2 Science: The World of Plants

[Year 2/3]



Lesson 1 topic: *Physical size of plants*

Lesson 2 topic: Plant parts and life cycle

Lesson 3 topic: The growth of a plant



This module was designed for years 2/3 and it comprises the following 3 lesson topics:

Lesson 1 topic: Physical size of plants

Table 1 - The World of Plants. Lesson 1: Activities & Appendixes

Activities	Appendixes
Lead-in	1 and 2
1	3
2	4
3	5

Lesson 2 topic: Plant parts and life cycle

Table 2 - The World of Plants. Lesson 2: Activities & Appendixes

Activities	Appendixes
Lead-in	1
1	2
2	
3	3 and 4
4	

Lesson 3 topic: The growth of a plant

Table 3 - The World of Plants. Lesson 3: Activities & Appendixes

Activities	Appendixes		
Lead-in	1		
1	2 and 3 and 4		
2	5		
3	6 and 7		



2.1 Science - Lesson 1 - The World of Plants: Physical Size of Plants

Linguistic objective

<u>Vocabulary</u>: physical size: big/small, medium, short/tall; plant, tree (oak; orange tree; apple tree; pine; palm tree; olive tree), shrub (rosemary; lemon grass; grapevine; green peas; juniper; lavender) herb (lily; tulip; daisy; daffodil; grass; mint)

Linguistic objective

<u>Skills</u>: students understand simple information about size of plants (listening); students pick up words (tree, shrub, herb) from authentic source (video) (listening and speaking); students create short texts (writing) and read them (reading).

Linguistic objective

<u>Functions</u>: students name and describe selected plants according to physical size, e.g. *This is an oak. It is big.*

Content objective

Students classify plants according to physical size into trees, shrubs and herbs.

Communication

Students talk about plants and students contribute to class plant clipbook.

Cognition

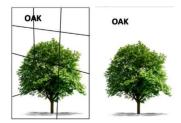
Students classify according to categories (physical size of plants).



LEAD IN: 5 MIN

Group division (6 groups) - The teacher prepares 6 photos for a puzzle (*Appendix 1*) and for 6 flashcards (*Appendix 2*) on the following plants: *oak, tulip, grapevine, pine, grass,* and *daffodil*.





- Each group gets one set of puzzles to assemble. (For additional difficulty children get
 one puzzle piece and have to find other children with the puzzle pieces that will
 complete their puzzle. Once students have found the rest of the group, they sit at a desk
 together and make a whole picture).
- When the children have assembled their puzzle, they read out their plant name to the rest of the class. Teacher corrects and drills pronunciation.
- For additional practice, teacher uses flashcards to elicit names of these plants in English.
 Teacher shows the 6 flashcards randomly and children read names of plants.



ACTIVITY 1: 25 MIN

- Teacher asks students to name categories of plants in their native language (L1) and writes them on the board in L1 (L1 equivalents of TREES SHRUBS HERBS. E.g. In Polish drzewa, krzewy, rośliny zielne).
- Teacher asks the students to watch the video
 https://www.youtube.com/watch?v=KaVEFFgkzy8 (from the beginning to 2:25) and to identify the three categories of plants in English (TREES SHRUBS HERBS). Teacher writes these three categories on the board next to the L1 words.



Class I: Science - Green World, trees, shrub, climbers, creepers



- Teacher asks volunteers to place the flashcard from Appendix 2 under the correct category. Teacher makes sure that students understand the names of categories and plants.
- Teacher places 18 flashcards (*Appendix 3*) face down on the desk closest to the board.
 Selected students come to the board, pick one flashcard, read the name of the plant and stick it under the appropriate heading on the board.
- Students read the names of the plants in each category together, after the teacher, to practise pronunciation.
- Teacher assigns three corners of the classroom to the three categories of plants.
 Students go to a corner of their choice. The teacher gives students 18 flashcards of plants randomly (6 trees: oak, orange tree, apple tree, pine, palm tree, olive tree); (6 shrubs: rosemary, lemon grass, grapevine, green peas, juniper, lavender); and (6 herbs: grass, mint, lily, tulip, daisy, daffodil) (flashcards taken from the board).

If there are more students in the class, teacher makes additional copies of the flashcards. Teacher asks students to look at their cards and say ...

is/isn't a tree/shrub/herb and change their places if necessary.



ACTIVITY 2: 15 MIN

Teacher chooses one plant from the board and describes it as follows:

I like tulips.

Tulips are herbs. They are small plants.

Tulips are red or yellow.

- Teacher writes the sentences on the board. Teacher asks one student to come to the board, choose one picture from the board and describe it orally following the model on the board. More than one student can repeat the procedure.
- In pairs students do a worksheet (*Appendix 4*) where they have to write short sentences about a plant from one of the flashcards.





ACTIVITY 3: 45 MIN

- Teacher tells the students they are going to make a flipbook. Teacher shows online flipbooks and tells the children that they can create their own class flipbook on the plants they are learning. Example: The Life Cycle of a Butterfly on Storyjumper: https://www.storyjumper.com/book/index/18764938/The-Life-Cycle-of-a-Butterfly#page/14
- Students start preparing their flipbook together in a Word document first. Teacher prepares several pages for the book and shows where students are going to put their texts and cover.
- Teacher also announces a competition (Appendix 5) for the best cover.

The class has to create its own **flipbook**, and then share it/ make it public. If the teacher thinks students are too young or inexperienced to do this activity, the teacher can create the online flipbook for them. In order to make an online flipbook, after the book is finished in a Word document, it is saved as a Pdf file. This pdf file can be made into a flipbook with https://online.flippingbook.com/ or any other available software.

• In pairs, students type their texts, which they save online. As children finish their typing, they can start working on the cover for the competition.



Fast finishers: Students practise reading their texts aloud in order to (video) record them for the class clipbook.

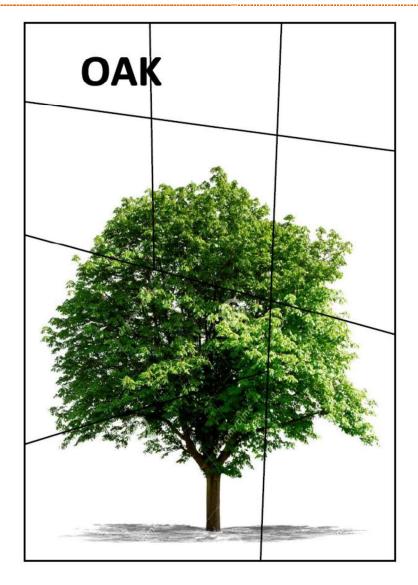
Additional remark: The flipbook can be edited during the three lessons and shared with the children for home study.

Assessment: There are **3 public Kahoot quizzes** to assess children's learning in this module. In order to use them you just have to register first.

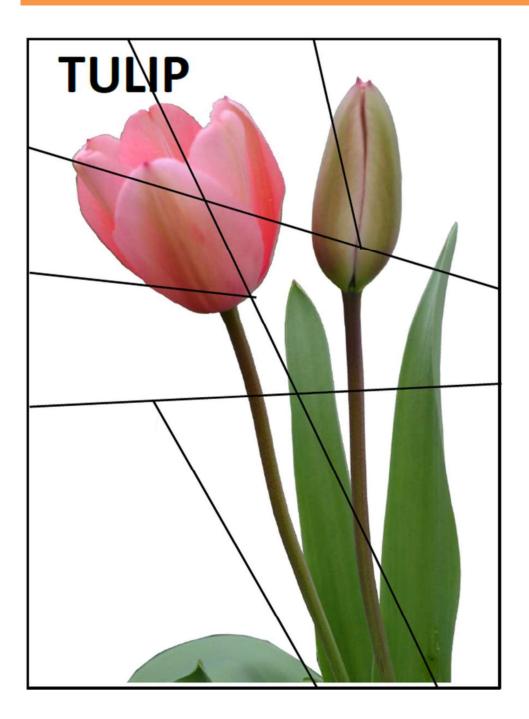
For lesson 1: C4C Unit Science Plants (lesson 1) https://create.kahoot.it/#quiz/4cad7418-f457-48dc-9679-7246a04e6651.



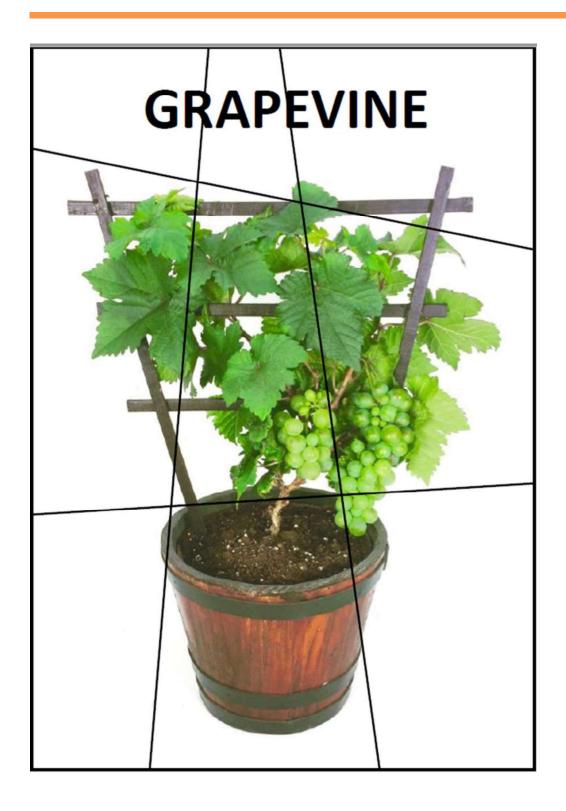
2.1.1 PLANTS - LESSON 1 - APPENDIX 1



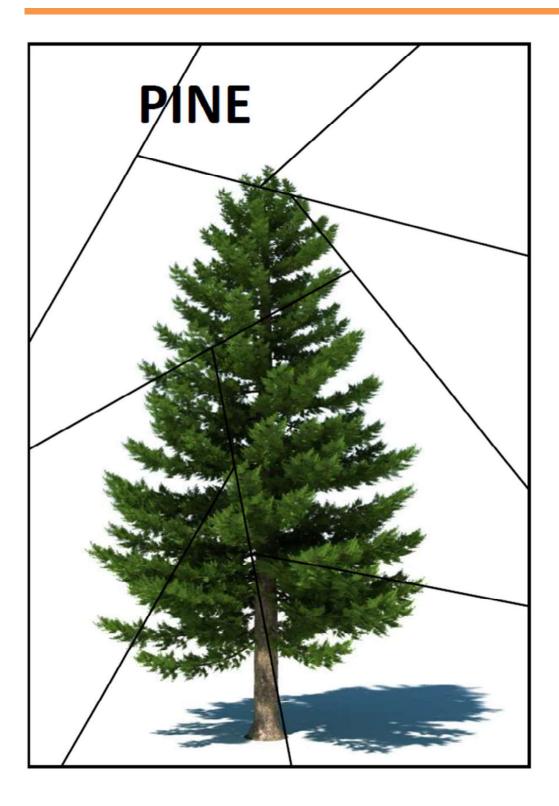




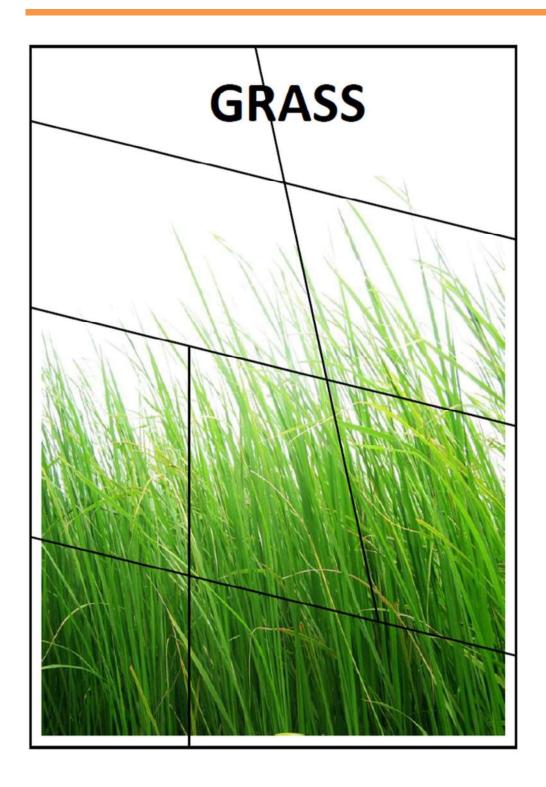




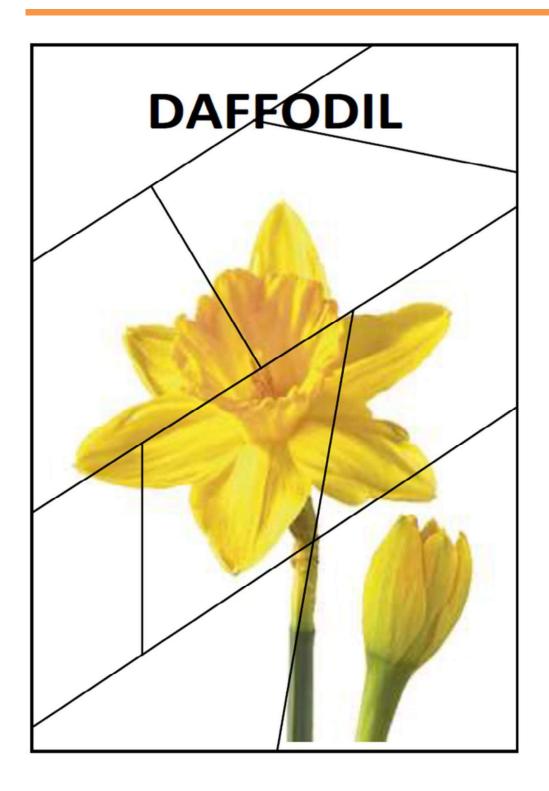














2.1.2 PLANTS - LESSON 1 - APPENDIX 2





GRAPEVINE





PINE





GRASS





OAK



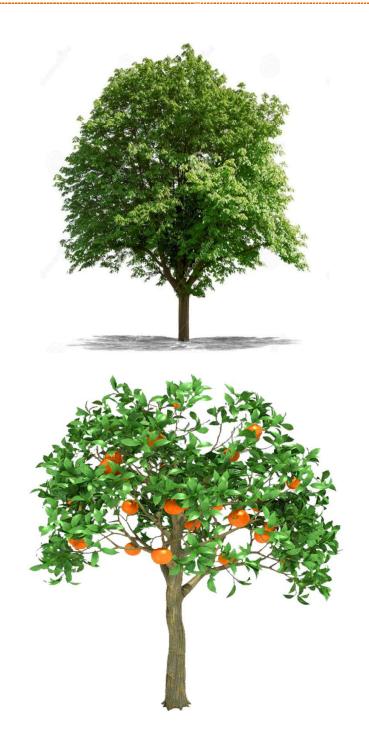


DAFFODIL





2.1.3 PLANTS - LESSON 1 - APPENDIX 3

















































OAK	
ORANGE TREE	
APPLE TREE	
PINE	
PALM TREE	
OLIVE TREE	



ROSEMARY

LEMON GRASS

GRAPEVINE

GREEN PEAS

JUNIPER

LAVENDER



GRASS MINT LILY **TULIP DAISY DAFFODILS**



2.1.4 PLANTS - LESSON 1 - APPENDIX 4

MY FAVOURITE PLANT

CHOOSE ONE PLANT FROM THE FLASHCARDS. WRITE ITS	NAME.
DRAW THE PLANT.	
READ THE EXAMPLE.	
I like tulips.	
Tulips are herbs. They are small plants.	
Tulips are red /yellow.	



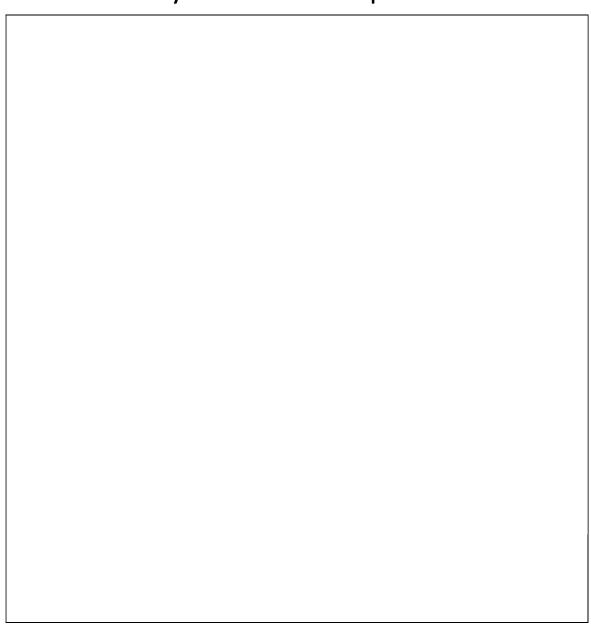
WRITE	SENTENCES A	ABOUT YOU	R PLANT. U	JSE SOME W	ORDS FROM	THE LIST.	
			-		·		

- herbs- shrubs -trees
- big- small- short- tall- medium
- yellow- green- pink- orange brown- purplered- white



2.1.5 PLANTS - LESSON 1 - APPENDIX 5

Draw the cover for the clipbook: "My Class Plant Clipbook"





2.2 Science - Lesson 2 - The World of Plants: Plant Parts and Life Cycle

Linguistic objective

<u>Vocabulary</u>: students name anatomical parts of plants (seed, roots, stem, leaves, flower bud, flower) and learn verbs connected with the life cycle of a plant (drop, grow, the sun shines, the rain falls, the flower opens).

Linguistic objective

<u>Skills</u>: students understand simple information from the authentic video and from the story told by the teacher.

Linguistic objective

Functions: students label parts of plants and order the stages of a life cycle.

Content objective

Students name parts of plants and understand the life cycle of a plant.

Communication

Students talk about parts of a plant and the life cycle of a plant.

Cognition

Reasoning – Students put the stages of a plant life cycle in a logical sequence.



LEAD-IN: 15 MIN

- The teacher draws a schematic picture of a plant on the board. The picture must include seed, roots, stem, leaves, flower buds and flowers. E.g. a bean. Showing the different parts of the plant the teacher elicits their names in L1. The teachers points to the parts of the plant and drills their English names.
- The teacher numbers the parts of the plant from 1 to 6 (E.g. 1 seed, 2 roots, 3 stem, 4 leaves, 5 flower buds and 6 flowers). Note that the names are NOT written on the board.



The teacher calls a number and selected students give the word that this number refers to. For example:

```
T: four
S1:leaves
```

 The teacher secretly writes one number (1-6) on the board and covers it with his/her hand or a piece of paper. Students need to guess the word the secret number refers to.
 For example:

Teacher writes number 3.

```
S1: Is it flowers?
T: No, it isn't.
S2: Is it stem?
T: Yes, it is.
```

The student who guessed is the next one to play.

• The teacher erases the numbers from the board and asks students to draw the plant from the board in the worksheet (*Appendix 1*).



ACTIVITY 1: 30 MIN

• The teacher tells students they are going to watch a video about the life cycle of a plant. https://www.youtube.com/watch?v=dJjNh2pMSB8.



The teacher pauses it after each name of the part of the plant that appears on the screen and asks students to label their pictures. Teacher asks students to add *a seed* to their pictures and label it.



- <u>TPR exercise</u>: Children show parts of the plant using their bodies: *seed* they sit on the floor with arms around their knees; *roots* they stretch their legs and feet; *stem* they stand up; *leaves* they open their arms and hands; *flower buds* make fists, *flower* they shake heads. While doing these movements, children drill the vocabulary.
- Whole class activity: Students sit in small circles in groups of 6. Teacher prepares a set of 24 pictures (*Appendix 2*), one for each group and places them face down in the middle of each circle.



In turns, each student picks a card and mimes the part of the plant to the student sitting to their right. The guessing student asks:

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S: Are you .... (roots, leaves, flower, stem, seed, flower buds)?
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If the guessing student is right s/he wins the card, picks a card from the pile in the middle and mimes the word to the next child in the circle, and so on. If the guessing student is wrong, s/he cannot mime and gives the turn to the child on his/her right. The procedure continues until all cards are taken.



ACTIVITY 2: 15 MIN

- Teacher tells the story with gestures:
 - a. The bird drops a seed (open arms to fly and pretend to drop a seed);
 - b. Roots grow (sit and stretch out legs);
 - c. Sun shines (spread out arms and fingers);
 - d. Rain falls (make downward movements with arms and fingers);



- e. A flower *opens* (join arms and hands at upper body and raise them; then open them);
- f. Bird comes back and looks down (open arms to fly and look down).

The teacher reads each sentence very slowly and shows the gestures. Children mime while teacher reads the story.

• Children listen once again and mime the gestures

One day, a little bird drops a seed in a garden and flies away. Soon roots begin to grow. Then the seed begins to grow. It grows up and up and up to the sky. The sun shines, the rain falls then the sun shines again. A flower opens. The little bird flies back to the garden. It looks down and sees the flower. It's beautiful.

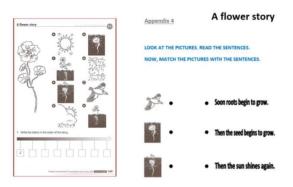
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ACTIVITY 3: 15 MIN

 The teacher gives out a worksheet with drawings from the story (Appendix 3) for students to order the story as he reads the story again. The teacher checks the answers with students.



• Next, students, in pairs, match jumbled sentences from the text with ordered images of the story (*Appendix 4*).





ACTIVITY 4: 15 MIN

• Students sit in a circle. Teacher appoints one student to be the bird, one to be the sun and one or two to be the rain. The rest of the students are plants. The teacher reads the story while the students act it out.

The procedure can be repeated. The teacher can prepare pictures/cut outs of Sun, bird and rain to help students enact the story.



Fast finishers: draw a fantasy plant and label its parts.

Assessment: There are **3 public Kahoot** quizzes to assess children's learning in this module. In order to use them you just have to register first.

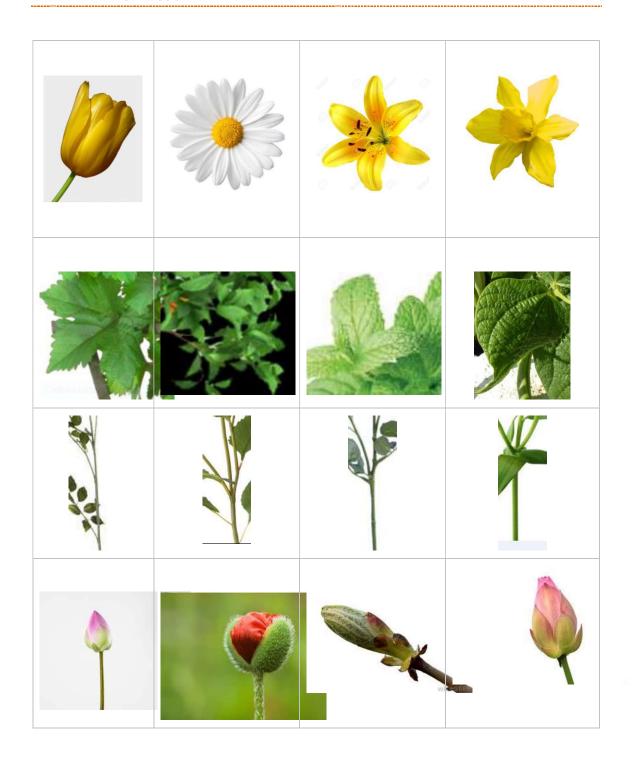
For lesson 2: C4C Unit Science Plants (lesson 2) https://create.kahoot.it/#quiz/c43ca08a-c0ee-408b-900b-d378309be7fc



2.2.1 PLANTS - LESSON 2 - APPENDIX 1 Draw the plant you see:



2.2.2 PLANTS - LESSON 2 - APPENDIX 2



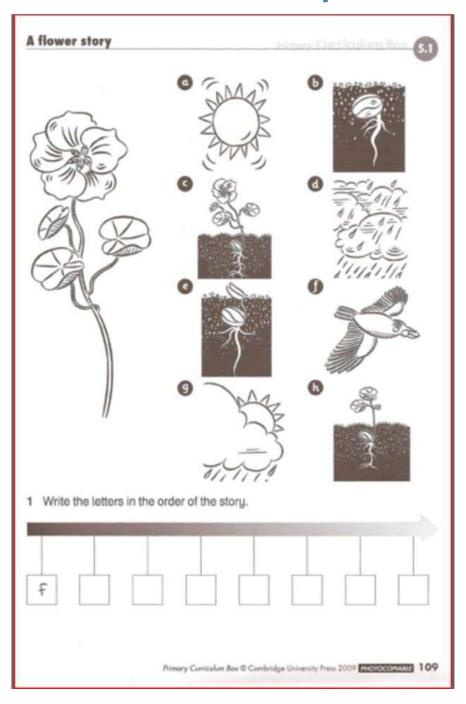






2.2.3 PLANTS - LESSON 2 - APPENDIX 3

A flower story





2.2.4 PLANTS - LESSON 2 - APPENDIX 4

A flower story

LOOK AT THE PICTURES. READ THE SENTENCES.

NOW, MATCH THE PICTURES WITH THE SENTENCES.



Soon roots begin to grow.



Then the seed begins to grow.



Then the sun shines again.



A flower opens. It's beautiful.



One day, a little bird drops a seed in a garden and flies away.



It grows up and up to the sky.



The sun shines.



The rain falls.

Name:	CHARLES CO. CO.
Name:	Date:



2.3 Science - Lesson 3 - The Growth of a Plant

Linguistic objective

<u>Vocabulary</u>: soil, pot, make a hole, drop a seed, cover with soil, pour water, sunlight.

Linguistic objective

Skills: Students follow instructions for an experiment.

Linguistic objective

<u>Functions</u>: students create text for pictures (source: picture book by Helen Nicoll & Jan Pieńkowski: *Meg's Veg* – online version animation film).

Content objective

Students hypothesise about how a plant will grow; Students plant and record growth of a plant through observation.

Communication

Students talk about the life cycle of plants.

Cognition

Perception: Students prepare a zigzag book to record the changes observed in a growing plant; they hypothesize about the growth of a plant.



LEAD-IN: 10 MIN

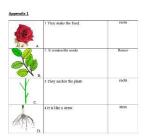
 The teacher asks students to watch the following video: https://www.youtube.com/watch?v=ql6OL7 qFgU, starting at 1:11 and students have to mime parts of the plant with their bodies.





The Parts of a Plant (song for kids about flower/stem/leaves/roots)

• Then, students are given a worksheet (*Appendix 1*), watch the video again and match words with pictures with sentences. When they finish, they read out the correct key and the part of the plant.





ACTIVITY 1: 50 MIN

- Teacher tells students that they are going to grow a plant. For that they need to sow a seed. The teacher asks the students: How do we grow a plant? What do we need?
 Teacher elicits from students what they need to grow a plant in their L1. Teacher gives and drills the English equivalents of the words and writes the words on the board: pot, soil, seed, water, sunlight
- Teacher gives instructions through the PowerPoint presentation (*Appendix 2*) on how to set up the experiment.
 - Teacher elicits instructions one by one from the PowerPoint presentation while the students follow one instruction at a time sowing their seeds in pairs.
- Students make a zigzag book divided into six parts to record the growth of the plant. Teacher uses the instructions to model how to do a zigzag book (**Appendix 3**). Students make observations every 3 days. On each page of their zigzag book students write the date, draw the plant and label the parts they can see.





Students also decide on how often they are going to observe and draw the stages of the plant growth (suggestion: 2-3 days).

Children predict based on the following questions:

How long will it take to grow a stem? leaves? flowers?

How big will it become?

• Teacher gives a worksheet from **Appendix 4** to all the students.

Questions	Predictions	Observations
How long will it take to grow a stem?		
How long will it take to grow leaves?		
How long will it take to grow flowers?		
How big will it become?		

Teacher reads the questions from the table and makes sure students understand them. Students write their predictions in the *predictions column*. They keep track of the changes and complete the *observation column* on regular basis. Once the project is over they compare their findings.





ACTIVITY 2: 30 MIN

Students in groups (suggested: 4 groups) receive a worksheet (*Appendix 5*) with 6 pictures from an animation movie (picture book by Helen Nicoll & Jan Piéncowski: *Meg's Veg* – online version) and label the pictures.



When they are ready they read out their stories with pictures to the other groups.



ACTIVITY 3 (OPTIONAL): 25 MIN EXTRA

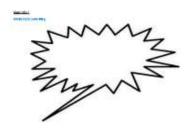
Students watch the animation video Meg and Mog's Veg
 (https://www.youtube.com/watch?v=wnJiS3paaOk) and compare with their stories.
 Each group has to describe a difference between the story they watched and their own story.



Meg and Mog Megs veg



- This can be done in their mother tongue or in English.
 - Students practise the spells aloud by chanting them as a class (*Appendix 6*):
 - a) The sun spell;
 - b) The rain spell.
 - Students (in groups) create a growth spell for their plants that they will use when they water the plant (*Appendix 7*).





Fast finishers: Students can come up with more spells: a spell against weeds.

Assessment: There are 3 public Kahoot quizzes to assess children's learning in this module. In order to use them you just have to register first.

For lesson 3: C4C Unit Science Plants:

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2.3.1 PLANTS - LESSON 3 - APPENDIX 1

A.	1. They make the food.	roots
B.	2. It creates the seeds.	flower
C.	3. They anchor the plant.	roots
D.	4.It is like a straw.	stem

2.3.2 PLANTS - LESSON 3 - APPENDIX 2

Growing a plant from a seed







Put some soil into a pot.





Make a hole with your finger.





Drop some seeds into the hole.





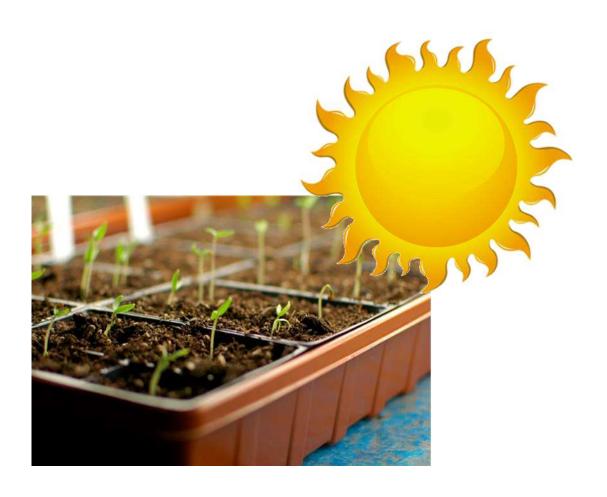
Cover the seeds with soil.





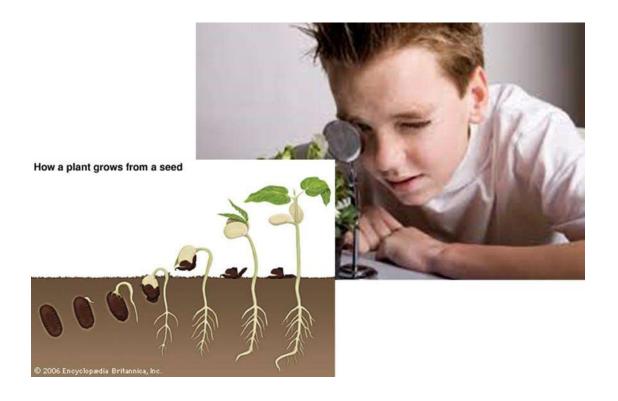
Pour water into the pot.





Give your seeds lots of sun.





Wait for your new plant to grow!

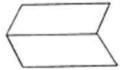


2.3.3 PLANTS - LESSON 3 - APPENDIX 3

SEE https://images.scholastic.co.uk/assets/a/44/f4/109155 100smarty1 sip-45-26007.pdf

How to make a zigzag book

■ Fold a piece of A3 paper in half lengthways and then unfold it.



 Fold the same piece of A3 paper in half widthways and leave it folded.



Fold it in half again in the same direction, then unfold the last fold.



Cut along the centre crease until you reach the middle of the paper.



 Unfold the paper completely. There should be a slit through the middle of the paper. Fold the paper in half lengthways again and then push the two ends inwards towards each other to create a star shape with four arms.





The four arms are the pages of the book. Fold all of the arms around to face the same direction and the book is complete.

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2.3.4 PLANTS - LESSON 3 - APPENDIX 4

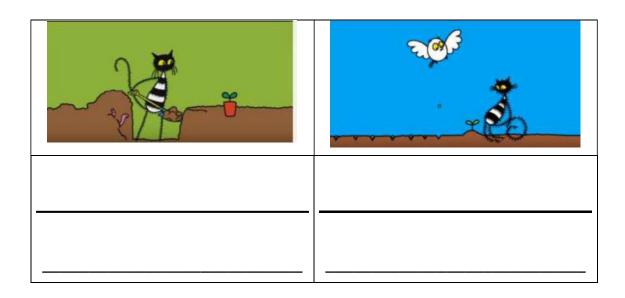
Questions	Predictions	Observations
How long will it take to grow a stem?		
How long will it take to grow leaves?		
How long will it take to grow flowers?		
How big will it become?		



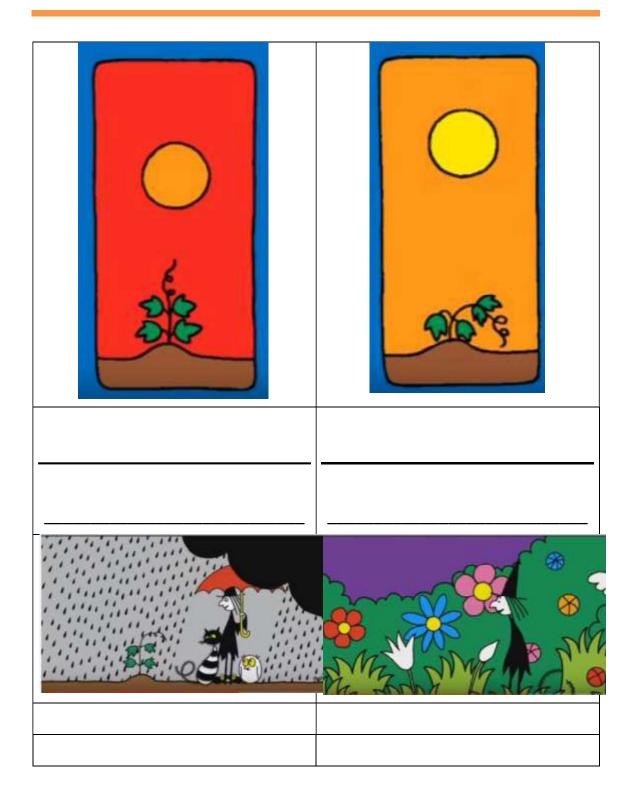
2.3.5 PLANTS - LESSON 3 - APPENDIX 5

https://www.youtube.com/watch?v=wnJiS3paaOk

LOOK AT THE PICTURES, THEN WRITE THE SENTENCES BELOW THE PICTURES TO CREATE A STORY.

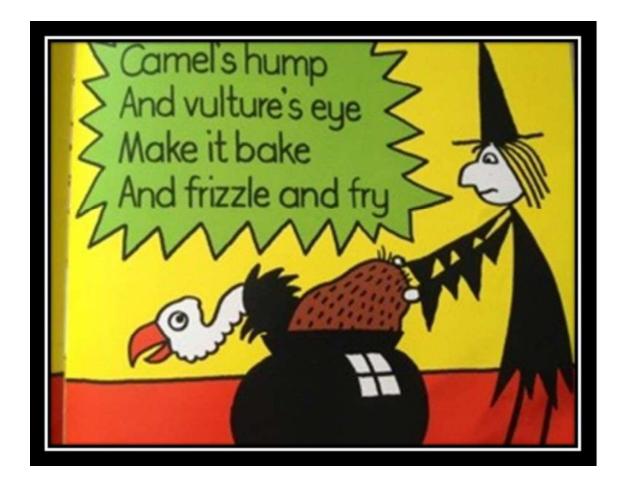




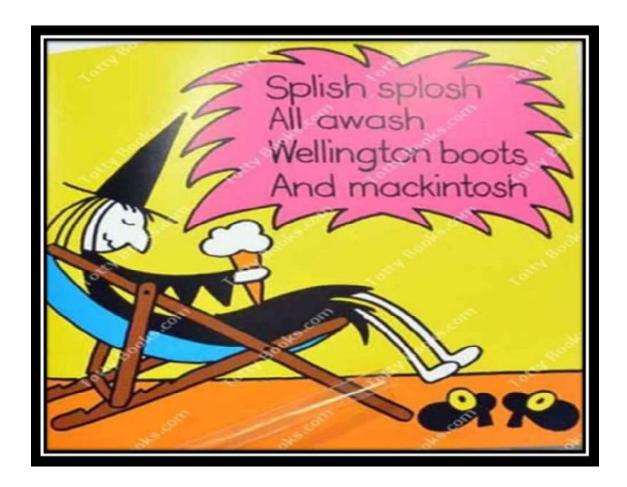




2.3.6 PLANTS - LESSON 3 - APPENDIX 6









2.3.7 PLANTS - LESSON 3 - APPENDIX 7

WRITE YOUR OWN SPELL.

