



# Home Learning Introduction: Topic 10 Let's Grow!



We hope you are all keeping safe and well.

These may be of help to you, particularly if you are trying to manage several children's needs or have limited access to the Internet.

*Page 1: activities – no IT needed Page 2: web links - if you have internet access and some extension.*

*The most important thing is that you are calm for your children and should only do whatever you can manage. Remember that children also learn a lot through play such as Lego and playing games and even through chores such as helping to prepare a meal. Great learning can happen when it's not always adult directed.*

## Wellbeing and Building Resilience

For resources to support this please click this link to our Padlet: <https://padlet.com/HLTWellbeing/jukwcst2scmfbd7t> or use this QR code:



## Being Kind – Showing You Care

### ***While We Can't Hug* by Eoin McLaughlin, illustrated by Polly Dunbar, publisher Faber & Faber (2020)**

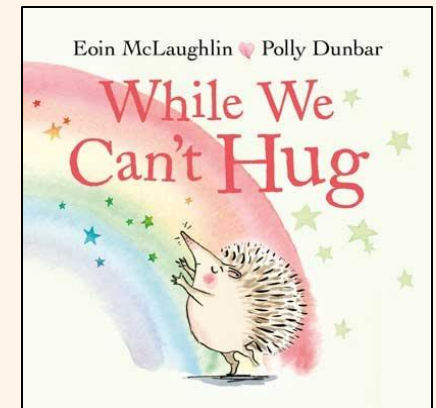
Some children are now back at school and are seeing their friends from a safe distance. The Government has also said that up to six people from different households can now see each other but only outdoors keeping a safe distance from each other.

In the story 'While We Can't Hug', Hedgehog and Tortoise are best of friends. Just like us, they have to keep their distance from one another. This makes Hedgehog and Tortoise feel sad. Owl reassures them that they can still show each other they care for each other, even from a distance. So Hedgehog and Tortoise decide to: wave to each other, write each other a note and paint each other a picture. This makes Hedgehog and Tortoise smile and feel better as they now know how much they each care for each other!

**Some ways you could show someone you care from a distance is:**

- When you see that person tell them how much you have thought about them and how much you have missed them!
- If you still can't see that person, give that person a surprise by sending them a message or ringing them unexpectedly just to 'say hello'.
- Plan together a fun activity that you both could do together in the future. Being and feeling hopeful is very important too.

*How might you show someone you care from a safe distance? What have you been doing at school and at home?*



**Watch the story:**

<https://www.youtube.com/watch?v=2PnnFrPaRgY>

**Remember** to show yourself that you care for you! Write yourself a letter! Start with 'Dear Me, I think I am special because.... Love me'

## Maths

### Roots

When we think of the roots of a tree, they are the part of the plant that sit beneath the soil and *make* the tree.  
Let's think about square root. I know the number square number is 25 - but what root *made* it? In this case the tree is "25", and the root is "5" because  $5 \times 5 = 25$ .

-What is the square root of 9? 36? 64? 100? 169?  
Is number 4 a square number or a square root?  
-The square root is smaller than the square number – always, sometimes, never?



### Deforestation maths

\*Given that 40 football fields of forest disappear in the world every minute, how many football pitches disappear in one hour? during the school day?  
\* If 137 species become extinct every day, how many become extinct in a week, how many will become extinct this month?  
\*75% of 120 trees were cleared for a new building to be built. How many trees is that?  
\*A company were told they could clear trees that were older than 18 years but had to leave the younger trees. To work out the age of cedar trees you divide the circumference by 2.5. The circumference of one cedar tree was 50cm. Will this tree be cleared or not?



### Planting seeds

\*You have 24 seeds. Each seed will produce a flower. You can use as many pots as you like but you must put the same amount of seeds in each pot.  
Draw pictures to show how many pots you could use. How many different ways are there?  
What if you had 48 seeds? What if you had 480 seeds? What operation did you use to work out this problem? Can you think of any more of these types of calculations for an adult to work out?



# Topic: Let's Grow!

#hackneyhomelearning @hackneysuccess



**This topic is all about observing the natural world around us and growing something new! Have fun being a gardener on your windowsill or garden and grow as much as you can! Gardening is great for well-being too! Join in with some of the many projects happening such as the natural History Museum's ISpy nature! or the Wildlife Trust's 30 days wild!**  
**Make sure you socially distance and don't touch plants or trees.**

## Literacy

### Poet-tree!

Think about all the parts of a tree:  
Roots, Trunk, Branches, leaves, blossom, seeds  
Brainstorm some words or phrases for each part of the tree:

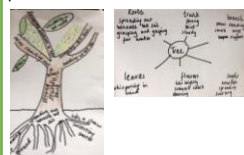
**Adjective:** describing words – strong, sturdy, green

**Adverbs:** describe a verb – slowly, quickly, carefully

**Similes:** describes something by comparing it to something else, using like or as: *The branches were as curved as a giraffe's neck*

**Metaphors:** a word or a phrase used to describe something as if it were something else: *The tree is a giant*

**Personification:** Describing objects as if they are people or characteristics of people *The leaves whispered softly in the wind (leaves can't whisper only people can)*  
Once you have the words or phrases you need to make them into verses about each part of the tree. Then make it into a poet-tree!



### Lost Gardens of Heligan

The gardens were created from the mid-18th century to the beginning of the 20th century in Cornwall. The gardens were neglected after the First World War and restored only in the 1990s. There are various amazing gardens within the whole estate including an ornamental, a vegetable, a jungle and there's even a scary rope bridge that leads to a secret woodland.

Imagine you have stumbled into the Lost Gardens and have just walked over the bridge. Write a short adventure story that begins on the bridge. What does it feel like? What time of day are you there? Can you see any hidden sculptures or secret walkways within the trees and vines? What else can you see? Smell? Hear? Is there someone with you on this adventure? How do you feel? Is there a way out of the woodland? What do you discover?



### How Plants grow!

We find out how plants grow from seeds in information books.

You could:

Make a mini non-fiction book:  
You could include:  
contents, index and glossary pages, headings or subheadings on each page  
interesting facts in facts boxes, instructions on how to plant seeds photos or draw picture of your seeds that you grew in science with captions for them  
a labelled diagram of a plant/tree/flower

You could make a zig zag book by folding an A4 paper



The best dictionary of plant, tree, and flowers:

First write down all the words you want to include. Then put them in alphabetical order. Remember if they start with the same letter e.g. Rose, Root: you need to look at the second letter. If that is the same look at the next letter! Root goes before rose because o comes before s!

Make a little book with a page for each letter. Write the words in alphabetical order and add a simple definition. You could picture too!



## The great dilemma, questions to think and talk about (Philosophy for children: P4C)

Crops such as sugar and cotton were grown on plantations which used slaves. How would you have felt being made to work on a plantation?

Wangari Maathai (see Humanities box) peacefully protested, like the protests that are happening now. She was arrested and put in prison. Why do you think this happened?

Do you believe that 1 small positive change you make could affect what happens in the world? Why or why not?

If you knew that some of the food you ate was available because of slavery what would you do?  
If your only source of income was growing crops that could harm people or the environment would you still grow them? E.g. tobacco for cigarettes or the use chemicals that could be harmful

## Science

### What's Growing Near Me?

Look at plants and trees growing in your local area – Can you find out the names of any? Can any be grouped together because they are similar? Some plants flower like grasses are flowering plants and others are non-flowering plants, e.g. ferns and mosses.

Look at where you find the plants and trees – how does their habitat affect them - some plants or trees prefer sunny or shady areas. What might grow in other countries you've visited?

**Seasons:** We are moving from Spring into Summer – plants and trees that keep their leaves all year round are called **evergreen** and those that shed their leaves are called **'deciduous'** - can you find some examples of each? Can you find the different parts such as leaves, flowers (blossom), petals, fruit, stems, trunks and branches?

Make a table of your observations:

Plant	Drawing	Habitat Notes
rose		sunny places covered in black flies. Bees like them
silver birch tree		woods. white trunk wrapping branches

### Grow your own food!

Did you know that fruit and vegetables are all grown. You can grow these at home too!

The next time you're cutting up a tomato, save some of the seeds and plant them in a small yoghurt pot or cup with some soil. Put them on your window ledge to get light. Give them a little bit of water most days (not too much).

What else could you collect seeds from to grow?

Can you investigate which might grow if you plant them in soil:

Potatoes: save and dry out the peelings  
A clove of garlic  
Cut off the root of an onion/ spring onion.

If you are lucky enough to have an outside space/garden growing your own food is a great activity that you can observe over time. Ask an adult to get some seeds from a shop.

Lettuce, green beans; chilli plants. cress, spring onions; peppers all grow quite quickly.



### Growing a bean!

Take a jam jar and swirl some water around it. Fold some kitchen roll or use cotton wool and put it in the jar, making sure it's slightly damp and place a bean on top. Spray some water on it every day.

After a few days, the bean should have some roots and shoots and this is called germination. Record and draw what you can see each day.

**What conditions do beans need to grow?** Do the same experiment but put a jar in a dark place and with another don't give the bean any daily water. What do you notice?

Think about air, light, water, nutrients from soil, room to grow and temperature.

Move the bean to a pot with compost once it starts to grow. What other beans can you grow?



## Creative Arts

### Make a mini Flower Press

To help preserve plants and flowers we need to learn about them.

Flower presses press flowers to preserve them.

You will need:

• Paper • Cardboard • Scissors • Elastic band  
Cut your cardboard and paper into squares about 6 cm by 6 cm

You will need 15 squares of cardboard and 28 squares of paper

Create a stack with 2 pieces of paper between 2 pieces of card  
Put an elastic band around it – if it is too loose then add some more cardboard and paper.

Now start collecting!

Head outside and look for flowers. Take a little bit off the plant and then put it between your 2 pieces of paper between the card.

Keep adding and keep the press tight! After 2 days have a look at your flowers. What can you see and observe?

You can use your dried flowers as pieces of collage in a flower/insect picture like the artist Helen Ahpornsiri

**Remember!** When collecting, take just a small amount and only collect when there are plenty of other flowers of the same type.

Never uproot any plants. Ask an adult to help and wear gloves if you prefer.



### Artists inspired by Flowers

Artists throughout history have been inspired by plants and flowers. Georgia O'Keefe was an American female artist.

She was inspired by nature and many of her paintings were of flowers, but she magnified them to be much bigger.

To draw like Georgia:

Find a picture or a real-life flower

Take an A4 (or bigger!) piece of plain paper  
Imaging the sides of your flower have fallen off the page so your petals must touch all 4 edges of the paper.

Draw the outline petals and the centre of your flower.

Some of the petals might overlap. Look closely to include the correct shape or the petals and any detail.

Once you have your outline use bold colours and



### The sounds of nature

There are many nursery rhymes about plants such as 'Mary, Mary, Quite contrary' 'Here we go round the mulberry bush' 'Lavenders Blue' and 'Oats, Peas, Beans and Barley Grow.' Can you sing them or any others about trees or plants?

Some music has been written to sound like aspects of nature. Listen to 'The flight of the bumble bee' by Rachmaninoff – can you listen to this and move as if you are a bumble bee?

Listen to the sounds of nature could you create a piece of music to reflect the sounds you hear? What instruments could you use? Would it be fast or slow? Loud or quiet?

The Four Seasons are a series of concertos written by Antonio Vivaldi in 1716/7. Listen to each – how do they represent each season? Which instruments can you hear/use?

Hackney Music Service is currently running the '30 days of music' festival. Here are some musical ideas:



## Humanities

### Did you know?

Did you know that:  
1. 85% of plant life is found in the ocean! (*What plants, do you think, live in our seas and oceans?*)  
2. The country Brazil is named after a tree!  
3. 70 000 plant species are used in medicines!  
4. Trees are the longest living organisms on our planet!

5. The Stinking Corpse Lily is the smelliest flower on earth! (*What do you think it smells like? Why does it have such a pungent smell, do you think?*)



6. The fastest growing woody plant in the world is the bamboo plant – it grows just under 89 cm a day! (*What animal relies on bamboo as their main source of food?*)

7. Many plants are carnivores! (*What do you think the Venus Flytrap plant eats?*)

8. The word 'banana' is an Arabic word meaning fingers!

9. Oak trees only produce acorns when they are 50 years old!

10. Cucumbers, avocados and tomatoes are fruits, not vegetables! (*Why?*)

Can you make up a plant-based quiz for someone to answer?!

### Wangari Maathai: Mama Mati

Wangari Maathai was Kenyan and Black African woman and environmentalist to win a Nobel Peace Prize. She saw how deforestation (cutting down trees) was affecting the soil and crops for food could not be grown. She got more and more women to plant seedlings all over Kenya to replace the trees that had been cut down. This was called the **green belt** movement because the trees looked like a green belt across Kenya. She protested and tried to stop the government cutting down more trees, but she was arrested and put in prison. Design a poster explaining to people why they need to plant trees and how they help the environment? Make it colourful and bright. Include pictures and not too many words.

Use some of Wangari's quotes:

"Until you dig a hole, plant a tree, water it and make it survive, you haven't done a thing. You are just talking."  
"It's the little things citizens do. That's what will make the difference. My little thing is planting trees."



### Mapping trees:

There is a huge project happening to find out where trees are being grown. On your walk where you live, look for trees that have been planted. Make a map showing where they are. Use a key to show how many different trees there are. Can you mark on your map you think more should be?



# Topic 10: Let's Grow!

These are links to websites – please practise Internet safety with your children whilst accessing these websites.

## Useful websites for parents and carers:

### Wellbeing, building resilience and PSHE:

1. While We Can't Hug: <https://www.youtube.com/watch?v=2PnnFrPaRgY>
2. Playing together but apart: <https://classroom.thenational.academy/lessons/playing-together-but-apart-4e7276/#>
3. Support for grieving families (for Father's Day): [https://www.childbereavementuk.org/Event/donate4dads?utm\\_source=News%2C+events%2C+volunteering%2C+fundraising+updates&utm\\_campaign=Oaa81079ab-TWOPOINTSIXCHALLENGE+April2020\\_COPY+01&utm\\_medium=email&utm\\_term=0\\_91395e89a6-0aa81079ab-67227679](https://www.childbereavementuk.org/Event/donate4dads?utm_source=News%2C+events%2C+volunteering%2C+fundraising+updates&utm_campaign=Oaa81079ab-TWOPOINTSIXCHALLENGE+April2020_COPY+01&utm_medium=email&utm_term=0_91395e89a6-0aa81079ab-67227679)
4. Create a diary on your thoughts and feelings during this time (in a comic!): <https://www.makebeliefscomix.com/>
5. The power of kindness: <https://www.redcross.org.uk/get-involved/teaching-resources/kindness-calendar>
6. The CAMHS Alliance for Hackney has produced a comprehensive list for parents and carers: <https://www.learningtrust.co.uk/sites/default/files/document/City%20and%20Hackney%20CAMHS%20support%20for%20parents-carers.pdf>
7. Talking to children who are worried about coronavirus: [https://www.nspcc.org.uk/keeping-children-safe/childrens-mental-health/depression-anxiety-mental-health/?utm\\_source=Adestra&utm\\_medium=email&utm\\_content=Talking%20to%20a%20child%20worried%20about%20coronavirus%20%28COVID-19%29&utm\\_campaign=CASPAR-2019-03-30](https://www.nspcc.org.uk/keeping-children-safe/childrens-mental-health/depression-anxiety-mental-health/?utm_source=Adestra&utm_medium=email&utm_content=Talking%20to%20a%20child%20worried%20about%20coronavirus%20%28COVID-19%29&utm_campaign=CASPAR-2019-03-30)
8. Resources for families around anxiety and stress: <http://www.safehandstinkingminds.co.uk/covid-anxiety-stress-resources-links/>

## Films and TV shows

The Secret Garden; The NeverEnding Story; The Jungle Book; The Lorax, Fern Gully; The Last Rainforest, Bee Movie, Wall-E

Learn the Spanish words for colours (you did this last week) and see if you can find a flower for every colour! Use the Spanish numbers to count how many you found!

<https://rockalingua.com/videos/colors-and-numbers>  
<https://rockalingua.com/games/colors>

## Religious Education

Flowers have significance in several world religions. The main Hindu prayer rites are called 'puja' which means "the flower act". A very important flower for Hindus and Buddhists is the lotus flower which, for Hindus, symbolises purity and for Buddhists, symbolises the path to knowledge or enlightenment – lotus flowers begin in the mud below a pond just as people are born into suffering. Christians have flowers at ceremonies such as weddings, funerals and different colour flowers are associated with different events such as white lilies at Easter. The olive tree is a symbol of peace for many religions.

Can you find out more about how flowers and trees are used?  
 Have you seen any examples of people using flowers and trees in your own/other peoples' religions?



## Literacy

### WRITING COMPETITION FOR YEAR 5 and 6!

<https://annefrank.org.uk/the-anne-frank-creative-writing-awards-2020/>

In this time of lock-down, when people are separated from each other, we invite you to write a poem, story, essay or article inspired by Anne Frank which shows how important it is that we all live together with kindness, respect and equality.

Mini-beast poems

<http://brian-moses.blogspot.com/2020/06/mini-beasts-poetry-anthology-4th-of.html?m=1>

Poems in form of trees

<https://poetryrondabout.com/2020/06/05/words-grow-on-trees-art-and-poetry-idea-from-sue-hardy-dawson/>

Secret start to a story: <https://www.literacyshed.com/the-mystery-shed.html>

Similes and metaphors: <https://www.bbc.co.uk/bitesize/topics/zfkk7ty/articles/z9tkxf>

Writing a story: <https://www.theguardian.com/childrens-books-site/2016/jun/01/top-writing-tips>

Upper KS2 game: <https://www.saps.org.uk/primary/teaching-resources/207>

### Books Booktrust plants booklist

<https://www.booktrust.org.uk/booklists/p/plants-and-gardens/>

EYFS  
N  
and  
R

Ten Seeds: Ruth Brown



Titch: Pat Hutchins



Jaspar's Beanstalk:  
Nick Butterworth

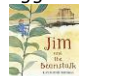


The tiny seed:  
Eric Carle



KS1  
Y1-  
Y2

Jim and the Beanstalk:  
Raymond Briggs



The Little Gardener:  
Emily Hughes



Wangari's Trees of Peace:  
Jeanette Winter



Little Guide to  
Wildflowers:  
Charlotte Voake



A seed is sleepy  
Dianna Aston



KS2  
Y3-  
Y6

Ready Steady Grow:  
Royal Horticultural  
Society



100 Facts,  
Rainforests



Plantopedia:



The Boy who grew  
dragons:  
Andy Shepherd



Toby Alone:  
Timothée De Fombelle



Great kapok tree  
Lynne Cherry



The Secret Garden:  
Frances Hodgson  
Burnett



## Science (Also apps for plant and tree identification)

Wildlife trusts 30 days wild festival during June:

<https://action.wildlifetrusts.org/page/59240/petition/2>

Natural History Museum I spy Nature Festival: [https://www.nhm.ac.uk/events/family-festival-i-spy-nature.html?utm\\_source=fb-image-post-20200523-vt&utm\\_medium=social&utm\\_campaign=family-festival](https://www.nhm.ac.uk/events/family-festival-i-spy-nature.html?utm_source=fb-image-post-20200523-vt&utm_medium=social&utm_campaign=family-festival)

Sounds of wildlife: <https://www.theguardian.com/environment/ng-interactive/2020/may/20/relax-to-the-sounds-of-british-wildlife>

Kew Home learning: <https://www.kew.org/learning/learning-at-home>

Cambridge Botanical gardens: <https://www.botanic.cam.ac.uk/education-learning/families/athome/>

Inventions to help nature: <https://www.littleinventors.org/>

Growing tomatoes: <https://www.rhs.org.uk/education-learning/gardening-children-schools/family-activities>

<https://www.saps.org.uk/primary/beyond-the-classroom>

Growing plants: <https://www.bbc.co.uk/bitesize/topics/zpxnrvd>

London tree map – not much for Hackney currently: <https://www.london.gov.uk/what-we-do/environment/parks-green-spaces-and-biodiversity/trees-and-woodlands/london-tree-map>

Growing beans: <https://www.science-sparks.com/bean-in-a-jar/>

The world's largest flower: <https://www.youtube.com/watch?v=R0WmkoOZ6ZE>

How does rice grow? <https://www.youtube.com/watch?v=Yb4AMwr0vNE>

## Humanities

The trans-Atlantic slave trade

<http://www.showme.uk/ed/toril/5663-the-trans-atlantic-slave-trade>

<https://www.liverpoolmuseums.org.uk/schools-and-groups/resources-transatlantic-slavery>

Teachers pack from Anti-Slavery museum

<https://images.liverpoolmuseums.org.uk/2020-01/International-Slavery-Museum-teachers-pack-0.pdf>

Teaching History with 100 objects:

[http://www.teachinhistory100.org/objects/about\\_the\\_object/thomas-clarksons-campaign-chest](http://www.teachinhistory100.org/objects/about_the_object/thomas-clarksons-campaign-chest)

Information on the slave

trade <https://dhi.library.cofc.edu/exhibits/show/african-passages/lowcountry/adapt/introduction/atlanticworld/plantations-before-the-transat>

Wangari Maathai

<https://kidworldcitizen.org/introduce-kids-to-nobel-peace-prize-winner-wangari-maathai>

<https://www.brainpop.com/health/conflict-resolution/wangari-maathai/>

<https://thekidsshouldseethis.com/post/wangari-maathai-i-will-be-a-hummingbird>

<http://internationaltreefoundation.org/wp-content/uploads/2017/11/Tree-Power-Ed-Pack-2017.pdf>

Reading of Wangari's Tree of Peace

<https://www.youtube.com/watch?v=08PbLwOtZJA>

## Creative Arts

Making a Flower press and other activities: <https://www.botanic.cam.ac.uk/education-learning/families/athome/>

Art using dried flowers:

<https://www.thiscolossal.com/2020/05/helen-ahpornsiri-botanic-illustrations/>

Georgia O'Keefe

<https://www.okeeffemuseum.org/creative-activities/color-me/>

<https://www.tate.org.uk/kids/explore/who-is/who-georgia-okeeffe>

<https://www.okeeffemuseum.org/creative-activities/>

Andy Goldsworthy:

<https://classroom.thenational.academy/lessons/to-investigate-the-colours/>

Hackney Music Festival: <http://www.hackneymusic.co.uk/join-us-for-30-days-of-music-making-in-june/>

Validi: <https://www.youtube.com/watch?v=VD-lvMChuDG&feature=youtu.be>

Rachmaninoff: <https://www.youtube.com/watch?v=M93qXOWaBdE&feature=youtu.be>

## Maths

Deforestation Maths: [http://www.mathematicshed.com/uploads/1/2/5/7/12572836/rainforest\\_teacher\\_guide.pdf](http://www.mathematicshed.com/uploads/1/2/5/7/12572836/rainforest_teacher_guide.pdf)

Plants – garden plan investigation: <https://nrich.maths.org/36>

Tiles on a patio investigation: <https://nrich.maths.org/35>

Square roots: <https://www.mathsisfun.com/square-root.html>

Estimating height of trees:

[https://www.saps.org.uk/attachments/article/141/SAPS\\_How\\_to\\_find\\_the\\_height\\_of\\_a\\_tree.pdf](https://www.saps.org.uk/attachments/article/141/SAPS_How_to_find_the_height_of_a_tree.pdf)

Digital roots investigation: <https://www.primaryresources.co.uk/mathspdfs/digitalroots.pdf>