): A Collection of Math Games (<http://www.pedagonet.com/quickies/acingmaths.pdf>)

c) Games with Dominoes:

- Basic rules for Dominoes**- The basic rule in playing dominoes is that you make a chain of dominoes placing them end to end. In extending a chain, you always match one square of one of your dominoes to a square on the end of the chain. The exception to this is if you have a double domino - one with the same number on both squares. In this case, you can match both squares of the domino to one on the end of the chain, by placing the double domino perpendicularly across the end of the chain, like this:



This creates a branch in the chain, and you now count both squares on the double domino as ends of the chain which can be built upon. (Of course, if you prefer, you can just play the double domino in the usual way.) Players all start with the same number of dominoes and you win if you are the first player to use up ALL your dominoes. If there are extra dominoes at the start they are placed face down as the 'pool'. Usually the player with the highest double starts the game. When it is your turn, you place one of your dominoes on one end of the chain and, if you cannot do so, then you have to pass, taking one domino from the pool if it is not empty.

- ii. **Rules for Fives and Threes** - You play dominoes in the usual way but you score points when the dominoes at the ends of the chain add up to a multiple of 5 or a multiple of 3. Divide the total on the ends by 5 or 3 and add the answer to the player's score. If the end total is divisible by both 5 and 3 then you score both, so for the end total of 15 you score 8 points. You also score 10 points for being the first to finish, plus one point for every domino held by another player, but you might not be the winner even if you do finish first.

In the following example the (1,5) domino starts, scoring 2 points. Then the (0, 1) domino scores 1 point because the ends add up to 5. Then the (4,0) domino makes the ends add up to 9 so it scores 3 points. Finally, the (5,6) domino makes the end total 10 scoring 2 points.

