

# National Numeracy Day

## Numbers and Dancing

Let's get moving this **National Numeracy Day**! My dancing activities can help you to understand that maths doesn't have to be scary. **It's completely normal to find maths difficult.** But just like dancing, if we break it down into easy-to-follow steps and keep practising, **we can ALL get better.**

You can dance along with Katya using the accompanying video to start thinking differently about numbers and maths.



**Katya Jones**

Professional dancer from BBC's  
Strictly Come Dancing  
National Numeracy Ambassador



## Children 7+

Did you know there was so much maths involved in dancing? Have a go at answering the questions below - it might help to do the dance steps and count as you go along.

### The Waltz

In a waltz, the basic move is 3 steps.

A figure called a 'box step' has 2 waltzes. How many steps would that be?

If Katya danced 4 'box steps', how many steps would she do?

In a full dance, Katya may perform 20 'box steps' - how many steps would this be?

### The Jive

When Katya choreographs dances on Strictly Come Dancing, the first thing she does is find out how many bars of choreography she needs to create.

A bar is a repeating group of beats.  
The Jive is danced to music that has 40 bars per 1 minute of a song.

The average dance on Strictly Come Dancing is about 90 seconds. So, Katya needs to work out how many bars of jive choreography she needs to create a full dance.

How many bars are needed for a 90 second jive dance?

### The Cha-cha-cha

In a dance called the Cha-cha-cha, there are 4 beats of music:

1 - 2 - 3 - 4.

But the last beat is split into two, which makes it

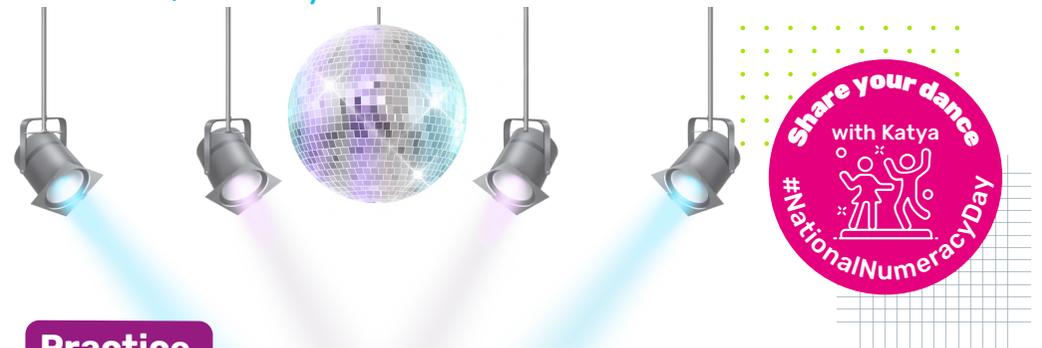
1 - 2 - 3 -  $\frac{1}{2}$  -  $\frac{1}{2}$

or, as dancers say,

1 - 2 - 3 - cha cha.

Each 'cha' is worth half of a full beat.

If this pattern is repeated and a full dance contains 24 'cha's or half beats, how many beats of music are included in total?



### Practice

Dance routines take a lot of practice to learn the steps and move smoothly. This takes perseverance and resilience when things go wrong. Dancers on Strictly Come Dancing can practice up to 14 hours a day.

If they practice 6 days a week, how many hours is that?

Strictly Come Dancing is on television for 13 weeks. How many total hours of practice might this be?