

# HOW TO USE THIS RESOURCE

This pack is inspired by the themes of PoliNations: biodiversity, diversity and our environment, which are the titles for each teaching session.

# THREE FLEXIBLE LESSONS FOR PRIMARY SCHOOLS.

This teaching resource will support and inspire teachers to find creative ways to connect with the themes of PoliNations.

The activities will encourage learners to engage with the journeys of people and plants, global Britain and the environment around them.

Learners aged 7-11
Curriculum: STEM
and Art Subjects



Each session contains information about the given theme, discussion questions for the class and a creative activity.

The activities included are written in child-friendly language to aid session planning. This pack is targeted towards learners aged 7 – 11, but they are easily adaptable for lower and upper age ranges. Curriculum links for planning can be found at the end of this resource.

This resource pack is full of ideas and inspiration. It is made up of three sections with activities that can be taught across two or three lessons. You can adapt the suggested tasks and sessions to suit your pupils.

By taking part, we would love learners to become 'Pollinators'; people who are passionate about the environment and who embrace and celebrate diversity at school and in their community.

The pack can be displayed on an interactive whiteboard for use in the classroom. We hope your class enjoy becoming Pollinators!



# TAKE PART IN POLINATIONS

This resource has been designed as a flexible set of starting points, which you can build into your teaching.

We hope the resource will give you a chance to share some new ideas and activities with your pupils and introduce them to the exciting stories and journeys of people and plants!



PoliNations will be taking place in Birmingham from Friday 2nd – Sunday 18th September.

The festival will host free events, workshops and performances including live music, dance, spoken word and drag and we hope that you will join us to have fun and discover more about the themes of this pack!

The 'Mother Tree' will also be in Edinburgh from Thursday 4th – Friday 12th August at Assembly George Street.

We will be running free tours and workshops for schools at PoliNations in Birmingham in September 2022. So, if you are a school and want to find out more information about this exciting opportunity, please register your interest by emailing us at:

takepart@triggerstuff.co.uk

#### SHARE YOUR PATH TO **BECOMING POLLINATORS!**

We would love to see what you create. Share your photographs and creations on social media using the handles:

#PoliNations

You can also email them to us at: takepart@triggerstuff.co.uk

# LESSON OVERVIEW



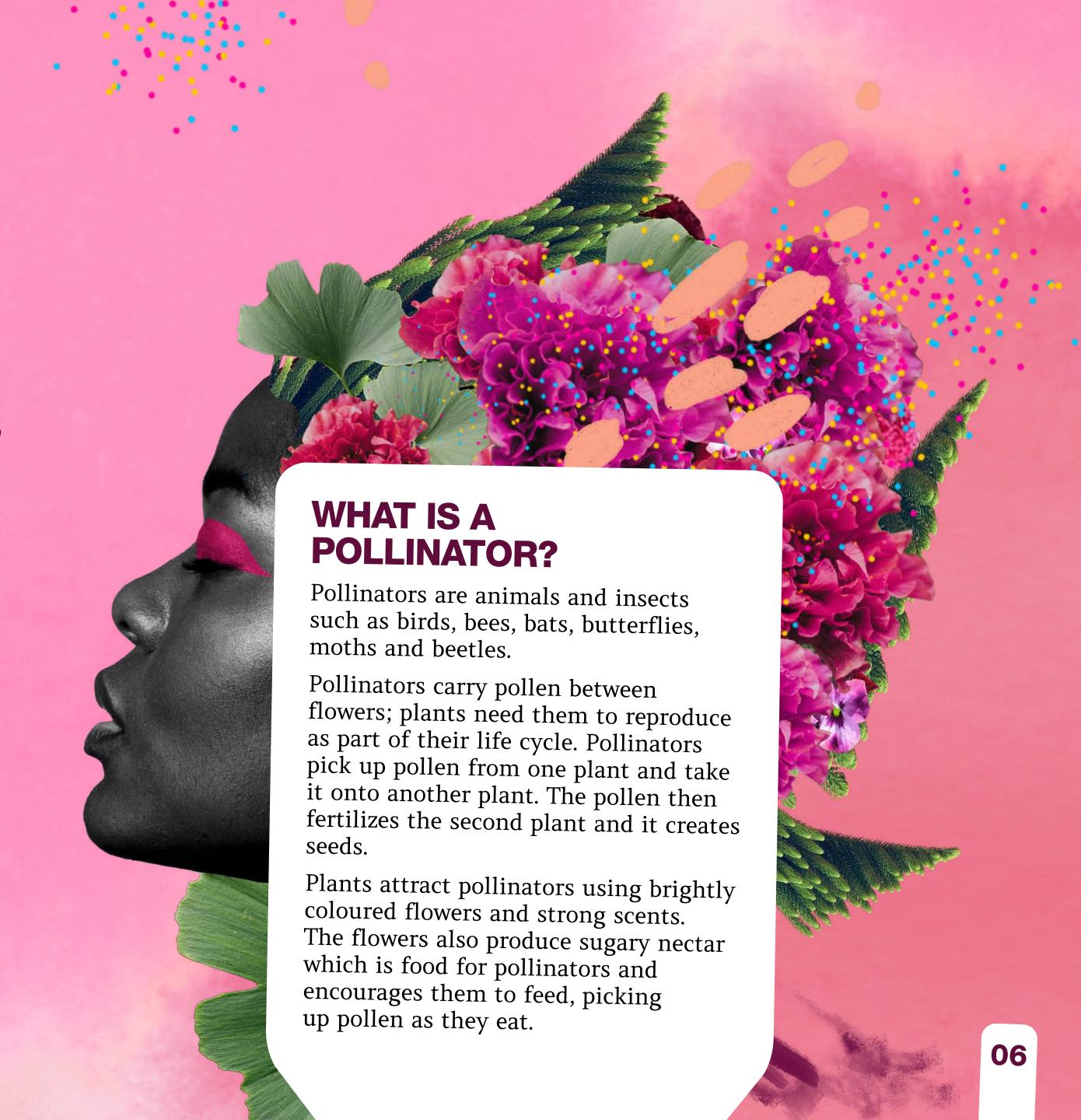
Lesson	Time required	Slide numbers	Lesson summary	Suggested materials for creative activity (per class)
Lesson 1: Biodiversity  Geography / Art The World Around Us / PDMU Sciences / Art and Design Humanities	30 Mins +	Slides 8-16	Lesson 1 explores biodiversity, all the different kinds of plants, insects and animals that you can find in one area. In this lesson you will explore plants from all over the world and make your own iconic plant sculpture.	Scrap or recycled cardboard (boxes, cardboard tubes etc.), coloured paper and card, pipe cleaners, beads, tissue or crepe paper, plastic bottles and lids, paint and felt pens, tape, PVA glue.
Lesson 2: Diversity  PSHE / Art The World Around Us / PDMU Health and Wellbeing / Art and Design Humanities	30 Mins +	Slides 17-22	Lesson 2 explores diversity, focusing on celebrating our similarities and differences. In this lesson you will create your own PoliNations portrait.	Collage materials such as old newspapers and magazines, images of plants and flowers to cut out, coloured paper, PVA or glue sticks, photos of each class member printed large on A4 paper, A3 card/paper, coloured pens/pencils, digital camera (optional).
Lesson 3: Our Environment  The World Around Us / PDMU  Social Studies  Science and Technology / Humanities	30 Mins +	Slides 23-26	Lesson 3 explores our environment and what nature needs to thrive. In this lesson you will make a wildflower seed bomb.	Mixed wildflower seeds, 10L of soil or peat-free compost, water, bag of powdered clay (found in craft shops), 30 mixing bowls, 1 pot for measuring.



# POLINATIONS

PoliNations is an epic city-centre garden filled with thousands of plants and giant towering trees.

It celebrates the incredible plants we see every day that have come from all over the world; roses, daisies, apples and even tea! These are plants that have come on amazing journeys, that tell us the story of global Britain.



### TAKE THE POLLINATOR PLEDGE!

Take part in PoliNations!
Become a Pollinator by
taking the Pollinator Pledge!

After completing these lessons, each member of the class will receive a special Pollinator certificate, easily printed for them to take home. This can be found at the end of the pack.

### POLLINATOR PLEDGE

I understand the amazing journeys that many people and plants have made.

I celebrate differences in my school and my community.

I will make small steps to protect the environment.

I will encourage others to do the same.

Like bees and butterflies who spread pollen and help our flowers grow, the Pollinator Pledge will inspire learners to apply their new understanding to become advocates for celebrating our differences, protecting nature, and who will be kind to people from all walks of life.



# **BIODIVERSITY**

**Biodiversity is all the different kinds** of plants, insects and animals that you can find in one area. Having lots of different plants is essential for the survival of wildlife and the wider environment.

Many of the diverse plants that are in our gardens and parks are not originally from the UK and have travelled here from across the world. Did you know that around 80% of plants found in UK city-gardens originated overseas?

Here are some examples of how they got here:



British botanists travelled around the world collecting plants to research and to collect, such as the lotus flower in Asia.

#### **Colonisation**

As Britain colonised many countries around the world it brought back crops to the UK, such as cotton from America and from Asia to Europe. sugar cane from the Caribbean.

#### **Trade**

The Ancient Silk Road brought apples, roses and other materials made from plants, such as paper,

#### **Immigration**

People moving to the UK often brought plants from their homeland. For example, people from the Caribbean brought ackee and breadfruit to the UK when they were invited to move here after WW2.

# POLINATIONS ICONIC PLANTS

As part of PoliNations we are celebrating iconic plants by commissioning artists and designers to make sculptures and costumes based on their favourite plants.

The artists are creating their artwork by taking inspiration from plant and flower origin stories – their colours, uses, structures and what they symbolise.

This is the design artwork for one of the iconic plant sculptures, which is taking inspiration from the tulip. It will be 4 metres tall and look like it is made of gold.

The design references the story that the tulip, which originates from Asia, became fashionable to collect in the Netherlands and became very expensive to buy - with one tulip bulb costing more than a house in some cases!

'Tulip mania' caused a financial crash in 1637 and people who invested in tulips lost lots of money.

Why do you think the artist has chosen to make this artwork gold?

A tulip is normally 30cm tall, why do you think the artist has designed the artwork to be so tall?

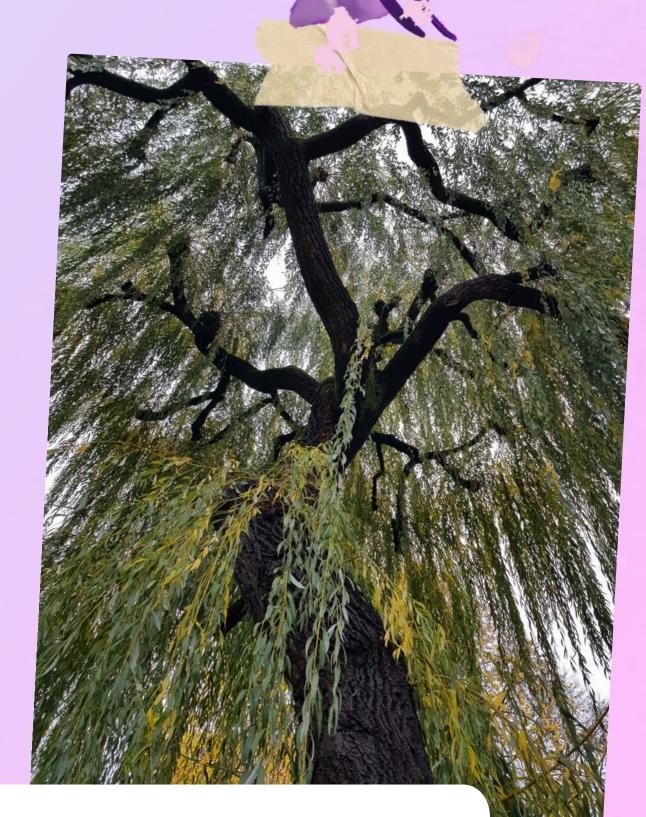
# ICONIC PLANT

Our diverse ecosystem includes plants from all over the world and come in different shapes, colours and sizes. Here are some very different plants that we see everyday that come from all over the globe and have some fantastic stories!



#### **PANSY**

The pansy is a symbol of free thought and brave women fighting for their right to vote wore pansies as a symbol for the Suffragette movement. The word 'pansy' comes from the French word for thought – pensé.



#### **WILLOW**

The willow tree is a common sight in the UK. It's a symbol of fertility and new life, as a willow branch can be planted in the ground and from it a new tree will grow in its place. It is used to make tables, chairs, and it's bark has been used in medicine as a type of aspirin.



Many roses are a familiar sight in British gardens and parks. In fact, the roses you see in British gardens are a hybrid of a rose from China that has been grown for over 5,000 years! During the Roman times, roses were grown in the Middle East and used as confetti at celebrations, for medicinal purposes, and as a source of perfume. It is the National flower for England and it was used as a symbol for the Tudor Wars of the Roses.

# ICONIC PLANT FOCUS

# THE APPLE HISTORY

Apples are a very common sight in supermarkets and greengrocers in the UK. Apples grow on trees and they grow very well in the UK climate.

#### **APPLE TIMELINE!**

The first apples grew in wild, mountainous apple forests in Kazakhstan. In fact, the name of the city of Almaty in Kazakhstan means 'full of apples'!

The apple started to spread from Kazakhstan via animals and birds who carried the seeds as far as Syria.

The Romans found apples growing in Syria and brought them to UK via the Silk Road (more info on next slide). Apples can be found growing all along this route, as people dropped apple pips when they travelled. Apples were an easy snack to take for travellers and Roman armies - the first fast food!

Apples back then didn't look like we know them now – they used to look like a shrivelled berry and were much more bitter in taste.



# ICONIC PLANT FOCUS

# THE APPLE TODAY

The Romans developed many new apple varieties, making them bigger and sweeter each time!

In the 1800s Victorians who were passionate gardeners developed the apple further and created new varieties. They also started the trend of growing fruit in domestic and kitchen gardens as well as in large orchards on farms.

There are now over 7,500 varieties of apple, however in the UK we only grow a handful commercially. Farmers use cuttings of tree branches to make new trees. Imagine all of the Granny Smith apples you see in the supermarkets originally come from ONE TREE and we've just taken cuttings and replanted them.

Did you know that pupils in American schools used to give an apple to their teachers to say thank you?

This tradition has roots in Denmark and Sweden in the 1700s, when poor families used to pay for their children's education with baskets of apples.

The apple appears a lot in mythology, fairy tales, and in British culture.

Can you think of where you have seen the apple image or symbol in a story or as a logo?

Next time you eat an apple, think about its amazing origin story and how far it travelled to end up in your lunch box!



# MAKE YOUR OWN ICONIC PLANT SCULPTURE!

Just like the artists and designers we are working with for PoliNations we would like you to design and make your own artwork inspired by your favourite plant or flower!





Why not research different types of plants and flowers – you could take inspiration from the pansy, rose, fern, tulip, apple or come up with your own suggestions!

Use your library or any online tools you have to hand to do your research. Try to find a flower or plant with an interesting story or choose a country which you have visited or your family are from and research which plants come from there!



Use recycled materials - this a great way to get creative and to help the planet too!

SCULPTURE!



#### Instructions

- 1. Choose your plant!
- 2. In pairs or small groups, describe your chosen plant to each other. Is it colourful? Is it tall? What shape are the petals or leaves? What else do you notice?
- 3. Choose what recycled materials your plant sculpture will be made from.
- 4. Build a structure using tape, glue and the chosen recycled materials.
- 5. Decorate the structure using additional materials like tissue paper or pipe cleaners.
- 6. Add final touches using coloured pens or paint.



## DIVERSITY

Just like a garden is made up of many different plants, the UK is made up of lots of different people from different ethnicities, races, cultures and backgrounds. It is a multicultural country!

Think about a garden and how many plants make up a flower bed. Wouldn't it be boring if the garden contained only one type of plant or flower?

In fact, lots of different plants (biodiversity) are essential for the survival of wildlife, humans and the wider environment.

Your school is made up of pupils and staff from different cultures and communities. It's important to celebrate our differences and how we are similar too. It's the same as in nature. Difference makes us stronger.

# Discussion task – What are your roots?

Does anyone speak another language?

Has anyone lived in another country?

Does anyone have parents or grandparents who were not born in the UK?

Did anyone know these things already?

Did anyone learn anything new?

Did you know... that Poli means many?
Our title means 'many nations'!



# DIVERSITY

Just like plants, the UK population is made up of people with roots from all over the world.



Throughout history, people have made journeys to the UK for various reasons:

#### Conflict:

Huguenots from France in 1600s came to the UK to escape religious violence.

#### **Slavery:**

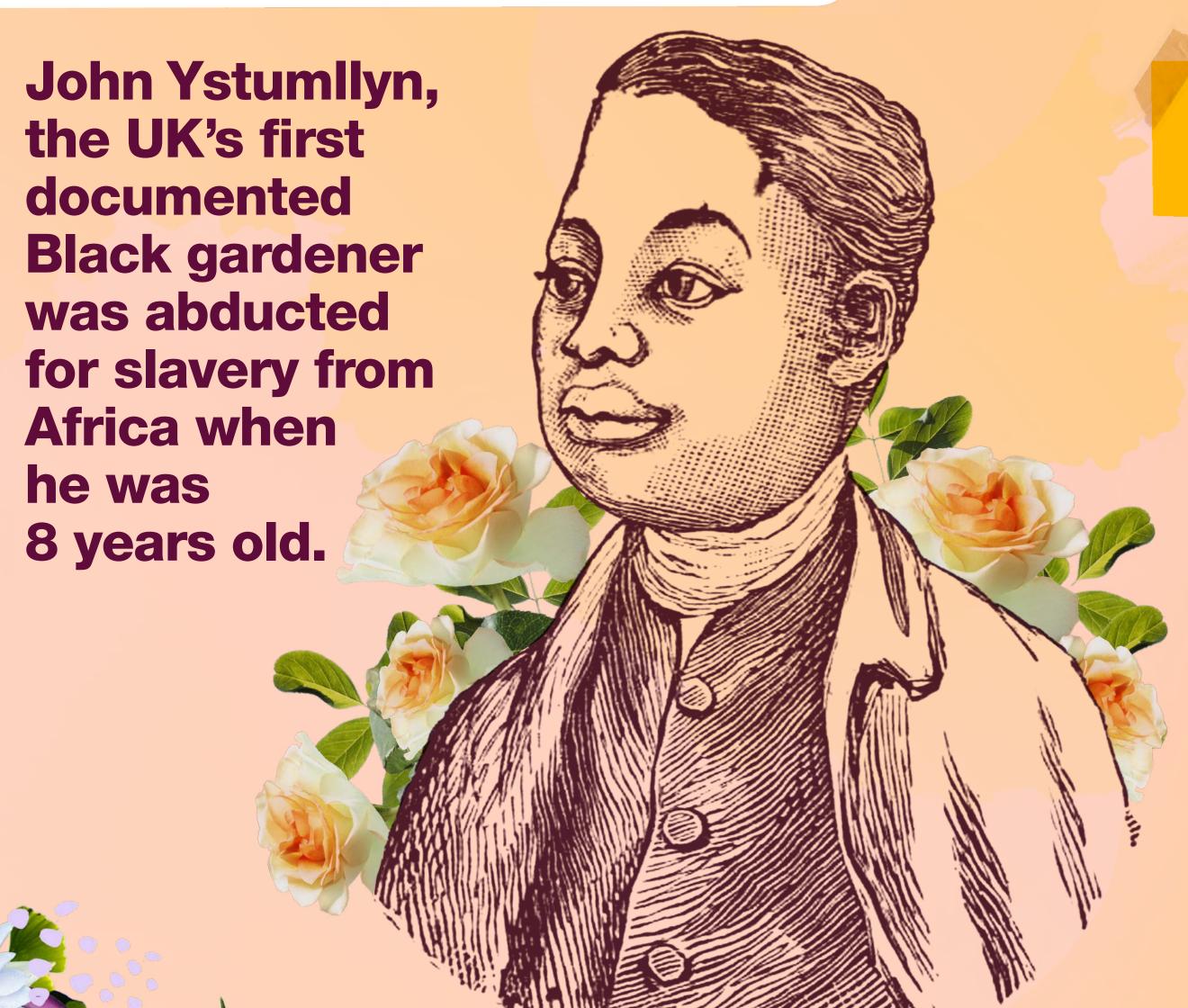
African people in the 1700s and 1800s were captured, enslaved, and forced to work in colonies or become servants in Britain.

#### Work:

After WW2, people from Commonwealth Countries were encouraged to live and work in the UK to help rebuild the country after the war.

While the UK has welcomed many people from all over the world, it is important to remember that the history of The British Empire was often painful for many people, especially due to transatlantic slavery. We are going to read about one such person who was forced to Britain during slavery (on the next page).

# John Ystumllyn



He was taken to Wales in 1746 – that's nearly 280 years ago!

His original name and where exactly in Africa he is from is unknown, but it is known that he experienced racism throughout his life in the UK. He loved horticulture and he became a respected gardener, which was an unusual job for a Black man in the 1800s. John married a local white woman and this is recorded as one of the first interracial marriages in Wales.

He has recently had a yellow rose named in his memory to symbolise friendship, love and community. Taking inspiration from this gardening pioneer, this is the first time a flower has been named after a UK person of colour.

www.roses.co.uk/john

VIDEO:
The first Black man in Wales

# HOW CAN WE CELEBRATE DIVERSITY?

**Everybody is different, everybody** has their own identity!

Migration has meant that the UK is incredibly multicultural. People who have moved here have introduced new plants, new food, new religions, new types of music, new art and new ideas to the UK.

What are your family traditions?

What do you celebrate in your family or school?

Do you celebrate something different to someone in your class?

Every year in the UK, there are events that celebrate the diversity of people who live here.

These events are often bright, colourful, and full of joy, aiming to celebrate the differences that make us who we are, and bring communities and individuals together.



Notting Hill Carnival

– A celebration of Caribbean culture.



Pride

– A celebration of the LGBTQ+ community.



#### Mela

– A celebration of South Asian Culture.

Have you been to any of these celebrations?

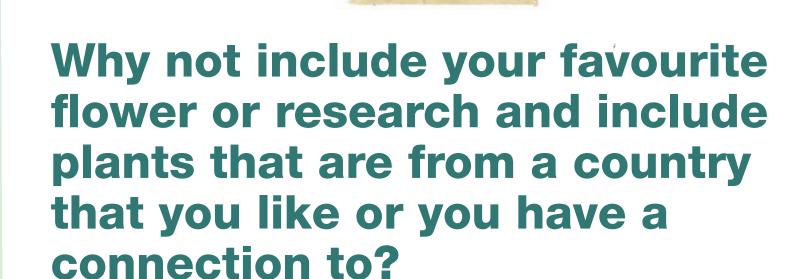


# CREATE YOUR OWN POLINATIONS PORTRAITS

Using the PoliNations imagery as inspiration, and the wonderful colours of Caribbean Carnival, Mela, and Pride, this activity will support your class to create collages based on their identities to help celebrate the things that make them different and unique!







#### Instructions

- Have your photo taken and printed out in class in a profile view (side view of your head and shoulders), or bring in a photo that you can cut out and use. If you don't have access to a photo or camera, or you're feeling very creative, you could draw your face instead.
- Write a list of everything that makes you different and unique. You can also include in the list the things that you love or are good at.
- Look at the PoliNations images as inspiration.
- Using your list as inspiration, start to create your collage around your picture.





### **OUR ENVIRONMENT**

Half of the world's population live in urban areas, so nature is needed in schools, towns, and cities more than ever.

#### Here are some reasons why:

Trees, grass and plants prevent flooding. Their leaves catch rainfall, and their root networks absorb water and strengthen the earth, preventing soil erosion.

Green spaces absorb noise, making our cities and towns quieter.

We need wildflowers in urban spaces so bees, butterflies, and other wildlife can survive; bees actually survive better in cities than the countryside as there are often more flowers.

Green spaces are good for us - they make us happier and healthier!

# **FACT FILE** NO ONE IS TOO SMALL TO MAKE A DIFFERENCE! Everyone can do their part to support nature in urban environments. You could try... Not cutting grass in some areas to help wildlife. – Making a 1m x 1m space to plant wildflowers for bees and butterflies. Adding something small like a bird feeder, bee hotel or butterfly feeder to attract wildlife and help stop the decline of local wildlife. 24

# HAVE YOU EVER SEEN A SEED GO BALLISTIC?

Plants disperse seeds in incredible ways.

Some have dramatic ways of dispersing their seeds through small explosions which expel the seeds to new locations where they can grow and spread.

VIDEO:
Ballistic seeds

A seed contains everything a plant needs to start growing or 'germinate'.

Germination - Is the process by which a plant grows from a seed. By adding a seed into soil and giving it water and warmth, the seed sprouts and develops into a seedling. After some more time and with light and water the seedling grows into a plant.

At the PoliNations festival we will be having a ballistic seed party, which will be an explosion of colours and cultures!



### MAKE A SEED BOMB

Sowing wildflowers can help diversify gardens and green spaces by supporting pollinators who struggle to survive in urban environments.

Why not have a go at making seed bombs?



# Instructions to make a seed bomb

- 1. Separate into groups of around four to six each group should make one portion of seed mix.
- 2. Mix together one cup of seeds with five cups of peat-free compost or soil and two or three cups of clay powder.
- 3. Mix in water until everything sticks together.
- 4. Roll the mixture into firm, golf ball-sized balls.
- 5. Place the balls on newspaper or in recycled egg boxes and leave them to dry in a warm place. Once dry they are ready!
- 6. Find a green space that you have permission to plant your seeds in.
- 7. Why not ask if you can plant in the school grounds?
- 8. Plant or throw your 'seed bomb' onto the ground.
- 9. Over the next few weeks, your seeds should grow. Keep an eye out!



# POLLINATOR PLEDGE

I understand the amazing journeys that many people and plants have made.

I celebrate differences in my school and my community.

I will make small steps to protect the environment.

I will encourage others to do the same.

Are you a Pollinator? If yes, write your name on the line below!

Pollinators are advocates for diversity, protecting nature, and are kind to people from all walks of life.



#### **SPECIAL THANKS TO:**

UNBOXED: Creativity in the UK

The PoliNations Creative Team

Everfi

Arts Connect

Royal Botanic Gardens Edinburgh

#### Charlotte Barnett

- School senior leader for creativity and mental health

#### Johanne Clifton

- Director of Curriculum and Virtual Learning, The Elliot Foundation

#### Professor Jane Memmot, OBE Hon

- FRES, ecologist and entomologist. Professor of ecology at the University of Bristol

#### Advolly Richmond

– Garden, Landscape & Social Historian

#### Gail Lambourne

- Brigstow Institute

# THANK YOU!

#### REMEMBER WE WOULD LOVE TO **SEE WHAT YOU CREATE!**

Share your photographs and creations on social media using the handles:

Poli\_Nations Poli\_Nations

#PoliNations

You can also email them to us!

Get in touch with feedback about this resource pack too! takepart@triggerstuff.co.uk

#### SUGGESTED FURTHER **READING ON THE TOPICS** IN THIS PACK:

Black and British: A Short Essential History - David Olusoga

Coming To England – Floella Benjamin

No One Is Too Small To Make A Difference - Greta Thunberg

Small Island - Andrea Levy

The Hungry Empire: How Britain's Quest For Food Changed The World - Lizzie Collingham

understandingslavery.com







PoliNations is created by Trigger, commissioned as part of UNBOXED: Creativity in the UK and presented as part of Birmingham 2022 Festival.















# Curriculum links: England, Key Stage 2

#### **Lesson 1: Biodiversity**

#### Geography

**Locational knowledge** 

**Place knowledge** 

**Human geography (trade links)** 

#### **Lesson 2: Diversity**

#### **PSHE Association Programme of Study**

#### Health and Wellbeing: Ourselves, growing and changing

- **H25.** About personal identity; what contributes to who we are (e.g. ethnicity, family, gender, faith, culture, hobbies, likes/dislikes)
- **H27.** To recognise their individuality and personal qualities
- **H28.** To identify personal strengths, skills, achievements and interests and how these contribute to a sense of selfworth

#### **Lesson 3: Our Environment**

#### **Science**

#### **Year 3, Plants**

Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.

#### **Year 4, Living Things and their Habitats**

Recognise that environments can change and that this can sometimes pose dangers to living things.

#### **Year 5, Living Things and their Habitats**

Describe the life process of reproduction in some plants and animals.

#### Art

Pupils should be taught to develop their techniques, including their control and their use of materials, with creativity, experimentation and an increasing awareness of different kinds of art, craft and design. To improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials, for example, pencil, charcoal, paint, clay.

# Curriculum links: Northern Ireland, Key Stage 2

#### **Lesson 1: Biodiversity**

#### **The World Around Us**

#### Interdependence

How they and others interact in the world. The effect of people on the natural and built environment over time.

#### **Place**

Ways in which people, plants and animals depend on the features and materials in places and how they adapt to their environment. Features of, and variations in places, including physical, human, climatic, vegetation and animal life; Changes over time in places. Positive and negative effects of natural and human events upon place over time.

#### **Change over time**

How change is a feature of the human and natural world and may have consequences for our lives and the world around us; ways in which change occurs over both short and long periods of time in the physical and natural world; the effects of positive and negative changes globally and how we contribute to some of these changes.

#### **Lesson 2: Diversity**

#### The World Around Us

#### Interdependence

How they and others interact in the world.

#### Personal Development and Mutual Understanding Personal understanding and Health

Their self esteem, self confidence and how they develop as individuals.

#### Mutual Understanding in the local and wider community

Valuing and celebrating cultural difference and diversity.

#### **Lesson 3: Our Environment**

#### **The World Around Us**

#### Interdependence

What else is living? How do living things survive? How living things rely on each other within the natural world?

Interdependence of people and the environment.

#### **Place**

Positive and negative effects of natural and human events upon place over time.

#### Personal Development and Mutual Understanding Mutual Understanding in the local and wider community

Playing an active and meaningful part in the life of the community and being concerned about the wider environment.

#### **Art and Design**

Develop their understanding of the visual elements of colour, tone, line, shape, form, space, texture and pattern to communicate their ideas.

Use a range of media, materials, tools and processes such as: drawing, painting, printmaking, malleable materials, textiles and three-dimensional construction, selecting which is appropriate in order to realise personal ideas and intentions.

## Curriculum links: Scotland, Second level



#### **Lesson 1: Biodiversity**

#### **Sciences**

#### **Biodiversity and interdependencies**

I can identify and classify examples of living things, past and present, to help me appreciate their diversity. I can relate physical and behavioural characteristics to their survival or extinction.

SCN 2-01a

Through carrying out practical activities and investigations, I can show how plants have benefited society.

SCN 2-02b

#### **Biological systems**

By investigating the lifecycles of plants and animals, I can recognise the different stages of their development. SCN 2-14a

#### **Lesson 2: Diversity**

#### **Health and Wellbeing**

#### Mental, emotional, social and physical wellbeing

I recognise that each individual has a unique blend of abilities and needs. I contribute to making my school community one which values individuals equally and is a welcoming place for all.

HWB 2-10a

#### **Lesson 3: Our Environment**

#### **Social Studies**

#### People, place and environment

I can discuss the environmental impact of human activity and suggest ways in which we can live in a more environmentally-responsible way.

SOC 2-08a

#### **Art and design**

I can create and present work that shows developing skill in using the visual elements and concepts. EXA 2-03a Inspired by a range of stimuli, I can express and communicate my ideas, thoughts and feelings through activities within art and design. EXA 2-05a

# Curriculum links: Wales, Progression Step 3

#### **Lesson 1: Biodiversity**

#### **Humanities**

#### Our natural world is diverse and dynamic

Human actions in the past and present can affect interrelationships between the natural world and people.

#### **Lesson 2: Diversity**

#### Health and wellbeing

#### How we engage with social influences shapes who we are

I have developed an understanding that my values, attitudes and identity are shaped by different groups and influences.

#### **Humanities**

#### **Human societies are complex and diverse**

An appreciation of identity, heritage and cynefin can influence learners emotionally and spiritually, and help build their sense of self and of belonging.

I can describe how some different characteristics of communities and societies have changed.

I can begin to understand that interpretations are influenced by identity, experiences, viewpoints and beliefs.

#### Enquiry, exploration and investigation

#### **Lesson 3: Our Environment**

#### **Science and Technology**

#### **Being curious**

I can understand how my actions and the actions of others impact on the environment and living things.

I can explain how the impact of our actions contribute to the changes in the environment and biodiversity.

#### The world around us

I can identify the threats to the development and health of organisms and recognise some natural defences, preventions and treatments.

#### **Humanities**

#### Informed, self-aware citizens

Understanding their responsibilities as citizens of Wales and the wider interconnected world, and of the importance of creating a just and sustainable future.

#### Our natural world is diverse and dynamic

Human actions in the past and present can affect interrelationships between the natural world and people.

#### **Expressive Arts**

I can explore and experiment independently and demonstrate technical control with a range of creative materials, processes, resources, tools and technologies showing innovation and resilience.

I can draw upon my familiarity with a range of discipline-specific techniques in my creative work.

I can safely choose and use the correct creative tools and materials with some consideration for others.







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