

# WE ARE WHALE SONG

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.

If you're aged 4-18 and you're inspired to write a poem on the themes covered here, submit it to the About Us poetry competition by **23:59 GMT on 19 December 2021** for a chance to win some amazing prizes. You can also enter the coding competition on the same theme by submitting a Scratch project. Find out more and enter online at [aboutus.earth](http://aboutus.earth).

## KEY STAGES 3, 4 AND 5

### Topics

- whales and whale song
- faith
- time

### Literary features

- metaphor
- refrains

This resource looks at Kyle Lovell's poem 'The Sunken Cathedral', a winning poem in a previous Poetry Society competition for young poets aged 11-17. In the poem, Lovell explores time, change, and the relationship between humans and marine life. 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 uses the image of the body of a whale, washed up on the shore long ago, to explore time, change, and faith. Before you start, brainstorm everything you know about whale song – you could begin by listening to some.



## KEY INFORMATION

**Whales belong to a group of sea creatures called cetaceans. There are around 90 species of cetaceans, including whales, dolphins, and porpoises.**

Like humans, whales are mammals – not fish. Even though they live in the sea, just like us they need air to survive, so they have to come to the surface to breathe. Whales also give birth to live young (instead of laying eggs) and the mother whale produces milk for feeding her babies.

Because it's dark in the ocean, some whales use their ears to 'see'. This is one example of how animals have adapted to use their environment to their advantage. These whales send out a sound and listen for the echoes. The strength of the echo helps them judge what is around them and how far away things are. This is called echolocation. Imagine standing in a cave and clapping your hands – could you tell how wide the cave is judging by the echo?

Echolocation works because soundwaves bounce off surfaces. The speed of sound in water is  $1.5 \text{ km s}^{-1}$  – four and a half times faster than in air, so whales can get this information much more accurately and quickly than we could! If soundwaves didn't reflect off surfaces, what would happen? Can you draw any comparisons with light waves and how we see?

## WHALE SONG

Whales are famous for making musical sounds, known as 'whale song'. Not all whales sing – it has only been observed in some species of baleen whales (named for the 'baleen plates' or sheets in their mouths, through which they sieve their food). Singing has also only been observed in male whales. It is thought that this is because whale song plays a part in mating rituals.

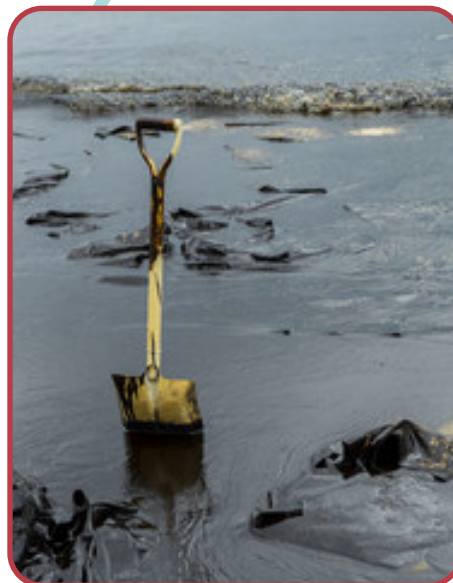
Whale song is communal. In a population of humpback whales, for example, all males often sing the same song at the same time, but each whale will sing a different part. This means that the whales communicate with one another to sing different parts of the song. Whale songs also change over time: elements of a population's whale song will change each year, and over the course of fifteen years the song will have changed completely. Scientists can track these changes to help map a population of whales and chart how the group is changing and moving.



## WHALES AT RISK

Human activity has a direct effect on the health of whales. Whales are at risk from the millions of tonnes of litter that makes its way to the sea, as well as from shipping accidents and oil spills. Some environmentalists are concerned that the ambient noise made by ships, sonar, and drilling for oil and gas are disrupting whales' communication and ability to navigate. This can force them away from their feeding and breeding grounds.

In addition to this, more than 1000 whales are killed deliberately every year. Although commercial whale hunting was banned in 1986, it continues in Japan, Norway and Iceland. Whales are killed for meat, and whale oil, blubber and cartilage are used in pharmaceuticals and health supplements.

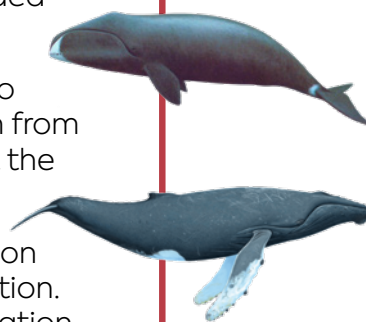


### DID YOU KNOW?

**Bowhead whales**, which live in arctic waters, have been recorded singing over 180 different songs!

In 1977, NASA launched Voyager I and Voyager II spacecrafts into space. Included on board was a recording of whale song, taken from a **humpback whale** off the coast of Bermuda. This means that the sound of whales has travelled beyond our solar system.

In 1996, humpback whales from the western Australian population invaded the breeding grounds of the eastern Australian population. This meant that the whale song of the eastern Australian population changed rapidly as they adopted the western song. This is referred to as a 'cultural revolution'.



Lots of the information collected here came from the Whale and Dolphin Conservation (WDC), a charity dedicated to protecting whales and dolphins. You can find out more facts about these animals on their [Kidzone](#), or teachers can access their free [resources](#) for the classroom. You can even play their echolocation [game](#)!

Lots of the information about whale song is contained in Vincent M. Janik's [article](#) 'Whale song', published in *Current Biology*, Vol. 19: No. 3, pp. 109-111.

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

Here is 'The Sunken Cathedral', by Kyle Lovell

## THE SUNKEN CATHEDRAL

If you strain your ears  
toward the westward ocean,  
you may catch the faded notes  
of an organ, crafted from the  
hallowed and hollowed bones  
of a whale's ribcage, which had  
washed ashore centuries before  
by summer waves and polished  
until gleaming by winter winds.

If you strain your eyes  
toward the westward ocean,  
you may spy the silhouette  
of the organist, a child,  
hunched over the bone keys  
as her hands dance with  
a clumsy innocence, asking  
the whale to sing his songs.

If you strain your ears  
toward the westward ocean,  
you may catch the whispers  
of an ancient lullaby, telling  
of a time when leviathans  
slept within sunless ravines  
and the whale learnt his songs  
from wandering monk fish  
who recited the karmic sutra  
of the sea.

If you strain your eyes  
toward the westward ocean,  
you may spy the figure  
of the child, shining softly  
in the shadow of her sanctuary.  
Sleeping softly in the shadow  
of a sun-sunken cathedral.

## DISCUSSION POINTS

Read the poem and spend a few moments thinking about it. Now discuss the points below with a partner or, if you're using the resource independently, jot down some notes.

- The poem uses a cathedral as a **metaphor** for a whale carcass. Why do you think the poet chose this image?
- Can you find any other references to religion in the poem? What do you think the relationship between nature and religion is in this poem? In what way is the whale a 'sanctuary'?
- Why do you think the poet wrote this in the **second person** ('you') voice? What is the effect of this on the reader?
- The lines 'If you strain your ears/ eyes / toward the westward ocean' are repeated at the start of each stanza. What is the effect of this **refrain**? How does it relate to the musical theme of the poem?
- When the poet refers to 'whale song' what do you think they mean? Is this the kind of song we learned about earlier in the resource, or is it different? How is the whale's body being used to create song?
- In what way do you think the idea of 'whale song' evokes sadness in this poem?

## FOR OLDER STUDENTS

- The poem alludes to time and processes of change. What do you think the relationship is between time and change as portrayed in this poem? Does the poem itself enact any kind of change? How do poems perform time?
- The poem refers to the 'karmic sutra'. In Hinduism and Buddhism, karma is the idea that all of a person's actions and intentions throughout their existence influence their future. In other words, if someone has been good in the past, they will have a better future. Sutra is a form of scripture or a set of rules and teachings. What do you think the poet means by 'karmic sutra'?
- What form might 'karmic sutra' take in the context of this poem? Think about who is reciting it: where has their wisdom come from and what can we learn from it?

## WRITING YOUR OWN POEM

Write about the creativity you can find in wildlife. Think about whether a particular plant or animal's activity could be viewed as an art form. You could explore:

- the music of birdsong or a cricket chirping
- a beaver building its dam or termites building their mound as a form of sculpture
- a spider's web as tapestry
- a butterfly's or a beetle's patterns as a painting
- the way that some kinds of birds dance to attract a mate e.g. the Vogelkop superb bird-of-paradise.

Research how these things are created and reflect in your poem on how each process can be compared to making a work of art.

### OR

Write about the relationship between nature and faith. You could explore the role of animals, plants, rivers or the sea in your own faith, or think about the spirituality of the natural world.



## NEXT STEPS

Once you have written a poem, consider entering it into the About Us competition. It's free to enter, and the competition is open to young people who live in the UK and are aged 4-18 on the closing date of Sunday 19 December 2021. Poems should be no more than 20 lines long. If you win, your poem could be featured in a major live show that will tour the UK in spring 2022. Winners will also receive lots of other goodies and development opportunities. Enter online at [aboutus.earth](https://aboutus.earth).

About Us is an epic new show for everyone who has ever looked up at the night sky and wondered about our connection to the vast universe. Developed in collaboration with poets and scientists across the four nations of the UK, About Us will tell the story of the infinite number of ways we are connected to the universe, the natural world and one another.

About Us is a first-time collaboration between 59 Productions – the award-winning design studio and production company who created the breath-taking video design for the London 2012 Olympic Opening Ceremony; Stemettes – the award-winning social enterprise working across the UK & Ireland to bring young women and non-binary young people into Science, Technology, Engineering and Maths (STEM) careers; and The Poetry Society – one of the UK's most dynamic arts organisations championing poetry for all ages.