

Use these **Activity Notes** with the Counting to a Million **Activity Booklet** and the Counting to a Million **Cards**

The instructions below will explain how to work through the ten activities set out in the Counting to a Million Activity Booklet. These activities will practise the following skills:

- Counting in steps of 20, 25, 50, 100 forwards and backwards
- Counting in steps of 1,000, 10,000, 100,000 forward and backwards
- Reading place value units up to 1,000,000
- Identifying missing numbers in any of the sequences
- Identifying the next number and the preceding number in any of the sequences
- Identifying highest and lowest numbers
- Ordering place value units up to 1,000,000
- Adding place value units up to 1,000,000

If you haven't used a FunKey Maths Activity Booklet before, please read this!

Our activity booklets are designed to help you work through a structured series of activities with a child to develop their skills and confidence in a target area of maths.

To really consolidate skills and build confidence a child needs to have **repeated opportunities to practise**. Remember that with younger children, **little and often** is a winning formula. 15 minutes at a time is enough to make progress. If you can manage **three sessions of 15 mins a week** you will see a difference. More is even better!

You should do the activities in the order set out, but the child doesn't have to be perfect at an activity before moving on. **Keep coming back to earlier activities for extra practice.**

In our Activity Booklets, you will often see an activity next to three columns, with one, two or three stars at the top of the column. Children thrive on encouragement so give the child a tick every time you do an activity. The one-tick column is for when they are developing new skills, the two-tick column is to show improvement and the three-tick column is for when they are confident at the activity.

You want children to be confident with the activity on at least three separate occasions. Only then can you begin to be confident that the new skill is secure. Even then it is worth revisiting earlier activities from time to time as you work through the rest of the Activity Booklet.

We hope you have everything you need to get started. Please do get in touch if you have questions, suggestions or want advice. We are at: hello@funkeymaths.com

Have fun!

What's in your Counting to a Million Card Deck?

There are seven sets of cards in the pack. These sets will help children learnt to count in

- 20s
- 25s
- 50s
- 100s
- 1,000s
- 10,000s
- 100,000s

In each set, there are ten cards. The coloured triangles will help you identify which set a card is in.



Some cards, like 100, are in more than one set so have more than one coloured triangle.

You need to work through Activity 1 with each of the different sets. Once you have done Activity 1 with one of the sets, you can carry on and do Activities 2a-d with that set. But you can't go on to Activity 3 until you have completed Activity 1 with all seven sets of cards.

It doesn't really matter in what order you work on the sets, but the purple set is a good one to start with as the sequence of numbers is easy to learn.

Activity 1: Now you see it! Now you don't!

This activity helps children with step counting

First, find the ten cards in your chosen set. You can use the coloured triangles to help you find the ten cards you need.

Lay out the ten cards in order with the lowest on the left and the highest on the right.

Count out loud with the child, pointing to the numbers, left to right, as you say each one. Do this several times. Then turn one card over and see if the child can still count fluently. If they can, turn over another card and count again! Keep turning cards over, keep counting and

keep pointing, left to right, even at the cards which are face down. Repeat until all the cards are face down.

If the child starts making mistakes, don't turn over any more cards until they are confident and accurate again.

Always count out loud and keep pointing to the cards, even when they are face down.

Don't forget to practise counting backwards too (pointing right to left).

Activity 2a: Slap Bingo 1

This game helps children to get quicker at reading numbers.

Find the ten cards in your chosen set.

Place the ten cards face up on the table in random order and roughly equidistant between you and the child.

You say one of the numbers. The child races you to be the first to slap the card showing that number. The first to slap the right card takes it. When all the cards have been taken, the person with the most cards is the winner.

Activity 2b: Order!

This activity reinforces children's step counting skills and helps them identify missing numbers in a sequence.

Find the ten cards in your chosen set.

Ask the child to lay out the ten cards in order, lowest number on the left, highest on the right. Watch how they are doing it. Most children look for the numbers in sequence.

When the cards are in order, ask them to look carefully at the number line and notice what the highest number is and what the lowest is. Ask them to notice what numbers are in the middle.

Now shuffle the ten cards and put them into a pile. Ask the child to take the first card off the pile and think about where it would go. Remind them about the highest and lowest numbers in the sequence and what is in the middle. Help the child place the card on the imaginary number line into roughly the right place.

Then take the next card and place that into the number line. Keep adding cards to the number line, adjusting the position of the other cards as you go. When all the cards have been laid out, check the sequence by counting up or down.

Get them to do this again and again, until they can do it in about a minute.

Once the child can quickly lay out the cards in whatever order they come, ask them to lay the cards out one more time. Then ask them to close their eyes.

While they are closing their eyes, mess up the order and then ask them to sort it. Get them to check the order by counting up again. Do this a few times.

Then, ask them to close their eyes and this time you take one card away from the number line. Can they work out which card is missing? (Shuffle the other cards along so they can't see the gap!)

Now, take a card away **AND** mess up the order. Can they identify the missing card? Always ask the child to count back up or down to check that order has been restored! The more they count, the more secure their step counting will become.

Activity 2c: Hunt!

This activity is designed to help children recall the position of numbers within a sequence.

Lay the cards out in order. Then turn them all **face down**. Take one away and hide the gap so that you can't see which card is missing.

The child's task is to work out which card is missing. The child turns over one card. If they can say what the adjacent cards are, they can turn them over too. Encourage the child to verbalise the link between the adjacent numbers using the phrases

...more than...

...less than...

So, for example, imagine the child is working with the set 100-200-300-400 etc. All the cards are face down. They turn over 600. Before turning over the adjacent cards, they would say something like this:

"100 more than 600 is 700" and "100 less than 600 is 500."

After they say this, they turn over the two adjacent cards. If 700 or 500 is missing, they have identified the missing card. If 700 and 500 are both there, they pick another card and try again.

When they find the missing card, put it back into the sequence, turn all the cards face down, remove a different card, and play again.

Activity 2d: Slap Bingo 2

This game helps children identify the next or preceding number in a sequence

This is the same game as Slap Bingo 1 (see above) but this time it's harder! Rather than just shouting the numbers on the cards, use a clue to describe a number without actually saying the number. So, for example, if the child was working with the set 100-200-300-400 etc, the clues could be in this form:

100 more than 700

100 less than 200

Between 400 and 600

Activity 3: Column Chaos

This activity will help children remember the order of place value columns

First, find all the "column heading" cards. These are the ones with a darker background. There are seven of them: 1, 10, 100, 1,000, 10,000, 100,000, 1,000,000.

Lay them out in order, with 1,000,000 on the left and 1 on the right.

Now, help the child put the rest of the cards into the right column according to their value. Any number between 100 and 1,000 goes in the 100s column. Any number between 1000 and 10,000 goes in the 1,000s column. The numbers should end up in ascending order in each column starting with the column heading card.

There will be no cards under the column heading card 1 and 1,000,000. The cards under 1,000, 10,000 and 100,000 go up in equal intervals. The cards under 10 and 100 do not!

This activity is worth repeating at the start of every session until the child can order the cards really confidently.

Activity 4: 1-2-3 Grab

This game gives children practice at identifying higher and lower numbers.

Place all of the cards face down. You shout "1-2-3 Grab!" You and the child both grab a card. The player with the higher card takes both cards. The first player to get 20 cards wins.

Activity 5: Piggy in the Middle

This game gives children practice at ordering numbers.

Place all the cards face down. Each player takes three cards and lays them out in order (lowest number on the left, highest on the right). Each player looks at their middle card. The player with the higher middle card wins. The winner takes all three cards. Play again.

When the child is confident at ordering three cards, you can increase the number of cards taken to five, and then seven, or even nine!

The winner is the player with the most cards when all the cards have been picked.

Activity 6: Hold the Line

This game helps with placing numbers on a number line

Place about 15 random cards face down on the table. You and the child both take one card. The player who has picked the higher number takes the other player's card and uses the two cards to start a number line.

Now players take it in turns to pick another card. If the card picked is lower than the highest card in the number line the player slots it into the number line.

If the card picked is higher than the highest card in the number line, the player can take all the cards already in the number line and rebuild the number line for themselves.

The winner is the player who has the number line when the last card has been picked.

Activity 7: Snatch *(with thanks to Iona Straker, Year 5, for inventing this game!)*

This game requires children to identify numbers which are between two other numbers

Before you play this game, remove from the set all the cards with orange triangles apart from 100. Shuffle and deal the rest of the cards equally between the two players.

Each player now has to lay out their cards in the same way they did in Column Chaos (Activity 3) only this time they only have half the pack so there will be gaps!

The idea of the game is to “snatch” as many cards as possible from the other player. The player with the card for 1,000,000 starts. A player can “snatch” any of their opponent’s cards which lie between two of their own “adjacent” cards. In this context, “adjacent” means that the two cards would be next to each other if the player created a number line with their own cards. The two adjacent cards don’t have to be in the same column.

There is no limit on the number of cards a player can snatch. When a player snatches cards, the snatched cards and the two adjacent cards are taken off the table by the snatcher. At the end, these cards are counted up and the player with the most cards wins. If a player can’t snatch any cards, they miss a turn. The game ends when all the cards have been snatched or neither player can snatch any more cards.

Activity 8: Add ‘em up

This game gives children practice with adding up place value units

Sort the cards, so that you have these four sets ready.

- 100 – 900 (purple triangles)
- 1,000 – 9,000 (blue triangles)
- 10,000 – 90,000 (green triangles)
- 100,000 – 900,000 (red triangles)

Shuffle each set individually and place face down in four separate piles.

Each player takes one card from each pile. Players then add the numbers on their four cards and write out their totals. Players get a point for writing the total correctly, and the player with the highest total gets an extra point.

When all the cards have been picked, the player with the most points wins.

Congratulations! You have now completed all the activities!