

NATIONAL CURRICULUM:

- recognise that living things can be grouped in a variety of ways
- explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment
- recognise that environments can change and that this can sometimes pose dangers to living things.

Pupils should use the **local environment throughout the year to raise and answer questions that help them to identify and study plants and animals in their habitat.** They should identify how the habitat changes throughout the year.

WORKING SCIENTIFICALLY:

Pupils might work scientifically by: ***making systematic and careful observations of living things and their habitats***

- asking relevant questions and using different types of scientific enquiries to answer them
 - setting up simple practical enquiries, comparative and fair tests
 - making systematic and careful observations and, where appropriate
 - gathering, recording, classifying and presenting data in a variety of ways to help in answering questions
 - recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables
 - reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions
 - using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions
 - identifying differences, similarities or changes related to simple scientific ideas and processes
 - using straightforward scientific evidence to answer questions or to support them
- Findings.

CONTEXT

Then it was Mark Antony's turn to speak.

Mark Antony stood sorrowfully beside Caesar's shrouded body. "Friends, Romans and countrymen," he said, "I am not here to speak fine words like honourable Brutus, but to mourn my friend and tell you how much Caesar loved you." He waved a scroll before the crowd. "Here, the proof is written in his will."

"Read it!" the crowd demanded.

But Mark Antony shook his head. "First let Caesar's wounds speak," he said and he pulled back the shroud. The crowd gasped in horror at the sight of Caesar's body. "Here is where honourable Brutus showed his love for Caesar," said Mark Antony. "And this is the mark of his good friend Cassius."

"How could Brutus be so cruel?" the people cried.

"In his will, Caesar left money to each one of you," continued Mark Antony. "He instructed that his parks and gardens should be made public for you all to enjoy. Is this the wish of a man who wanted to take away your freedom?"

Julius Caesar instructed that his parks and gardens should be made public for everyone to enjoy. Now that Spring is upon us, we will witness our parks and gardens in bloom with flowering and non-flowering plants.

Julius Caesar's favourite plant was Silphium (giant wild fennel). The Romans loved it so much that they ate the plant to extinction. It was a versatile culinary ingredient but it was used for medicinal purposes as well as a digestive aid. History records that, because of its great demand and limited supply, some considered it to be more highly prized than gold. Today, **silphium is nowhere to be found and, for that reason, considered to be extinct.**

Before you start the unit:

Get every child to plant their own seed in a pot or plastic cup. They can choose from the following: sunflowers, radishes, lettuce, herbs (like basil), green beans, marigolds, zinnias, nasturtiums, sweet peas, chives. These will grow quickly and are easy to look after.

Fair test investigation sheet - put in same location and all plants to be watered as instructed. (Activity Investigation 1)



During the unit:

What are we looking for? Growth

1. Measure the height of the plant each week.
2. Create a table of results from the findings (Activity Investigation 2)
3. Create a bar chart of heights from varied plants. (Activity Investigation 3)
4. Analyze the results

ACTIVITY INVESTIGATION 1

We are investigating...

We could change...

We could measure/ observe ...

We will change ...

We will measure/ observe ...

We will keep these the same...

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Method ~ how are you going to carry out this investigation?

First, we will

Then, we will

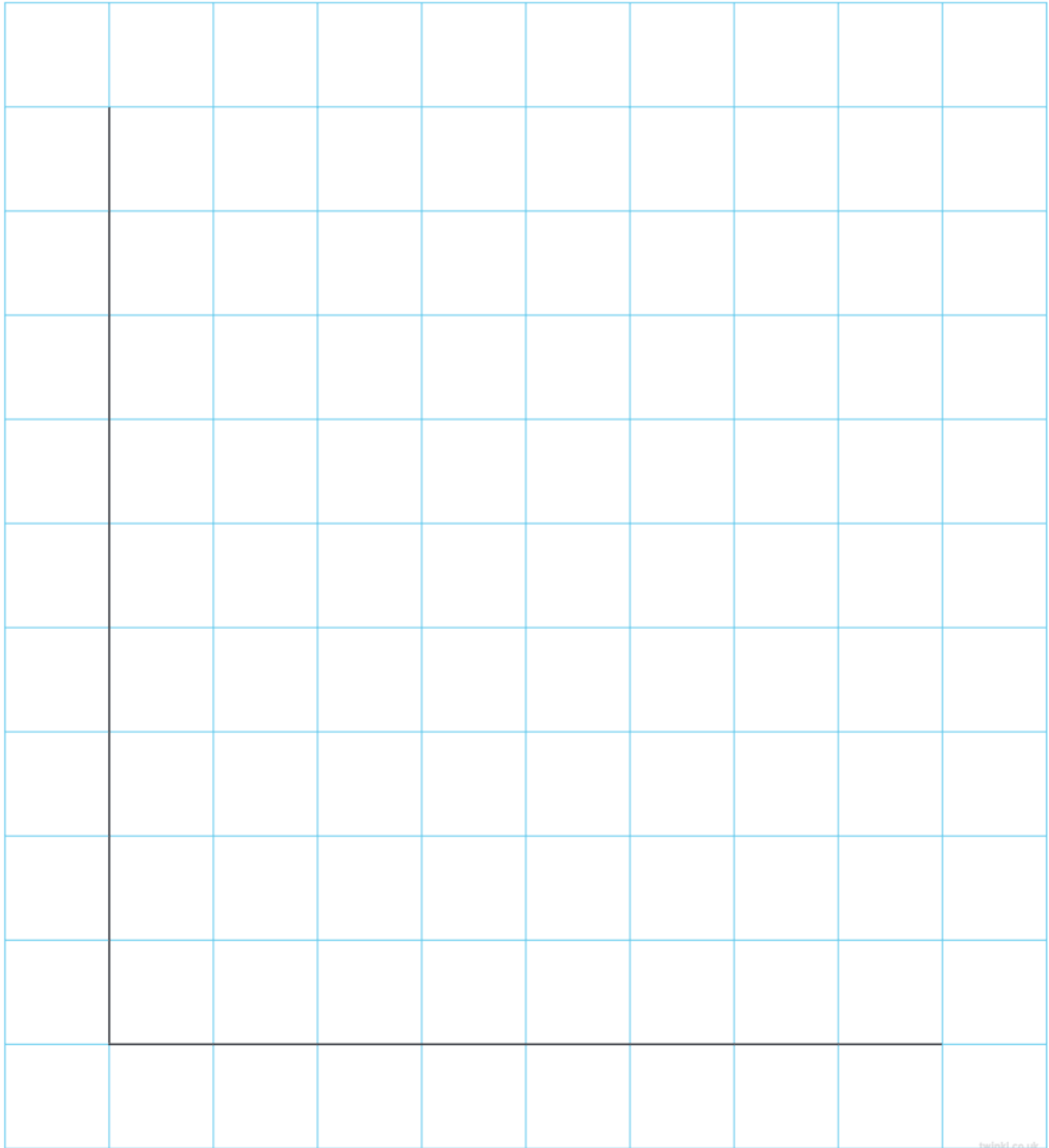
Finally, we will

Equipment...

We will need

ACTIVITY INVESTIGATION 3

A bar graph to show _____



ACTIVITY INVESTIGATION 4

We found out that:

We think this is because:

Next time I would change:

NON INVESTIGATION LESSONS

Lesson 1- To identify living things.

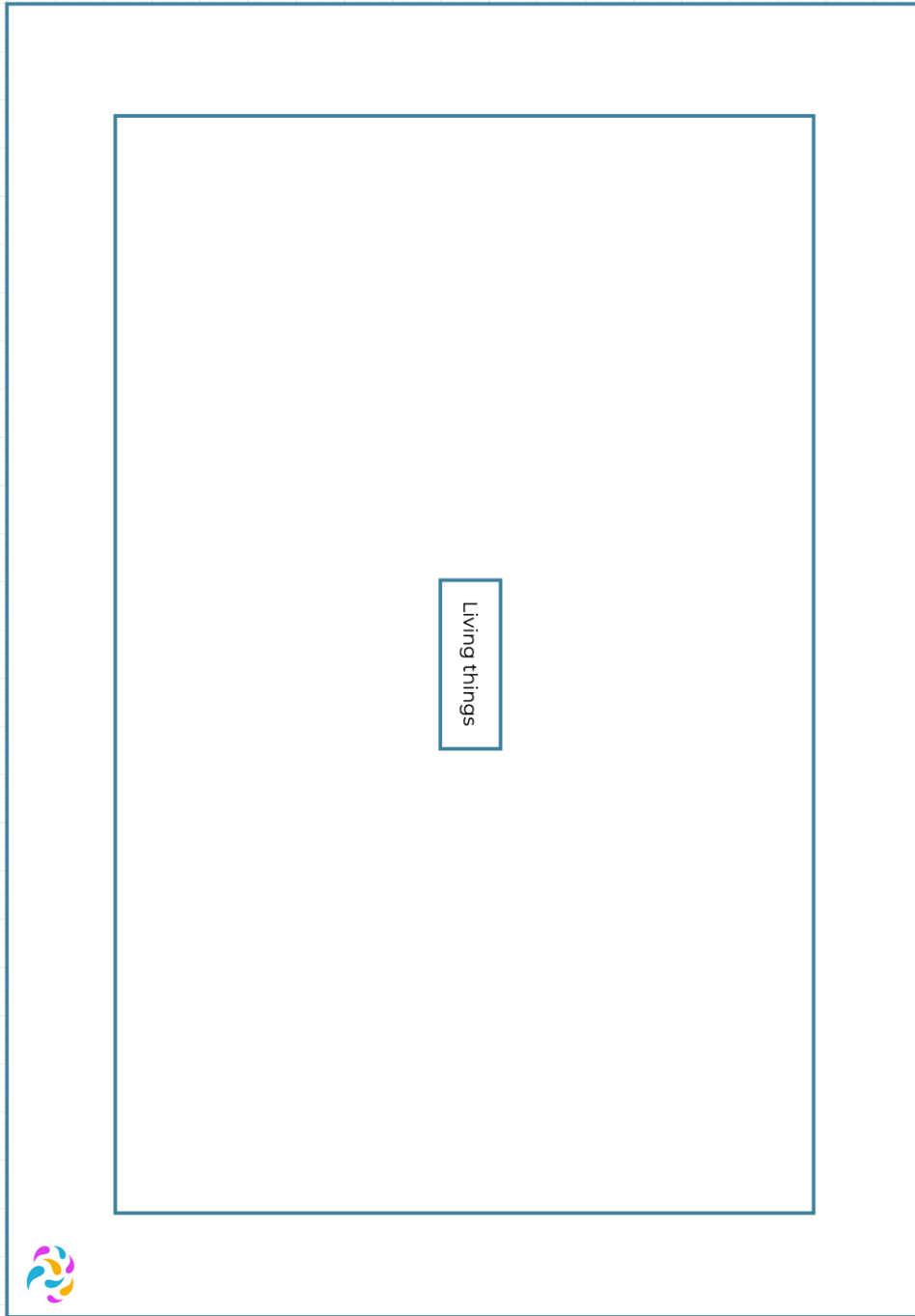
Question: How do we know if something is alive?

1. Pre-assessment- ask the children how do we know something is alive. Create a defining frame. (Activity 1a) <https://thinkingframes.app/>
2. Starter- odd one out. IE Dog, iPhone and tree. Discuss which is the odd one out and why. (Activity 1b) OR use this website. <https://explorify.uk/en/activities/odd-one-out/meadow-feast> (sign up it's free!) (Activity 1b)
3. Main task 1- There are **seven things** that all living things do, we call these **life processes**. All animals, including humans, do these and plants do too! <https://www.youtube.com/watch?v=Q2HDJP10qSQ-> watch video

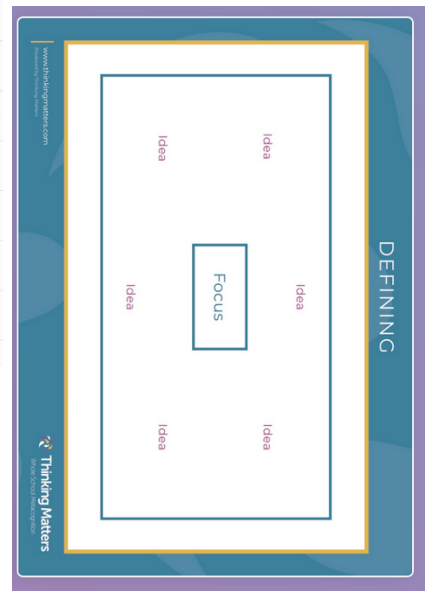

We can remember them with the help of **Mrs Gren!** (Movement, Respiration, Sensitivity, Growth, Reproduction, Excretion, Nutrition.) Create a new acrostic poem for MRS GREN (Word mat Activity 1c)

4. Main task 2- pick 2 things and create a comparing and contrasting frame about it. Why is it a living/non-living thing? <https://thinkingframes.app/> (Activity 1d)
5. Plenary- share thoughts

Activity 1a



Living things



Activity 1b

Find the odd one in the group



Activity 1c- word mat

Characteristics of living things

Movement
Respiration
Sensitivity

Growth
Reproduction
Excretion
Nutrition

MRS GREN



Movement

Respiration

Sensitivity

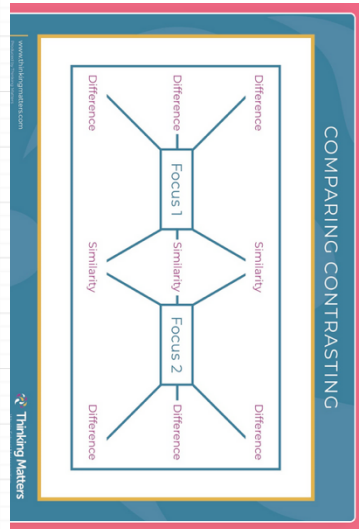
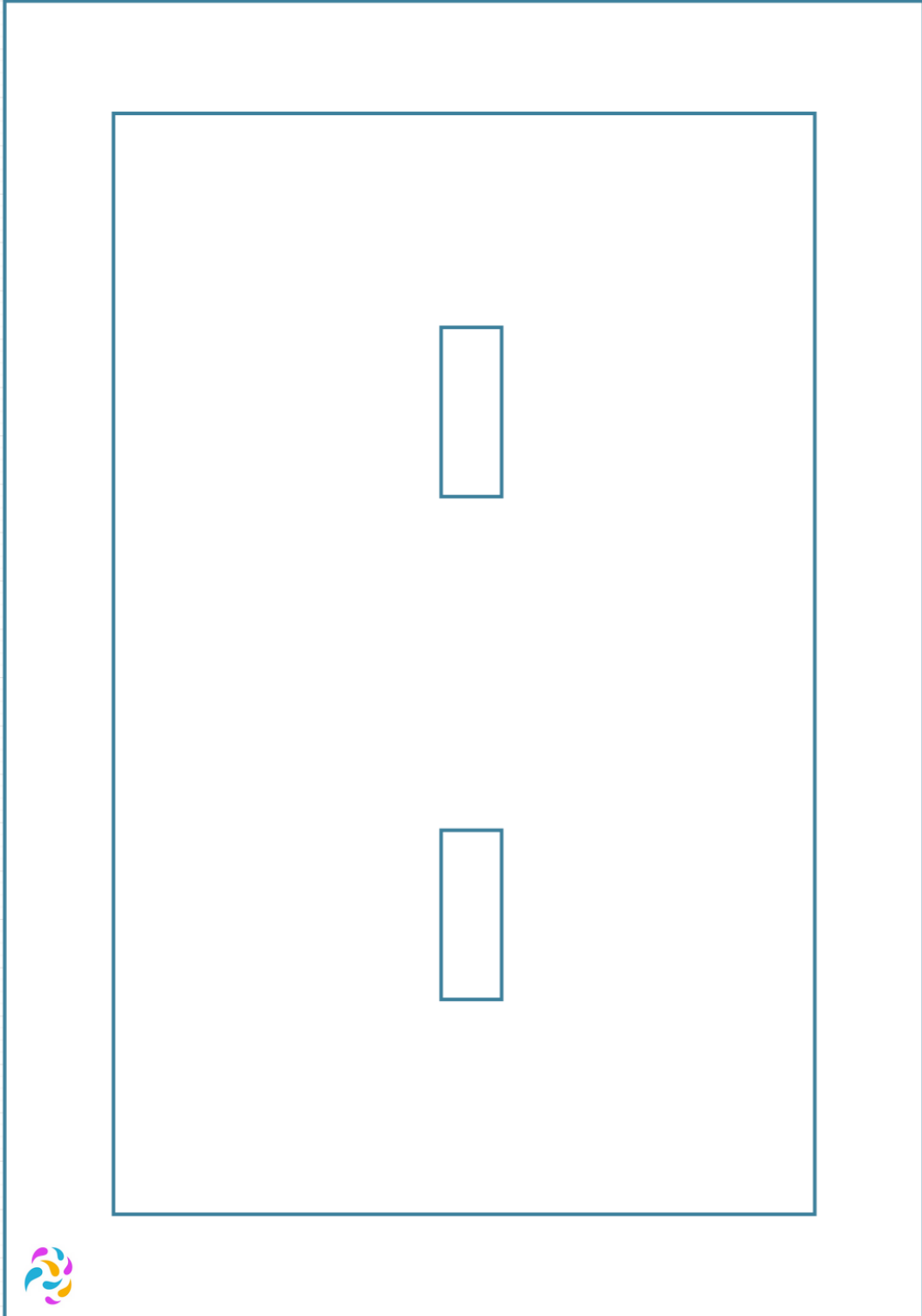
Growth

Reproduction

Excretion

Nutrition

Year 4- Living things and their habitats



Lesson 2- I am learning to identify living things

Question: What living things are around us?

1. Recap- Mrs Gren- 7 life processes.
2. Starter- Zoom in and zoom out- what could it be?
<https://explorify.uk/en/activities/zoom-in-zoom-out/strange-stripes> (Sign up it's free!)
3. Main- Go on a living thing hunt. (Activity 2a)

Our school environment is a **habitat** for a number of **different living things**. You will **photograph** or **draw** the different living things in our **school environment**.

When you take photographs, you can make your photos more **scientific** by adding a **ruler** to show the **scale** of the living thing. You could also place a small whiteboard or a piece of card with the **date**, **location** and **the identity** of the living thing – these will then be visible in the photograph.

4. As a class, children to create their own living and non-living key from items they found on their hunt. (Activity 2b)
5. Plenary- chn to share what they found on their hunt.

Activity 2a

Item	Not Living	Living

© <http://worksheetplace.com>

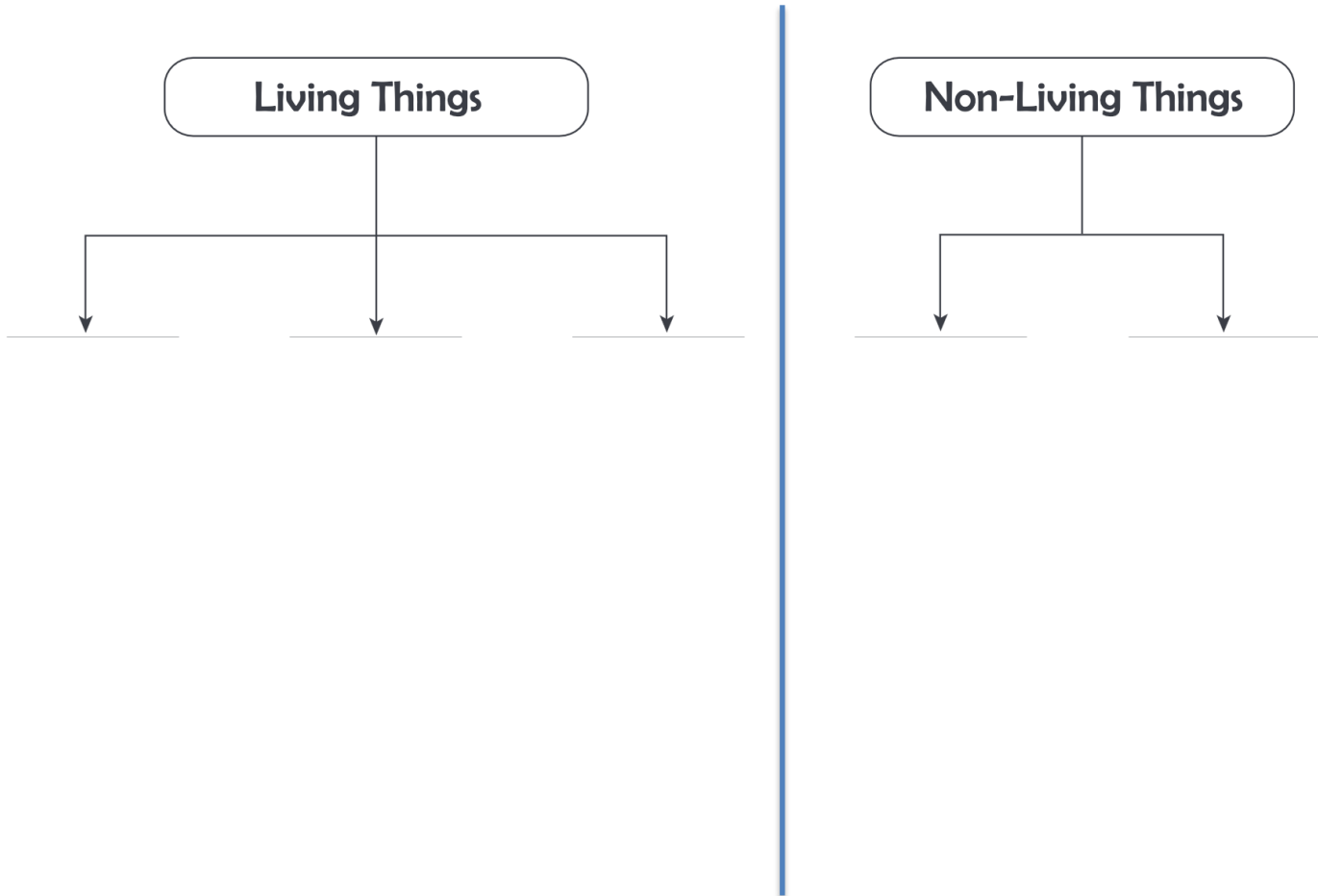


Scavenger Hunt

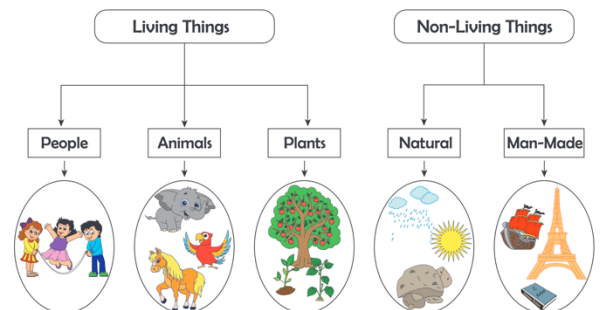
Take a walk around the school and the yard and complete the following chart:



LIVING AND NON-LIVING THINGS



LIVING AND NON-LIVING THINGS

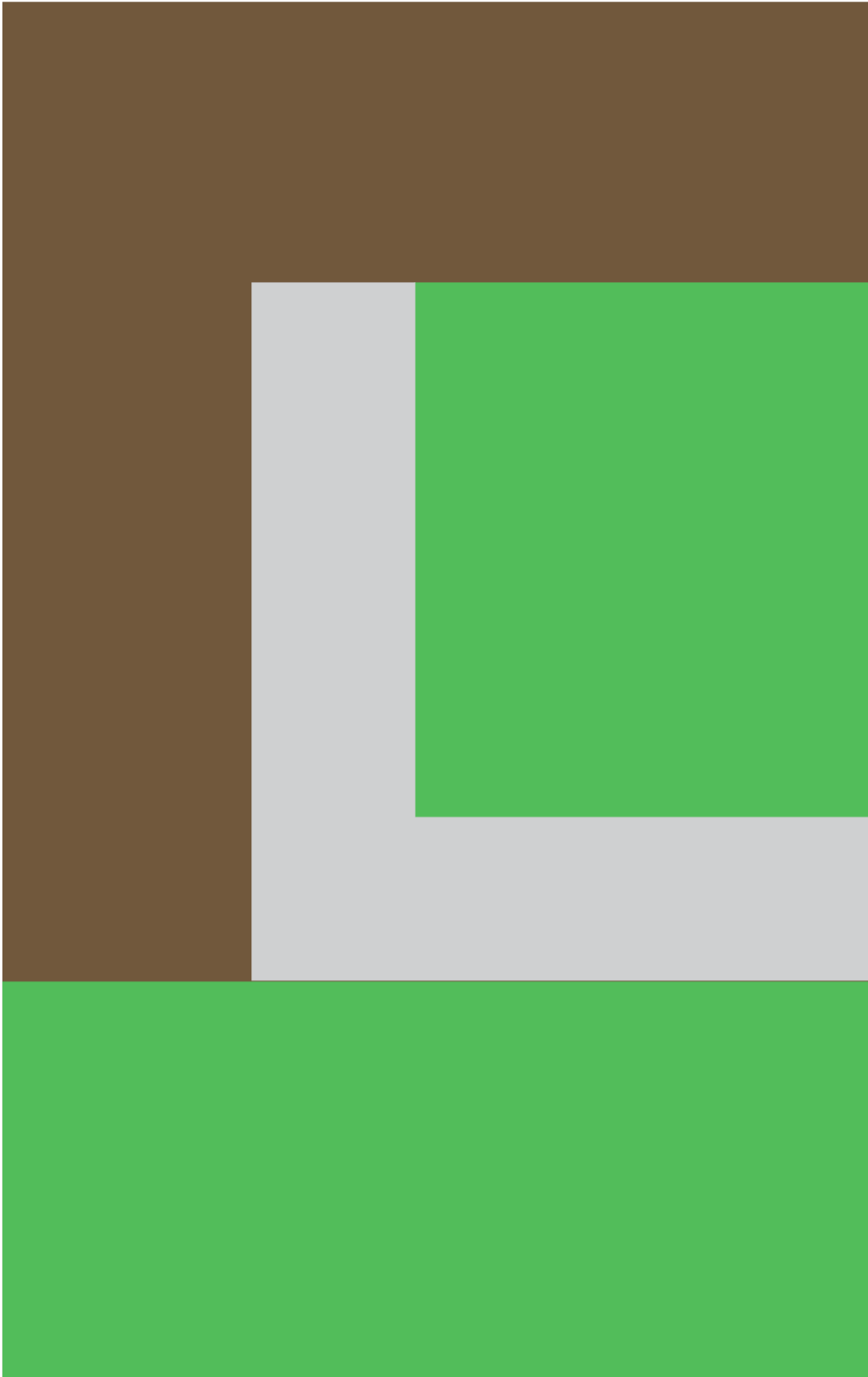


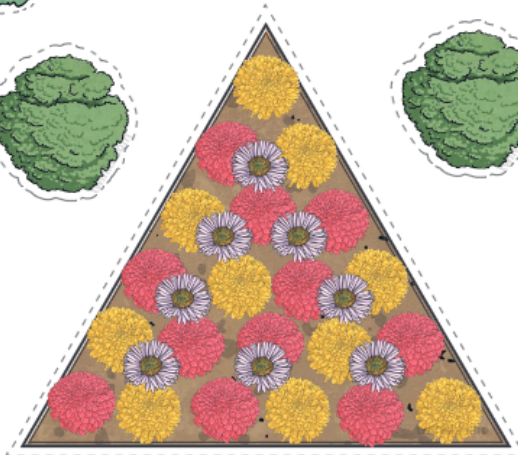
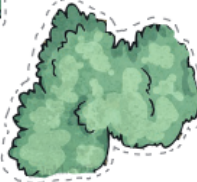
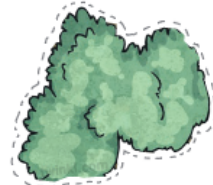
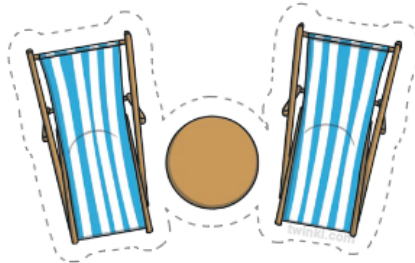
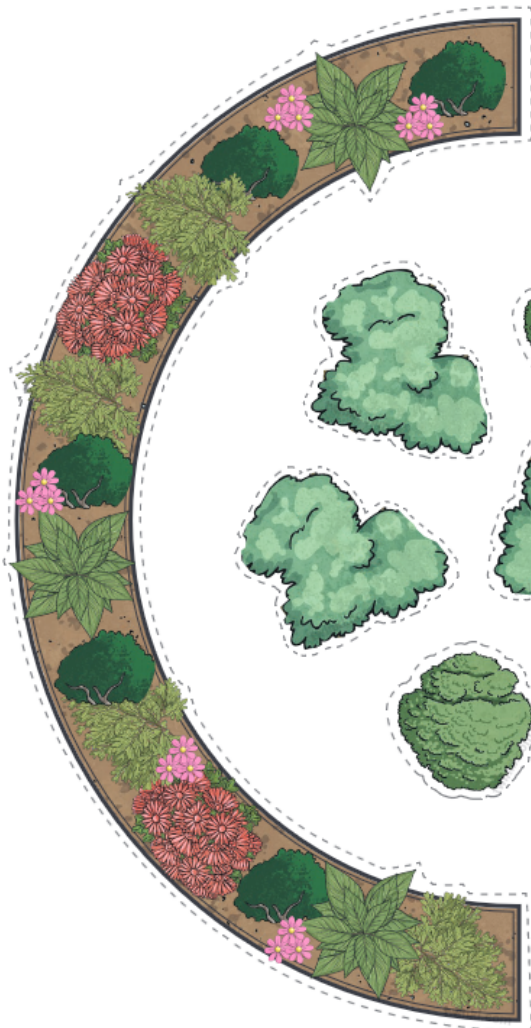
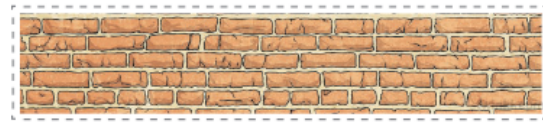
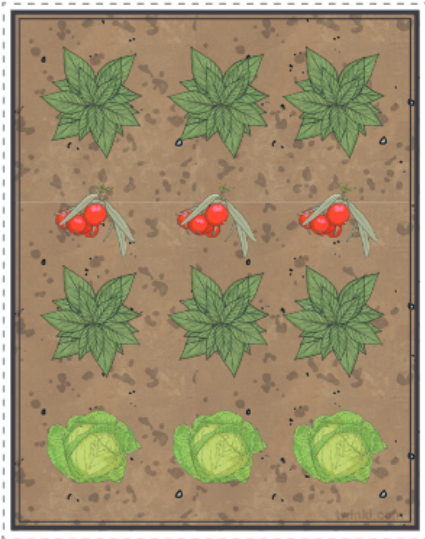
Lesson 3- Create your own garden.

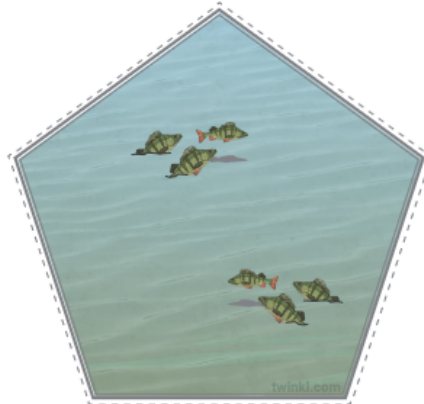
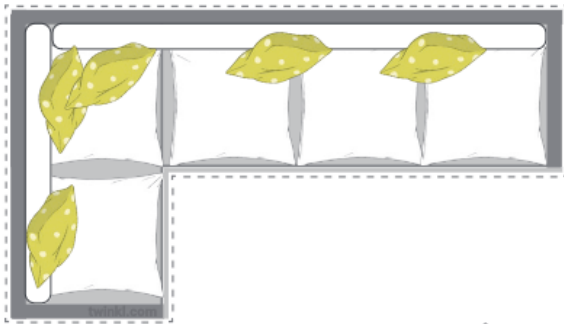
1. **Starter-** Have you ever? <https://explorify.uk/en/activities/have-you-ever-found-it-difficult-to-spot-an-animal-because-of-its-colour> (Sign up it's free).
2. **Main-** Discuss how the environment will change throughout the year. What dangers could this pose to animals and plants?
Chn to plan and create their own garden. Chn to be given word mat of living things to put in their garden. Chn to think about animal habitats, living non-living items they what their garden will need.
(Activity 3) Chn to label.

Most gardens consist of **a mix of natural and constructed elements**, although even very 'natural' gardens are always an inherently artificial creation. Natural elements present in a garden principally comprise flora (such as trees and weeds), fauna (such as arthropods and birds), soil, water, air and light.

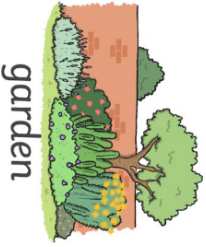
3. **Plenary-** Chn to present their garden and its features of living and non-living things.



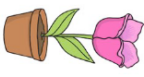




Garden Word Mat



garden



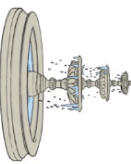
flower



tree

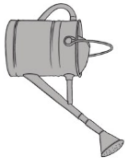


bird



fountain

watering can



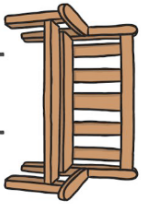
seeds



plant



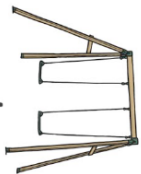
hose



bench



grass



swing



pool



ball



plants



gardener



butterfly



sparrow



fence



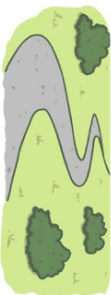
colours



playground



sunshade



footpath

RESEARCH

An international team of researchers has investigated how human activities during the Roman Empire may have impacted the climate in Europe. The experts found that a large number of fires burned by ancient Romans triggered air pollution that cooled down the climate across the country.

WHAT ANIMALS WENT EXTINCT DUE TO ROMANS?

The Hippopotamus were captured from the River Nile in Egypt but following the Roman era they disappeared from this habitat. Many of the great wild animals from Africa and Asia such as **elephants, lions and tigers** were hunted to the point of extinction.

WHAT ANIMALS WERE SACRED TO THE ROMANS?

Many animals were considered sacred to the ancient Greeks and Romans; for example, Snakes in the worship of Apollo, Dionysus, and Asclepius, Pigs in the cult of Demeter, Bees and Bears in the cult of Artemis.

LESSON 4 RESEARCH LESSON LINKED TO NATIONAL CURRICULUM:

- To recognise that environments can change and that this can sometimes pose dangers to living things.

Key questions:

- Why would a large number of fires burned by ancient Romans effect the environment?
- How does the environment change
- What changes can occur in the environment?
- What Impact would this have on habitats?
- What effect would this have on living things?

Starter- Share and read through the research page above.

Main- Chn to research the key questions in pairs or small groups. (Use research sheet below). Chn to use safe search and books.

Plenary- Chn to share their thoughts and findings.

What have I been asked to research?

Key words and spellings I have found:

-
-
-
-
-
-
-

Where did I find this information?

Books:

Full websites:

The most interesting thing I found out was...

Rough notes made while researching:

I am still unsure about...