GARDEN WATCH



Year 4 Science

Week 6

Week Beginning Monday 8th February

What are 'garden birds'?

'Garden birds' are any species of bird that visit our gardens for food and shelter on a regular basis. Every garden attracts a different set of birds depending on the plants, trees and shrubs present, whether extra food is provided, what water sources there are, and what the surrounding habitats are like.

Which birds am I likely to see in my garden?



House sparrow
Males are streaky brown above and grey below, with chestnut-and-white wings, a black bib and a grey cap. Females and juveniles are duller.



Starling
Adults are oily-black with a purple-and-green sheen, and tiny, beige spots in winter. Juveniles are dark grey-brown.



Blue tit
Greeny-blue above and yellow below, with a blue cap, white cheeks, black eyestripes, and a blue tail and wings



Blackbird
Males are black with a yellow bill and yellow ring around the eye. Females and juveniles are dark brown.



Woodpigeon
Grey above, with a pink breast, white neck patch and white patches on the wings.



Goldfinch
Gingery-brown above and pale below, with black-and-yellow wings, a black crown, white cheeks and a red face.



Chaffinch
Males have blue-grey crowns, brown backs and pink breasts. Females are brown, with white shoulder patches and wingbars



Great tit
Green above and yellow below, with a black head, white cheeks, and black stripe down its breast.



Robin
Brown above, with a white belly and red breast. Juveniles are mottled gold and brown.



Long-tailed tit
Black, white and pink above, and pale pink below, with a long, black-and-white tail, a white head, and a broad, black stripe above the eye.

Other species that visit gardens include carrion crows, magpies, jackdaws, collared doves, dunnocks, wrens, song thrushes, greenfinches, coal tits, swifts, house martins, and green and great spotted woodpeckers.

How can I encourage birds to visit my garden?

Whether you have a small, city patch or acres of fields, you can encourage birds to visit your garden:

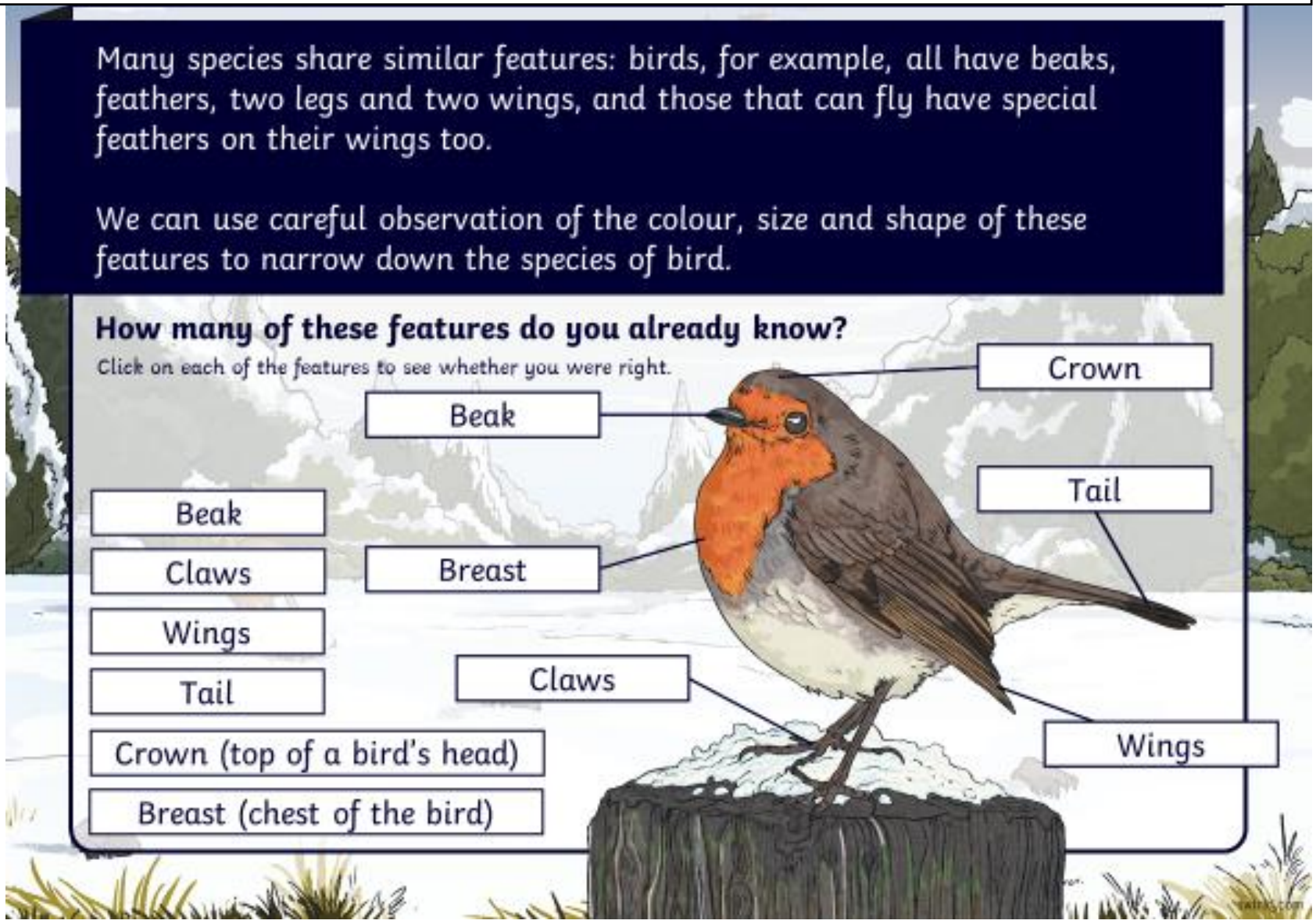
Put out suitable food on a bird table and in feeders – even one that sticks to a window will do the trick!

Birds eat different things: try seeds for sparrows and finches, fat balls for tits, and fruit and worms for thrushes and robins. As long as it's not mouldy, you can also pop out leftovers like fruit cake, unsalted nuts, and over-ripe apples and pears

The amount of food you need to supply will vary depending on the season and weather; try to put out only what will get eaten, so there's nothing left to go off

Don't forget to provide fresh water (in saucer or even bin lid will do) as well, and make sure you clean feeders and tables regularly to avoid disease

L.O: to explore and use classification keys.



TASK: Keep a tally of all the birds you see in your garden or local area.

Once you have done this, try making a classification key like the one below.

This is a series of questions that help us to identify a living thing or decide which group it belongs to, based on its characteristics.

A classification key to sort birds, for example, might look like this:



Falcon

Birds

Yes

Is it a predator?

No

Does it have long tail feathers?

Yes



Pheasant

No



Robin

Yes

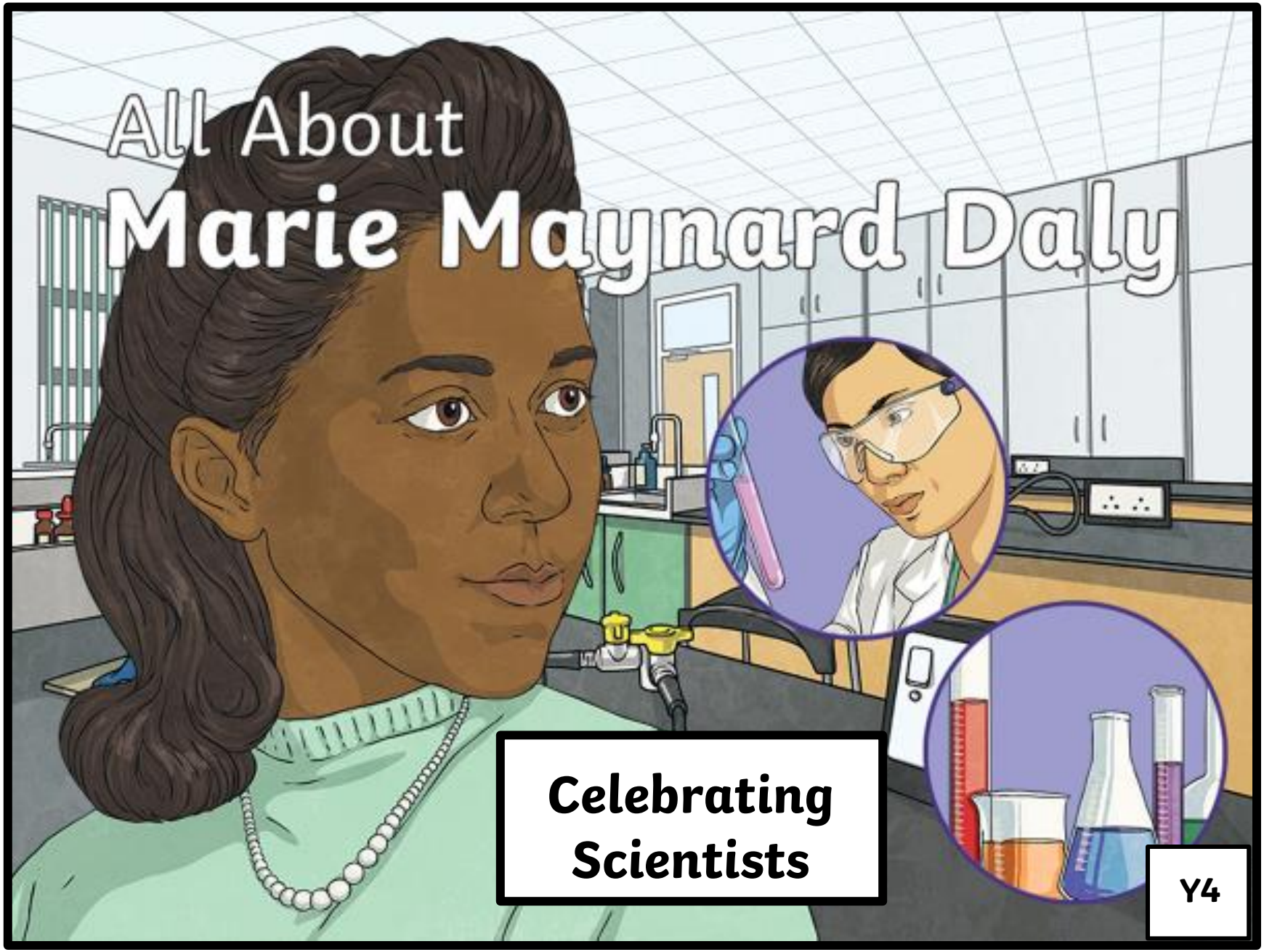
Does it have a red or orange breast?

No



Sparrow

Good questions to use in a classification key ask about the physical features, size and appearance of living things, as well as their habitats. If your classification key is detailed enough, it could even help you to identify an unknown living thing!


All About
Marie Maynard Daly
Celebrating Scientists
Y4

Who Was Marie Maynard Daly?

Marie Maynard Daly (1921 – 2003)



Courage is like — it's a habitus, a habit, a virtue: you get it by courageous acts. It's like you learn to swim by swimming. You learn courage by couraging.

Marie Maynard Daly was an American biochemist who paved the way for other Black Americans and women who wanted a career in science.

Early Life

Marie Maynard Daly was born on 16th April 1921 in Queens, New York in the United States of America.

Her family believed strongly in education, even though at this time very few Black Americans even hoped to attend university.



Her mother inspired a love of reading in Marie and the two shared countless books together.

Her father had started to study chemistry at Cornell University but had to stop for financial reasons. He passed his love of chemistry on to his daughter.

Think About:
Why do you think Black Americans did not often enrol in universities at this time in America?



Education

Marie Maynard Daly attended an all-girls high school in New York City before attending Queens College. She lived at home during her time at college to save money. When she graduated with a degree in chemistry, she was named a Queens College Scholar, an award only given to the top 2.5% of graduates.

She worked part-time as a laboratory assistant to help pay the fees needed to attend New York University, where she studied for her master's degree.

She went on to complete her master's degree in just one year.

In 1944, Daly enrolled at Columbia University. She began to study how chemicals in the body help food digestion.

In 1947, she became the first Black woman to be awarded a PhD in chemistry in America.

PhD stands for Doctor of Philosophy. It is the highest award given by a university.

Think About:
How might Marie Maynard Daly's PhD inspire other Black women?



Later Life

Her future research included work on cancer and heart disease.
She discovered the role played by cholesterol in clogging arteries and her research helped people to understand how diet could affect the heart. Towards the end of her career, she investigated the impact smoking had on the lungs.

Marie Maynard Daly enjoyed teaching biochemistry to students. Recognising how difficult it had been for her, she wanted to support other students of minority groups to follow in her footsteps.

In 1988, she started a scholarship at Queens University to provide the opportunity for students from minority groups to study science. She set up the award in honour of her father, who had never had the chance to complete his own studies.



In 1999, she was recognised as one of the top 50 women in Science, Engineering and Technology.

Marie Maynard Daly died in New York City on 28th October 2003.

TASK: Read the information you have been given. Create a fact file detailing the life and achievements of Marie Maynard Daly.

There are lots of scientists featuring in news and daily lives, find out about another scientist who inspires you.