Times Tables Cards

Tips before you use cards in school!

Thank you for purchasing FunKey Maths Times Tables cards for your class!

There are loads of different ways to use the times tables cards, and lots of additional free resources you can download from the website to support your work with children in school

Here is a brief guide to **getting started** and links to other resources.

1. Number the cards if you are using more than one pack!

There is a small white space on the backs of the cards for this.

Give all cards in the same pack the same number.

Use a permanent pen.

If you don't do this, you will waste hours trying to work out which pack the card on the floor belongs to...

2. Read about the design features on the cards

Read the Overview of Design Features at the end of this document. It will explain the essential design features on the cards. Understanding these will help you and your students get the most out of the cards.

3. Play with the cards yourself before using them in class

Ideally, take the cards home and play some of the games with family or friends.
The games instructions are here.

Games 1-6 are good for children in KS1. Games 7 -10 are good for children in KS2.

FunKey Uno and FunKey Rummy are fun for children and adults. Playing the games is a fun way to get to know the cards and to experience the power of the design features.

4. Explore all the free support resources available online

Invest time in exploring the free support resources before deciding how you are going to use the cards in class. This will save you time in the long run and save you lots of work preparing your own resources!

5. Decide on your approach – what comes first?

The cards can be used to develop children's conceptual understanding of multiplication and division as well as children's recall of facts. We strongly recommend you start with teaching conceptual understanding. Conceptual understanding gives meaning to facts and helps

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pupils make links between facts. Making links will significantly improve the ease and accuracy of recall, so it is important to work on this before developing rote recall.

Click here for Concept 1: a guide to developing initial conceptual understanding.

When you have worked through Concept 1, and your students have developed basic conceptual understanding, you can download Recall 1: our guide to developing fluent fact recall.

The sequences of activities we recommend are the same whether you are working whole class, with an intervention group, or 1:1.

Once children have developed good initial conceptual understanding and some recall of facts, you can build on this by working on their language and reasoning skills and by deepening conceptual understanding.

Click here to access resources on developing children's ability to use mathematical language in the context of multiplication, division and times tables.

We will soon be publishing further teacher guidance for extending children's conceptual understanding. Look out for news of Concept 2 on Twitter @FunKeyMaths

If you are a Maths Lead or a member of SLT, you may like to read Recall1/Appendix 2 - our suggestion for how to distribute the teaching and learning of times tables in Year 3/4 .

If you are looking for ways to support children needing intervention with times tables, download our tried and tested peer mentoring intervention. The intervention can be delivered by trained peer mentors (Year 5+) or by adults working with intervention groups.

If you want tailored support for your school, we can offer face to face or online training for teachers or TAs. Please contact us at hello@funkeymaths.com for more information.

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Overview of design features on the FunKey Times Tables cards

The colours

Each times table has its own unique colour. Children soon learn the colours, particularly if you are using the skip counting power points.

Children with good visual memories start to associate numbers with colours, and this can help them recall multiplication and division facts.

When a multiplication fact is very long, it is difficult to learn by rote. In such cases, **using the visual support of a card** can be hugely helpful.

Look at this card. The multiplication fact is 14 syllables long!! It's very difficult to get into your auditory memory, whereas the colour and shape-coded card makes remembering the fact much easier!

The antennae and matching background pattern

These are designed to help children who don't see colour to link multiples from the same times table.

The position of the numbers

The number in the middle is the whole, i.e., what we've got after we combine equal parts, or what we start with before we split something up into equal parts.) It's the *product* in multiplication contexts and the *dividend* in division contexts.)

The fact that the whole is larger than other numbers on the card and in the middle helps children to remember that that is the whole.

The smaller numbers around the edge of the card are *factors* of the middle number. In other words, the smaller numbers tell you which times tables the middle number is in. Or

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put it another way, they tell you different ways you can split the middle number up into equal groups with no remainder.

Notice that when two factors are the same, they appear at the side of the card, not at the top or bottom. See the note below on square numbers.

The white shapes around the product (the middle number)

There are three different white shapes which appear around the middle numbers.

Squares: these are for *square numbers*
Kites: these are for *prime* numbers
Circles: these are for all other products

Square numbers arise when both factors are the same.

Prime numbers are numbers which can only be put into 1 group, or groups of 1. There are no other ways to make equal groups out of prime numbers.

The tiny white shapes around the edge of the white shape around the product

The tiny white shapes on cards with more than two factors help children match factor pairs. The general rule on four factor cards is to match diagonally, but on 24 and 36 it's more complicated and the little shapes can really help.

2 x 12 = 24
3 x 8 = 24
4 x 6 = 24

What's not on the cards!

There are no division or multiplication symbols and no equal signs. We want children to use their understanding of the multiplicative relationships between numbers to create a range of different equations.

Not all factors of the product (the middle number) are shown on the cards. You will see all the factors you need to learn your times table facts up to 12 x 12, excluding the 1x table. We don't show 1 as a factor on any card as 1 is a factor of every whole number.

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Tips before you use cards in school!

Actually, that's not quite true!

1 is shown as a factor of 1, but that is to draw attention to the fact that 1 is a square number!

Have fun with the cards!

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