

Mental Maths Challenge Card

![MC900332680[1]]()

Extension Booklet

Improve your mental maths skills by learning your number facts off by heart. Practice at home and when you are ready to be tested ask somebody to sign the booklet. If you know the facts off by heart your teacher will give you a sticker and you will be ready to move on. When you have completed all the challenges in this booklet you will get a certificate.

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Class: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date started: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date completed: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Guidance for Parents

Knowing number facts off by heart will make your child more confident with maths in class. They are also a necessary foundation for success in written methods which are introduced from year three.

Children who can calculate addition and subtraction facts mentally are less likely to make errors when working with larger numbers. Children who know their times tables will find formal multiplication and division easier to understand and will be able to work with fractions and decimals, manipulating numbers with confidence.

When working on mental methods at home ‘little and often’ is the key. You can practice anywhere – in the car, walking to school, cooking tea, waiting in a queue, in the bath etc. Try to make it fun and use games. There are also lots of on-line games that can help.

Remember lots of praise for improvement and the learning process.

Good luck and have fun!

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| **Number Facts** | **Signed by Parent** | **Date Tested in school** | **Sticker** |
| Find the lowest common multiple of two single digits e.g. 3, 8 = 24 |  |  |  |
| Find fractions of amounts where the numerator is not 1 e.g. $\frac{2}{5}$ of 25, $\frac{3}{7}$ of 21 |  |  |  |
| Solve single digit additions and subtractions involving negative numbers e.g. -7+9, 5-8 |  |  |  |
| Give at least 2 equivalent fractions for a given fraction e.g. $\frac{3}{5}$ = $\frac{6}{10}$ = $\frac{9}{15}$ |  |  |  |
| Use known tables facts to solve multiplication and division involving decimals to 2 decimal places e.g. 0.03 x 4, 0.56 ÷ 7 |  |  |  |
| Multiply and divide by 1,000 up to 2 decimal places e.g. 2.35 x 1,000, 2541 ÷ 1,000 |  |  |  |

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| **Number Facts** | **Signed by Parent** | **Date Tested in school** | **Sticker** |
| Find the highest common factor for any two given 2 digit even numbers e.g. 60, 72 is 12 |  |  |  |
| Know all prime numbers to 80 |  |  |  |
| Use common factors to simplify fractions e.g. $\frac{12}{20}$ = $\frac{3}{5}$  |  |  |  |
| Know the first five cubed numbers e.g. 2³= 2x2x2 = 8 |  |  |  |
| Find the cubed root of numbers to 125 e.g. ³√64 |  |  |  |
| Use common multiples to give fractions with the same denominator e.g. $\frac{1}{5}$ = $\frac{4}{20}$, $\frac{3}{4}$ = $\frac{15}{20}$ |  |  |  |
| Know the equivalent fractions, decimals and percentages for e.g. $\frac{1}{2}$ $ \frac{1}{3} $ $\frac{1}{4} $ $\frac{1}{5}$ $\frac{1}{8}$ $\frac{1}{10}$  |  |  |  |
| Multiply simple pairs of proper fractions e.g. ¼ x ½ = ⅛ |  |  |  |