



Sounds harmonious

Rhythmic patterns

JANICE

So Alan, is there an incident or...or something you remember where you've had a difficulty with the music and the maths has come in to help?

ALAN

Well quite recently - I play the bongos sometimes in the band, and one of the things I wanted to do was to play a particular rhythm of three against two. And however much I tried, I just couldn't do it. So I decided to use a simple mathematical diagram. I sketched it out on the back of an envelope. Because it's three against two, I wrote the beats out in sixes, and the three went, 'one three five, one three five', and the two went, 'one four, one four'. And I taught that rhythm to my hands, and eventually I was able to chuck away the back of an envelope. My hands had learnt it, and I was able to play it.

JANICE

Well shall we see you do it.

ALAN

Well okay. Sheila have you got those bongos.

JANICE

So the bongos are going to prove that maths helped you with your music.

ALAN

It worked for me. [PLAYS RHYTHM ON BONGOS]

JANICE

Well you make that look very straightforward.

ALAN

Would you like to have a go.

JANICE

Okay, so three with this hand, and two with that.

ALAN

That's right, yeah. [JANICE TRIES THE BONGOS]

JANICE

I can't even start. Ready, okay.

ALAN

That's what I was like when I started. But you might like to share the roles. Sheila if you would like to do...you could do perhaps 'one four, one four', so you're beating two beats, and Janice if you would do 'one three five' so you're beating three beats. I'll count out the beats in sixes, and you start together on one, okay. [SHEILA & JANICE PLAY RHYTHM ON BONGOS WITH ALAN COUNTING]

JANICE

Oh no, I'm making a complete mess of this. Well look, thanks very much for all your lessons in maths and music, and music and maths, but I reckon this one we need to keep working on don't you.

ALAN

I think so yes.

JANICE

Shall we have another go then.

ALAN

Have another go. And ...[SHEILA & JANICE PLAY RHYTHM ON BONGOS WITH ALAN COUNTING]