The poem ‘Cosmic Disco’ by Grace Nichols combines poetry with the science of the stars and the universe. The full text of the poem is included here, and can be photocopied and distributed to the class or put on a screen or SMART Board.

The poem can be used in many ways – both scientific and creative – in the classroom, and some approaches are suggested below.

THE SCIENCE OF STARS

The poem is fuelled by the very real science of magnetic fields, orbits and gravity, and can be used as a prompt for discussion or teaching of various key stage 2 science topics.

All these principles are worked into Nichols’s idea of a cosmic disco, so start by asking the pupils to describe a disco. There will be people moving around, and dancing, perhaps all doing the same dance but at different times or speeds. There will be lights that might come and go or revolve, like a disco ball, and cast shadows. And there will be music that all the dancers can hear.

Some scientific principles to discuss after reading the poem are included here, with suggested ways to use the poem to teach them.

★ Types of force: gravity

Pick out the final verse and especially the description of the boys as ‘gravitational’. Talk about gravity and explain that objects are pulled downwards because of the gravitational attraction between them and the Earth.

Grace Nichols says:

★ Poetry comes out of a sense of wonder at the world and the desire to praise and celebrate it through language. But behind the images and lyricism of the poem I was conscious of some scientific principles about the stars.

★ Start by reading the poem aloud to hear its music, perhaps while showing some starry or night sky images.

★ When writing, don’t force a poem into saying what you think you ought to say, as if someone is looking over your shoulder. Be truthful to your imagination.

★ Trust the first image or picture that comes to mind. It often holds the key to unlocking the whole poem!

Grace Nichols was born in Guyana, in the Caribbean, and moved to live in the UK in 1977. She has written many poetry books and has been inspired by her homeland and her experiences of England. Some of her best-known poems include ‘Hurricane Hits England’ and ‘Praise Song For My Mother’.

Grace Nichols constellation image by Nick Cain
Ask the students who they think that the ‘gravitational boys’ in the poem are being pulled towards, and whether they think that the poet is describing real boys and girls. Might the children in the poem represent something else – something that might appear to wear a ‘shimmering shirt’ or ‘luminous’ glad-rags?

Explain that Nichols humanises the stars (using personification) by transforming them into young boys and girls dancing, ‘exploding’ onto a disco dance-floor.

For advanced groups, you can extend this to explain the gravitational implications of the ‘waltzing-with-moon ocean’ in the second line.

**Types of force: magnetism**

Read the final verse of the poem again and pick up on the description of the girls as being ‘within magnetic reach of their rotating handbags’. This can offer a way into talking about the forces of attraction and repulsion between magnets, and about the forces of attraction between magnets and magnetic materials.

You can demonstrate how magnets pull other magnetic materials towards them, and make the link to the boys and girls at the disco. You can joke about whether they are they attracting or repulsing!

**The Earth and periodic changes**

Point out the description of the ‘orbiting girls [...] / within magnetic reach of their rotating handbags.’

Discuss what this means by asking a child to stand still and ‘orbit’ around them (or have students do so!) as though dancing around someone at a disco. You can then introduce the idea that the central student is the Sun and those moving around them are the planets, explaining that that the Earth orbits the Sun once each year, and that the Moon in turn takes approximately 28 days to orbit the Earth.

Ask the children to consider whether, if the person representing the Sun was a disco light (like the ‘inter-galactic lights’ of the poem), they would still be lit up all the way around during their orbit (a torch can be used here). This can help explain how day and night are related to the spin of the Earth on its own axis, and why the position of the Sun in the sky appears to move through the day.

**Vibration and sound**

Talk about the sounds created by the explosions as new stars are formed ‘on the dance-floor of infinity’ in the second verse.

Remind the children that sound is made when air vibrates, and then ask students to imagine that the cosmic disco they are inhabiting has no air, like space. Explain that without air, the disco would be a silent one, as the vibrations have no medium to travel through.

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**CREATING NEW STARS**

‘Cosmic Disco’ can also be used as prompt for new creations. Some ideas are given here, but there are many more – let your imagination run free!

**Star poems**

Students can write their own star-inspired poem, whether from their own imaginations or scientifically researched. Perhaps they could write about how our own star, the sun, affects us, and what life would be like without it. Students can use the star-shaped writing frame overleaf to create a poem or list starry words within or around the shape.

Encourage children to let their imaginations travel the galaxy!

**Star-tistic**

Art lessons can use the poem as inspiration. Children could choose one or more images in the poem and respond by creating paintings, collages or masks (see below).

**Have a cosmic disco**

Use the poem for drama and dance by reading it aloud and then using music to get students to become stars. They could wear brilliant masks and create their own dance movements involving orbits and the formation of new constellations.
COSMIC DISCO

The rocking-with-wind trees
the waltzing-with-moon ocean –
Everything in purposeful motion
like the lifting lark
or the swirls of Saturn

Even the far away stars
explode on
the dance-floor of infinity –
grouping
and regrouping
into new constellations.
O see them under
the shifting disco
of the inter-galactic lights –

The gravitational boys
in their shimmering shirts.
The orbiting girls
in their luminous glad-rags –
within magnetic reach of their rotating handbags.

GRACE NICHOLS

From Cosmic Disco (Frances Lincoln, 2013)
MY STAR POEM

TITLE:

POET’S TIP
Trust the first image or picture that comes to mind. It often holds the key to unlocking the whole poem!

NAME: