UNBOXED
CREATIVITY IN THE UK

ABOUT US

WE ARE LIQUID STARS

This resource has been produced for About Us as part of UNBOXED: Creativity in the UK.

This interdisciplinary resource brings together creative writing, literature and science: teachers can use it in the classroom to explore literary techniques in scientific contexts, and to explore the creativity behind scientific themes. Older students can use the resource in their own time to further their reading and generate ideas for poems of their own.

CURRICULUM LINKS

England:
English: Writing & Reading Composition
Science: Working Scientifically, Animals Including Humans (Y4–6), Structure & Function of Living Organisms (KS3)
Key Stages: KS2, KS3

Northern Ireland:
Language & Literacy: Writing & Reading
Science & Technology: Organisms & Health
Key Stages: KS1, KS2, KS3

Scotland:
Languages: Literacy & English – Writing & Reading
Sciences: Biological Systems
Levels: First Level, Second Level, Third/Fourth Level

Wales:
Languages, Literacy & Communication: Literature
Science & Technology: Being Curious, The World Around Us
Progression Steps: PS2, PS3, PS4

AGES 7–14

Topics
- the human body (and the circulatory system)
- blood and its role in the body
- Earth and Space – our relationship to the universe
- identity and diversity'
- the solar system and beyond

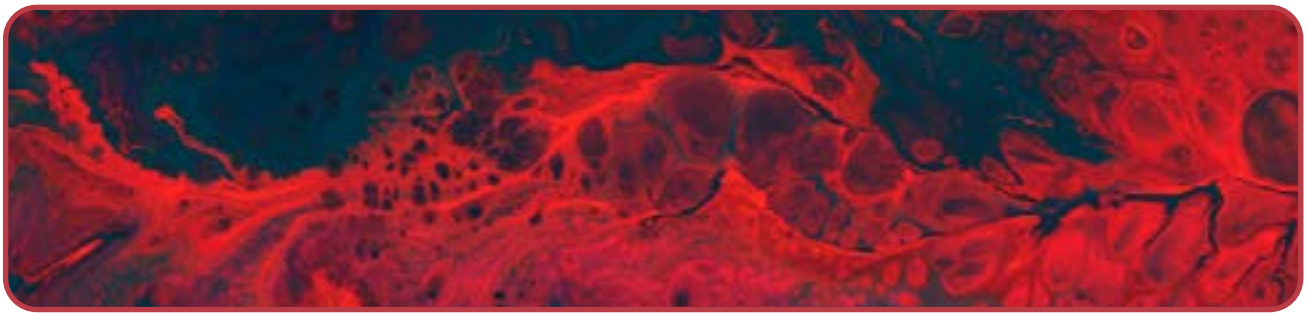
Literary features
- voice – first and second person
- personification
- imagery
- dynamic and stative verbs
- juxtaposition

This resource looks at Celeste Herriotts's poem 'Blood', which was a winning poem in a previous Poetry Society competition for young people aged 11–17. In the poem, Herriotts addresses the blood circulating in the human body and reflects on how it links us to the wider universe. The resource contains discussion and writing prompts for young people to engage with the text and create their own poem in response.

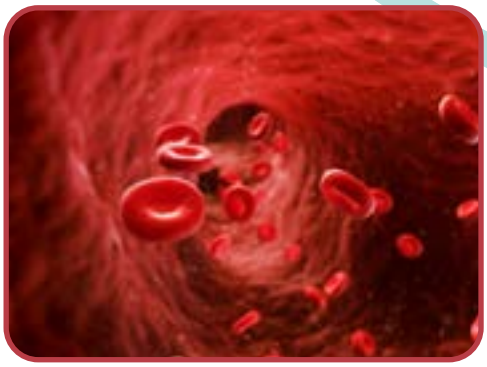
GETTING STARTED

The poem you are about to read is all about the poet's relationship to the blood flowing around their body, and how it links them to the wider universe. How much do you know about blood already? What have you learnt in your Science lessons?

With a partner, spend two minutes sharing all the information you already know about blood or, if you're approaching this resource independently, jot down what you know. Think about what the job of blood is within the body, where it travels to, and what it contains.



KEY INFORMATION



Blood is a fluid that flows through the body's blood vessels – your **veins, arteries**, and **capillaries**. It is essential to life, carrying important things to tissues within the body, such as: **nutrients, electrolytes, hormones, antibodies, oxygen, heat**, and more. It also carries away **waste matter** and **carbon dioxide**. Blood is a transport system within our bodies!

Humans have **red blood cells**, **white blood cells**, and **platelets**. Red blood cells transport oxygen to tissues in our body and take away carbon dioxide, while white blood cells fight infection and help protect us. Platelets help our blood to clot. Different people have different blood types. There are four main blood groups – A, B, AB, and O.'

Now, before you read on, see if you can think of a metaphor for blood. A metaphor is when we describe something as though it were another thing. For example, we might say 'life is a rollercoaster' or 'the snow is a blanket'. How could you compare blood to something else? e.g. 'blood is a delivery van, transporting supplies'.

Similarly, turn the question around: can blood itself be a metaphor for something else? For example, could a particular footballer be described as the 'lifeblood' of their team? In other words, they play an essential role. How else do we use this metaphor in our everyday speech?

DID YOU KNOW?

- The human body manufactures about 2 million red blood cells every second.
- Blood makes up nearly 7% of the weight of a human body.
- It only takes around 60 seconds for a drop of blood to travel from the heart, through your body, and back to the heart again.
- Red blood cells contain a protein called haemoglobin, which contains iron. The iron combines with oxygen to give our blood its red colour.
- Our blood contains around 0.2 milligrams of gold.
- An adult body has 100,000 kilometres or 60,000 miles of blood vessels running throughout the body. To put that in perspective, the circumference of the Earth is only 40,000 km.
- In Japan, there is a widespread belief that your blood type is linked to your personality. You can buy products marketed for different blood types, and there are even dating services that claim to match personalities up by blood type.

DO SOME MORE RESEARCH ON BLOOD AND ITS ROLE WITHIN THE BODY. THINK ABOUT:

- the substances found within blood, for example, what is an electrolyte? What is its function? How do antibodies work? How does our body use oxygen?
- different cultural attitudes towards blood – is it associated with particular genres of poems, songs, or films?
- What can you find out about non-human blood? Are there animals whose blood is a different colour? Why?
- the history of blood donation. Where did it begin? What can you learn about it?

HERE ARE SOME PLACES YOU COULD START YOUR RESEARCH:

If you're aged 7–11...

- BBC Bitesize, 'What is in your blood?'
- Smart Class 4 Kids, 'Some interesting facts about blood'
- DK Findout, 'Heart and Blood'

If you're aged 12–14...

- Kidskonnect Blood worksheets
- BBC Bitesize, 'Blood'

Present what you have found out to the group – you could do a presentation, make a display, or even create a quiz for your classmates!

Octopuses have blue blood because their blood contains a protein called haemocyanin, which transports oxygen. This contains copper, which makes their blood blue.

NOW LET'S THINK ABOUT THIS TOPIC IN THE FORM OF A POEM...

Here is 'Blood', by Celeste Herriotts

BLOOD

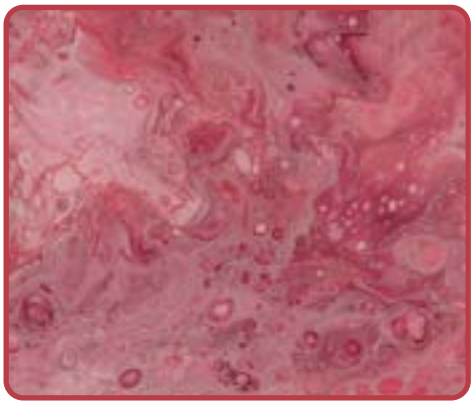
You are blue on the inside
and red on the outside. I know the many roads
you travel every day.
Your life is a sprint, a push, a current. Flowing through a black hole,
its casing pulsating and fleshy.
Among your clones,
you have no control over your existence or where you go, but you flow
through someone's universe, necessary for life.
You dance with the spinning of the Earth, flinging our view of the stars to blue.
I hear you.

DISCUSSION POINTS

Read the poem to yourself first and spend a moment digesting it. What is the message of the poem? Is there anything about it that surprises you?

Now read the poem aloud – if you can read it to another person, even better! Do you feel differently about the poem when you speak it? Does saying the words out loud change how you think about the 'you' and the 'I' in the poem?

With a partner or in a group, or by making notes to yourself, consider the discussion points below.



- If you didn't know the title of the poem, would you know what it was about? Without the title, the poem is a bit like a riddle. Could you have solved it?
- **Voice.** 'Blood' is written in the second-person ('you', 'your') and first-person ('I', 'my') voice. Do you find it unusual that the poem addresses a part of the body? Who might a 'you' poem normally be speaking to?
- **Personification.** Personification is when we attribute human characteristics to something non-human. In this poem, the poet speaks to blood as though it is another person, one who understands the poem's language. Why do you think the poet chose to write the poem as though they were addressing blood directly? What is the effect of the personification of blood in this way?

- Now look at the **verbs,** the 'doing' words. Underline all the verbs you can find in the poem. You might notice that lots of the verbs are lively and full of action, such as 'flow', 'dance', 'fling'. These are called **dynamic verbs.** Can you find any verbs in the poem that seem less active, such as 'know'? These are called **stative verbs**, because they describe a state rather than an action. What is the effect of contrasting dynamic verbs with stative verbs?

- What examples of **imagery** can you find in the poem? This is when the language used is visually descriptive and creates a picture in your mind. See if you can find images related to transport, space, or liquid. Do these images change the way you think about blood?

- Why do you think Herriotts compares blood to the universe? What does this tell us about blood and its role in our body? What does it suggest about the universe?

- Why do you think the poet refers to 'clones'? What does this suggest about the way blood is created?

WRITING YOUR OWN POEM

Look again at the poem 'Blood'. You will see that it encompasses both the very small – the blood cells circulating in our bodies – and the very large – the universe, space and the Earth.

Highlight all the references to space in the poem. Earlier, we learned that there is iron and gold in our blood. Where do you think these minerals come from?

The Natural History Museum has produced a guide that tells us that many of the elements in the universe, including the ones that make up our own bodies, originally came from stars that have gone 'supernova'. A supernova happens when a star explodes. Dr Ashley King explains a process called 'galactic chemical evolution', in which 'Every element was made in a star and if you combine those elements in different ways you can make species of gas, minerals, and bigger things like asteroids, and from asteroids you can start making planets and then you start to make water and other ingredients required for life and then, eventually, us.'

So, in a sense, we are all made of stardust. This is a great starting point for a poem. What else can you do with this idea? Perhaps you can trace the journey of a chemical from its origin in a star to its existence in another object or creature today. Or maybe you can write about the tiny amount of gold found in blood – how do you feel about the presence of a precious metal inside us? Or perhaps you can write a recipe for the universe using some of the 'ingredients required for life'.

MORE IDEAS FOR POEMS

Like Herriotts, you could write a poem using personification. Address your poem to a non-human object, creature, or plant – perhaps your favourite tree, building, or food. Think about how it is connected to the rest of the universe.

Or you could try writing about one of these aspects of the body: breathing, blood circulation, digestion, nervous system, skeletons, or muscles, or a part of the body such as a nostril, eyelash, or fingernail. In the poem 'Blood', Herriotts makes a surprising analogy (comparison) between a part of the body and the universe.

Can you surprise the reader by making an unexpected connection?

NEXT STEPS

For more poetry opportunities, check out Young Poets Network, The Poetry Society's free online platform for poets worldwide up to the age of 25. You'll find features, challenges and competitions to inspire your own writing, as well as new writing from young poets, and advice from the rising and established stars of the poetry scene. youngpoetsnetwork.org.uk

About this project

About Us is one of ten commissions for UNBOXED: Creativity in the UK. The project explores the infinite ways we are connected to the universe, the natural world and one another. A major live show toured the UK in spring 2022.

59 Productions is an award-winning design studio and production company who created the breath-taking video design for the London 2012 Olympic Opening Ceremony. Stemettes is an award-winning social enterprise working to bring young women and non-binary young people into Science, Technology, Engineering and Maths (STEM) careers. The Poetry Society is an Arts Council England National Portfolio Organisation and is one of the UK's most dynamic arts organisations, championing poetry for all ages.