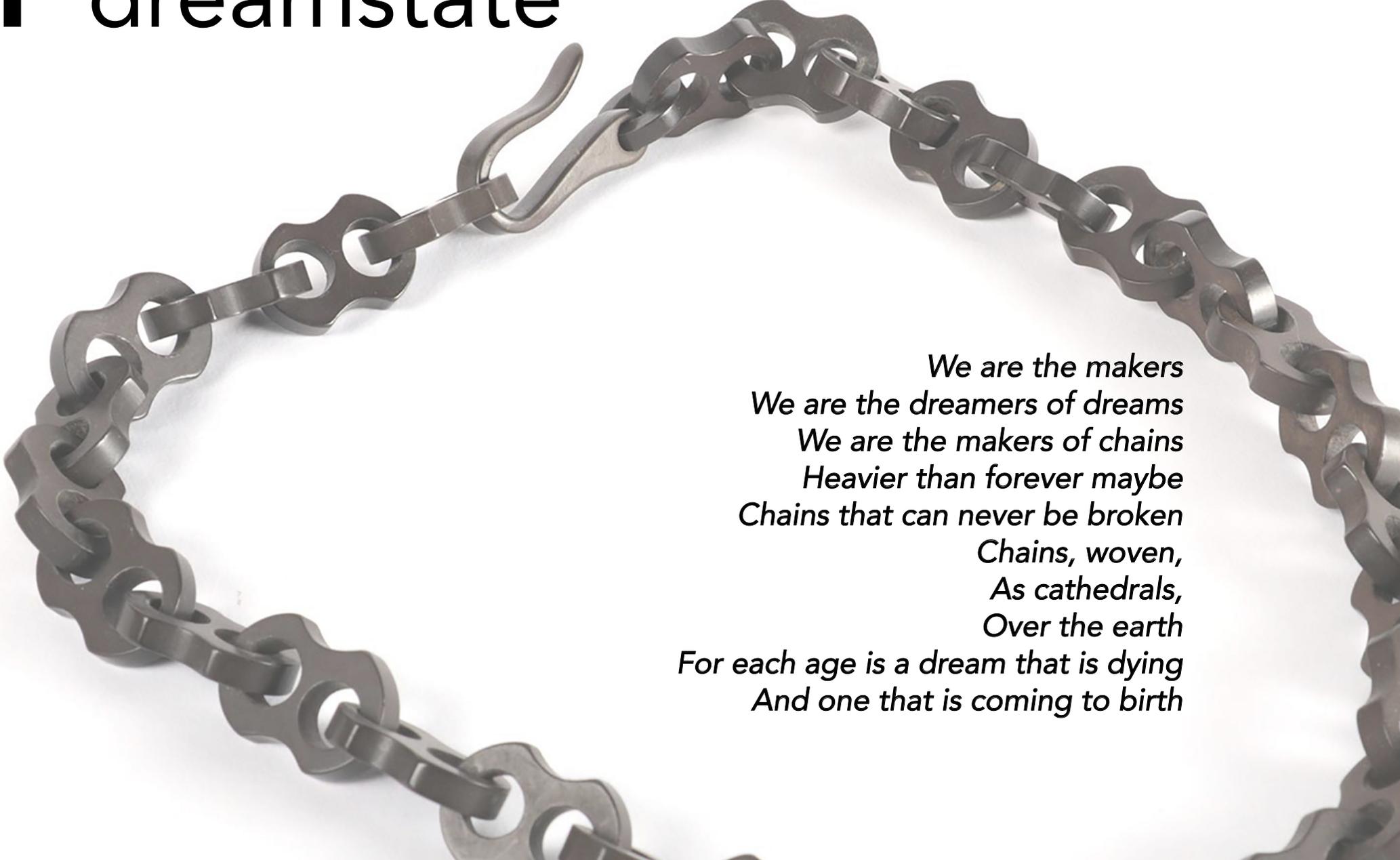
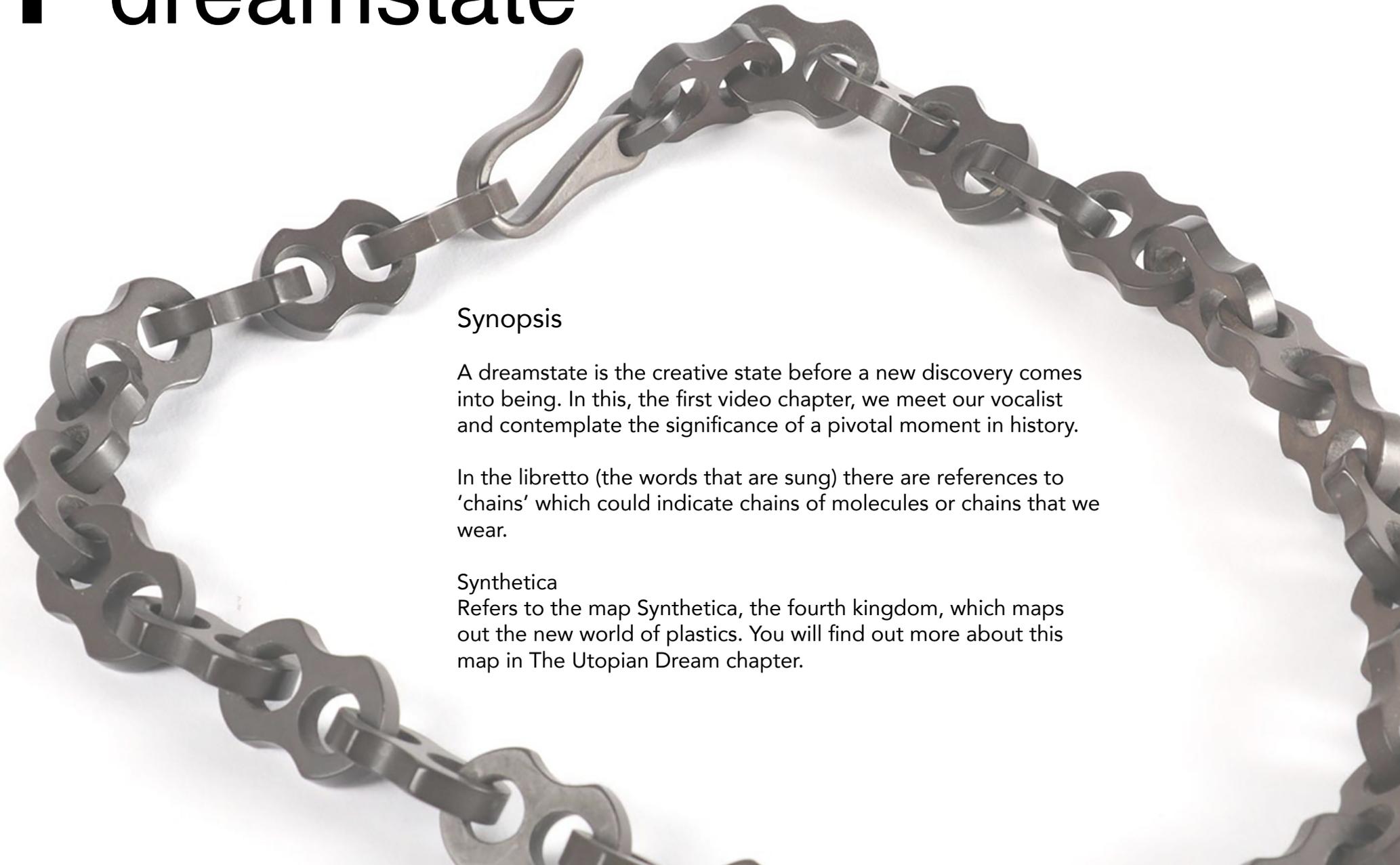


1 dreamstate



*We are the makers
We are the dreamers of dreams
We are the makers of chains
Heavier than forever maybe
Chains that can never be broken
Chains, woven,
As cathedrals,
Over the earth
For each age is a dream that is dying
And one that is coming to birth*

1 dreamstate



Synopsis

A dreamstate is the creative state before a new discovery comes into being. In this, the first video chapter, we meet our vocalist and contemplate the significance of a pivotal moment in history.

In the libretto (the words that are sung) there are references to 'chains' which could indicate chains of molecules or chains that we wear.

Synthetica

Refers to the map Synthetica, the fourth kingdom, which maps out the new world of plastics. You will find out more about this map in The Utopian Dream chapter.

Project 1: Polymer Chains

The metaphor of a chain is introduced in Dreamstate. At a microscopic level, plastics are made up of long, repeating chains of molecules known as polymers.

The object in the picture is from the MoDiP collection. Its age and material might surprise you. What can you find out about it? When was it made? Is it big or small? Is it heavy like a normal chain? <https://www.modip.ac.uk/artefact/aibdc-006564sa>

task one

Research

The material it is made from is Vulcanised rubber. In your workbook draw a diagram of the polymer chain of vulcanised rubber.

Now, can you explain what the difference between vulcanised and non vulcanised rubber is? Why is this classified as a plastic?

extension task

Chemistry

Choose three objects from the MoDiP exhibition Precious Plastics here:

<https://www.modip.ac.uk/exhibitions/precious-plastics>

In your work book paste an image of the chosen item along with a diagram of the polymer chain of its main material.



Project 1: Polymer Chains

task two

Creative Writing

Look closely at the libretto (the words that are sung). Can you imagine the world before plastics were invented?

Discuss with your classmates what your daily life would be like without plastics.

The libretto ends with the phrase:

“For each age is a dream that is dying
And one that is coming to birth.”

The MoDiP exhibition You Can Do It with Plastics includes a wide variety of examples where design in plastics has been used to change the way we live. Look around the exhibition, can you spot any items which positively shape your daily life?

<https://www.modip.ac.uk/exhibitions/you-can-do-it-plastics>

Using one of the subcategories in the exhibition to inspire you, write a poem of 8 lines starting with the phrase
“Each age is a dream that is dying
And one that is coming to birth.”

subcategories:

Buoyancy; insulation; flexibility; transparency; squeezable products; built-in obsolescence; living hinges; colourful design; one-piece moulding; illusionism; protection; recycling; weight saving; click assembly; materials enabling.

Each age is a dream that is dying
And one that is coming to birth

Project 1: Polymer Chains

task three

Composition.

Translate each chemical element from your vulcanised rubber molecule into a pitch and rhythmic value and then read this as a repeating musical cell as you see fit.

You can use Beep box to get you started with your composition and quickly generate a repeating pattern of notes.

<https://www.beepbox.co/>

Every second molecule there is a sulphur chain which bonds repeating chains together. Represent this in some way (chord; percussion sound; etc.).

Repeat cell 4 times (includes two 'sulphur' events) and then, maintaining the rhythmic values, use the technique of interval based augmentation/diminution to create a variation of your cell. Repeat this process again and then return to original cell.

<https://www.musictheoryacademy.com/composing-music/augmentation-and-diminution>

Harmonise, orchestrate, develop this composition as you see fit. It can also accompany your spoken poem. Record the final version to share with your class.

