

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

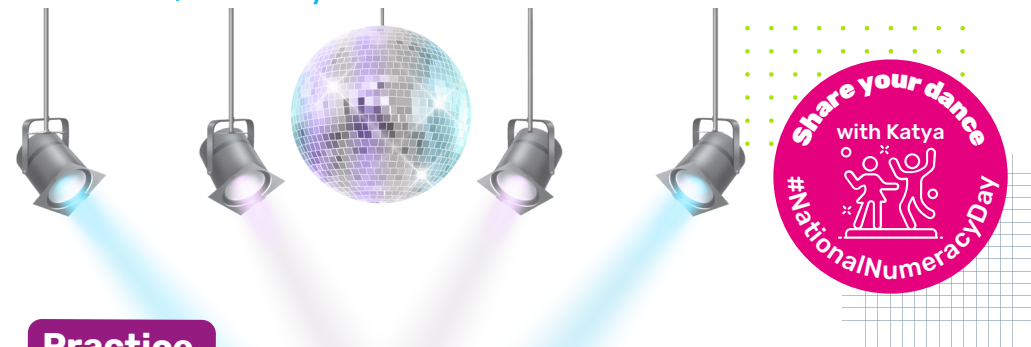
1 - 2 - 3 - $\frac{1}{2}$ - $\frac{1}{2}$

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?