



SUPPORTING TEACHER GUIDE FOR KEY STAGE 1 AND KEY STAGE 2

 $\bigcirc$ 

;



# MARVIN'S BINOCULARS

### CREATED AND DIRECTED BY JUSTIN AUDIBERT For pupils in Years 2 - 5

Marvin loves exploring all the parks around his home in London and finding birds, bugs and animals. On his ninth birthday he's overjoyed - his very own pair of grown-up, pro binoculars! But then something terrible happens: he loses them, and to get them back, he must face the intimidating park warden.

Join Marvin as he discovers wildlife and friendship in the most unlikely places. Touching on themes of racial prejudice and self-belief, *Marvin's Binoculars* is a highly engaging and vibrant show that will inspire you and your pupils to explore the outdoors in your local green spaces.

### THE UNICORN THEATRE

The Unicorn Theatre is the largest children's theatre in the UK, specialising in producing new, innovative and ambitious productions for children aged up to 13 years. Based in their purpose-built home at London Bridge, the venue is a creative space that welcomes around 65,000 families and schools every year, and reaches thousands more across the UK and beyond through touring and online theatre experiences.

Creating theatre with the values of curiosity, respect and courage, and working in partnership with schools and communities, the Unicorn connects young people with hopeful stories that question and explore the world.

### WWF

WWF is a conservation organisation that works to shape a future where people and wildlife can thrive together. We work all over the world – everywhere from the Amazon rainforest to the Arctic ice sheets! We work to save endangered species, protect precious habitats and come up with new solutions to tackle huge global challenges like climate change, deforestation and plastic pollution. We want to inspire young people to explore the wonders of the natural world and learn about how you can take action to protect our amazing planet.



# CONTENTS

- **4** INTRODUCTION
- **5 CURRICULUM LINKS**
- 7 ACTIVITY 1: NATURE SPOTTER
- **13 ACTIVITY 2: NATURE CATEGORIES**
- **15 ACTIVITY 3: NATURE CONNECTIONS**
- **16 ACTIVITY 4: NATURE MAP**
- **18 NATURE READING LIST**



# INTRODUCTION

### **BY JUSTIN AUDIBERT, UNICORN THEATRE ARTISTIC DIRECTOR**

When I set out to write *Marvin's Binoculars* I had an incredibly clear idea in my mind of the kind of young boy Marvin was; thoughtful, kind, somewhat serious in his demeanour and a little bit shy, especially when talking to adults that he didn't know. In some ways it is an extra challenge to write an introverted character but the key was to tap into his what motivates him, what makes him tick. Marvin has a deep, soothing and joyful passion and that passion is for exploring the natural world.

WWF have been engendering passion for the natural world in children and adults since 1961. They therefore felt like the perfect partners to create fun, interactive and educative resources that would get children and their adults out of their homes and exploring the hidden delights of their natural environment.

We have all had a year like no other and it felt vital to make a show that people can find comfort, calm and hope from as we emerge from the pandemic. *Marvin's Binoculars* feels like the story to be telling in this moment as we seek to see our precious world with fresh eyes.

I hope that you enjoy this story and that you use the fun, stimulating activities in this resource pack to find your own deep connection with nature, just like Marvin.



# **CURRICULUM LINKS**

This accompanying teacher guide, aimed at Key Stage 1 and Key Stage 2 teachers and students, contains activities to encourage children to connect with the nature around them and explore the biodiversity of their local green spaces.

### **KEY STAGE 1**

**Science Plants:** Identify and name a variety of common, wild and garden plants, including deciduous and evergreen trees.

**Animals including humans:** Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals; identify and name a variety of common animals that are carnivores, herbivores and omnivores.

**Living things and their habitats:** Identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other; identify and name a variety of plants and animals in their habitats including microhabitats; describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food.

**Working scientifically:** observing closely, using simple equipment, identifying and classifying, using their observations and ideas to suggest answers to questions, gathering and recording data to help in answering questions.

**Geography Human and physical geography:** Use basic geographical vocabulary to refer to key physical features, including: forest, hill, river, soil, vegetation, season and weather.

**Geographical skills and fieldwork:** Use aerial photographs and plan perspectives to recognise landmarks and basic human and physical features; devise a simple map; and use and construct basic symbols in a key; use simple fieldwork and observational skills to study the geography of their school and its grounds and the key human and physical features of its surrounding environment.



### KEY STAGE 2

# Science Living things and their habitats: 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. Describe how living things are classified into broad groups according to common observable characteristics based on similarites and differences including microorganisms, plants and animals; give reasons for classifying plants and animals based on specific characteristics.

**Animals including humans:** Construct and interpret a variety of food chains, identifying producers, predators and prey.

**Working scientifically:** 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.

**Geography Geographical skills and fieldwork:** Use fieldwork to observe, measure, record and present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies.



# ACTIVITY 1: NATURE SPOTTER (KS1&KS2)

- Take a nature walk through your local park or green space and use the Nature Spotter guide on page
  8 11 to identify some of the wildlife you find.
- 2 Note down which different types of wildlife you find and count or tally up the total.
- 3 Draw a bar chart or pictogram to display your results. You could also conduct your nature spotting walk in another green space or park and compare the types of wildlife you find (KS2).

### EXAMPLE

Location: Priory Park, North London Season: Spring Weather: Cloudy Wildlife spotted: Blackbird II, Grey squirrel IIII, Oak tree IIII, Snail

### NUMBER CHALLENGE

See if you can spot 1 type of mammal, 2 types of insect, 3 types of flower, 4 types of bird and 5 types of tree or bush!

If you can't complete the challenge in one green space you could visit again on another day or find a different green space to add to your sightings.

### SEEK APP

You can download the free **Seek app** by iNaturalist on a phone or tablet to unlock a whole world of nature on your doorstep! From bugs to trees and everything in between, Seek's smart image recognition technology will identify what you've found and encourage you to discover the hidden natural treasures in your local surroundings.

www.wwf.org.uk/discover-nature-seek-app

### **QUESTIONS**

Do you think your list would look different in different areas, different times of day or different seasons? Why might this be?

Choose 4 different animals from your check list, or from the nature spotting guide and fill in the worksheet on page 12 to work out the best habitats for your animals.



# NATURE SPOTTER GUIDE: Plants



🗌 Oak



🗌 Ivy



Holly



Sycamore



Horse Chestnut



Elder



Hawthorn



teve Morgan / WWF-UH



Primrose



Buttercup



Daisy



Dandelion

Bluebell





# NATURE SPOTTER GUIDE: MINIBEASTS





🗌 Caterpillar

Butterfly



Moth



Ola Jennersten / WWF-Sweder

Honey bee



Bumble bee



🗌 Ant



Centipede





Damselfly







Ladybird



Stag beetle



🗌 Slug



Earthworm



# **NATURE SPOTTER GUIDE:** BIRDS



Feral pigeon



Wood pigeon



Blue tit





Blackbird



**Song thrush** 



**Ring necked parakeet** 





Crow



Black headed gull





Canada goose



Swan



Swift



Mallard



**Moorhen** 



Starling



**Magpie** 



# NATURE SPOTTER GUIDE: Mammals



Grey squirrel



Brown rat



Red fox



🗌 Bat



Hedgehog

# AMPHIBIANS



Smooth newt



🗌 Common frog



Common toad



## NATURE SPOTTER WORKSHEET

Animal	What does it eat?	How is it protected from predators? Or adapted to be a predator?	What else does it need in its habitat?	Where is its ideal habitat?
Frog	Flies and other insects	Green brown colour is good camouflage	Water for Laying eggs and for tadpoles to Live	Near a pond or lake
Blackbird		Dark colour is good camouflage	Materials for building nests	



# ACTIVITY 2: NATURE SORTING (KS1&KS2)

Using the wildlife images on page 10, sort them into the different categories below. You can include any wildlife you found in your local park or greenspace too!

- 1 Plants and animals (KS1)
- 2 Mammals, birds, minibeasts, amphibians (KS1)
- 3 Herbivores, carnivores, and omnivores (KS1) plus insectivores (KS2)
- 4 Habitats: woodland, pond or river, soil and under logs, grassy area (KS1 & KS2)
- 5 Vertebrates and invertebrates (KS2)
- 6 Vertebrates into birds, mammals, amphibians (include reptiles and fish if you find any!). Invertebrates into molluscs (snails and slugs), worms, spiders, crustaceans (woodlice, centipedes and millipedes) and insects. (KS2)

### FOLLOW ON ACTIVITY (KS2)

Try and make your own food chains using the wildlife information on page 14 to help you. Remember all food chains must start with a **producer**, a plant that makes its energy from sunlight.









# ACTIVITY 3: NATURE CONNECTIONS (KS2)

### YOU WILL NEED:

- Printed out wildlife images and information from page 14 or draw your own!
- Ball of string

### **DEFINITION: ECOSYSTEM**

A community of living things and non-living things like soil, water, air and rocks.

### **INSTRUCTIONS (FULL CLASS ACTIVITY)**

- 1 Get into groups of 10-12 and form a circle.
- 2 Each student is given one animal, plant or resource from page 10
- 3 One student holds the end of the ball of string and announces what part of the ecosystem they represent (e.g. soil, oak tree, grey squirrel). Students put their hands up if they think they have any connection with that species or resource and explain why. If the group agrees that there is a connection, the string is let out to them. Students should keep their strings taut.
- 4 You can go back to the first student in order to then connect others with the same element of the ecosystem, or always go on from the student who has just been connected to the web.
- 5 When you run out of connections or string you can see and discuss the complexity of the web of connections within the ecosystem.
- 6 Next, consider human impacts on the ecosystem (e.g. plastic pollution, climate change (higher temperatures, more extreme weather), pesticides) and ask students to put their hands up if they think their animal or resource would be negatively affected. Decide which would be most affected and ask them to leave the circle, letting go of all the strings they hold.
- 7 As each student leaves, the web becomes more and more broken up, and it becomes clear how many other parts of the ecosystem would be affected by the loss.



# ACTIVITY 4: NATURE MAPS (KS1&KS2)

- Using the grid on page 17 draw a rough map of your local green space (or a section of it) and identify the different habitats it contains. It might be helpful to take a walk around the green space and look at images on digital maps like Google Earth to try and get things in the right place.
- 2 Use a different colour or pattern for each habitat and build up a key for your map. (Examples: grass, wildflowers, flowerbeds, river, pond, woodland, wetland, buildings, play area). Include a north arrow and a scale bar if you can.
- 3 After you have done your nature spotting walk you can add extra symbols onto your map to show where you spotted different wildlife.

### FOLLOW ON ACTIVITY FOR KS2

4 Draw a bar chart showing the different habitats (along the x axis) and the number of different types of animals you found there (along the y axis). Were there any habitats in your local green space that had more wildlife than others? Why do you think that might be?







# LOCAL GREEN SPACE MAP


Map scale

1 square =

Map key



### SUGGESTED READING LIST

### **KEY STAGE 1**

- The Enormous Crocodile by Roald Dahl & Quentin Blake
- Tree: Seasons Come, Seasons Go by Patricia Hegarty & Britta Teckentrup
- Omar, The Bees and Me by Helen Mortimer
- Pedro the Peurto Rican Parrot by Beverly Jatwani
- Nature Trail by Benjamin Zephaniah
- Tidy by Emily Gravett
- The Lost Words by Robert Macfarlane & Jackie Morris
- The Big Book of Bugs by Yuval Zommer
- Plantopedia by Adrienne Barman
- RSPB First Book of Birds by Anita Ganeri and David Chandler

### **KEY STAGE 2**

- Beetle Boy by M.G. Leonard
- Watership Down by Richard Adams & David Parkins
- The Wilderness War by Julia Green
- Wild City by Ben Hoare
- The Boy Who Met a Whale by Nizrana Farook
- The Secret Explorers and the Rainforest Rangers by SJ King
- Redwall by Brian Jacques
- Cast Away: Poems for our Time by Naomi Shihab Nye
- Our Planet by Matt Whyman
- National Trust: Out and About Bird Spotter by Robyn Swift

### **FURTHER RESOURCES**

### Teaching resources and activities

wwf.org.uk/schools

### Crafty nature activities: Build an apple bird feeder

www.wwf.org.uk/sites/default/files/2019-03/WWF\_Apple\_Feeder\_Activity\_Sheet\_0.pdf

### Make a recycled plastic bottle planter

www.wwf.org.uk/sites/default/files/2019-09/Plastic\_Bottle\_Planter\_Activity.pdf

### Build a bee hotel

www.wwf.org.uk/sites/default/files/2019-04/WWF\_Bee\_Hotel\_Activity\_Sheet.pdf







# MARVIN'S BINOCULARS

**Created and directed by Justin Audibert Resource pack written by WWF-UK** 

The Unicorn Theatre and WWF working together to inspire children through nature and theatre.

UNICORN THEATRE, 147 TOOLEY STREET, LONDON SEI 2HZ  $\oplus$   $\Rightarrow$  London Bridge 020 7645 0560 · UNICORNTHEATRE.COM 🛩 UNICORN\_THEATRE 🕇 UNICORNTHEATRE 🚟 UNICORNTHEATRE



For a future where people and nature thrive | wwf.org.uk  ${\small @}$  1986 panda symbol and  ${\small @}$  "WWF" Registered Trademark of WWF. WWF-UK registered www charity (1081247) and in Scotland (SC039593). A company limited by guarantee (4016725)