

INSIDE

What's hiding in our home?

Can you match the pests to their location in our pest filled home?



Home sweet home

Clara makes friends with Bella the bee and learns all about worker bees.

WELCONE





The Magazine for Budding Pest Controllers

PCN Junior is a new magazine brought to you by the creators of Pest Control News.

This magazine is where you'll find different activities, games to play and articles to read all around the world of pest control to capture the imagination of aspiring pest controllers and beyond.

PCN Junior is an educational tool to teach and advise you about curious creepy crawlies, animals and bugs!

We're giving interactive content across the issue in many different forms, all based around the animals and bugs we see day to day in the UK.

Can you find the pests hiding in our house, or in the wordsearch?





What is an ENTOMOLOGIST?

ntomologists study insects' habitats and how insects evolve, as well as developing ways to control harmful insects. They research and control insect-borne diseases, as well as studying new species of insects that are being discovered all across the world every day!

Entomologists have the option of working in several different fields.

The word Entomology comes from Ancient Greek; $\xi v \tau o \mu o v$ (entomon), meaning 'insect', and $-\lambda o \gamma i \alpha$ (-logia), meaning 'study of' and it's been used for a long time; with the famous Greek scientist, Aristotle offering the earliest evidence of entomology from describing insects almost 2,500 years ago! Since then, more modern uses of entomology were visible through various books being published, but it emerged as a distinct field of study with John Curtis' 8-volume publication in the early 19th century (1824-39); British Entomology.

Over that time, insects and wildlife in general have changed in many ways and so has the job of entomologists, because as technology moves on, so does the way that people use it. Microscopes were only available across Europe around 500 years ago, so the job of entomologists was a lot harder before that!

Entomology can lead to lots of different jobs; such as pest control, working on crime scenes, biological research and producing medicine.



What's hiding in our home?

The people that live in this house might need the help of a professional pest controller. Match the names and colours to where you might find these creatures.

Spicers Not necessarily unwelcome, spiders are known to eat all other types of insects, whatever lands in their webs. Even the giant house spiders you may see in the bath are likely more scared of you than you are of them. Leave them alone or catch them in a cup and put them outside to carry on their happy life catching insects.

Wasps Nests are often found in lofts or attics, behind soffit boards around the roof or anywhere in a cavity in your house. They tend to build-their nests in areas near to what they need. They can get angry and sting which is why if you find a nest then a pest controller might be needed to help you. Wasps do have very special (but a bit gross!) abilities. They chew up wood, mix it with their saliva to make 'wasp paper' which is then used to build their nest.

Cluster Flies These guys like to come in our homes around September. They stay over the winter in your loft space then come out again typically around April. They can be seen in massive numbers! But are what is known as a nuisance pest, it is unlikely that they will make you ill, but it's not very nice to have large numbers of flies in your loft.

Harlequin Lacybirds These ladybirds are relatively new to the UK. They were first found in 2004. They are larger than the ladybirds that we normally see. They can also eat the eggs and larvae of the UK native ladybirds; they can damage fruit trees and some crops. A bit like cluster flies, they like to gather in large numbers. You may see other colours, not just red with black spots, but black with red spots, orange and black or yellow and black. They are often found clustering around windows and doors.



Black Garden Ants If these ants are outside and causing no problems, you can leave them alone. But sometimes they come into your home to look for food. They form trails which all the worker ants follow. They are the same family of insects as wasps and also have some special features. One of their ways to communicate with each other is to pass a tiny bit of the food they have found to the other members of their nest. This is called trophallaxis.





House Mouse Unfortunately mice can damage our homes by gnawing, they can also carry diseases which could make you poorly. It is much easier to keep mice out in the first place, any holes going outside should be filled up, even around pipes. They can also do up to 80 droppings a day, which even though they are small is a lot! They are also nocturnal which means they like to be out at night.

Silverfish Another nuisance pest, these guys like the damp areas often found in bathrooms, or the area behind a fireplace. The name silverfish likely comes from exactly how they look. They wiggle along and have a dull metallic silver sheen; they actually look like wriggly silver fish. They can damage fabric, wallpaper and other things too.





lara was watching the rain fall outside her window when something moving on the windowsill caught her eye. As she took a closer look, she noticed a bee standing on the windowsill, her fluffy coat was dripping wet, and she was shivering from the rain. Clara immediately opened the window and encouraged the bee to hop inside.

Bella the bee couldn't believe what was happening, normally she found herself getting swatted away but this time she was being welcomed inside by a young girl with a warm smile. She hopped inside and waited patiently as the young girl gently dried her soaking wet coat with a towel until she was all fluffy again. The girl held out a finger to Bella and said in a soft voice, "Hi, I'm Clara, what's your name?" "I'm Bella" she said. "Thank you for helping me, I was buzzing around with my friends but when the rain came, we got separated and now I'm not sure where I am!"





"Don't worry" said Clara,

"I'll be your friend!"



Over the next few days, **Clara learned that Bella was a worker bee,** and her job was to find food, build and protect the hive, and clean and circulate the air by beating her wings.

Bella was happy in Clara's company and she felt loved and cared for, but she missed her friends and found herself daydreaming of buzzing around a field filled with beautiful flowers and returning to the hive with all the food that she had found. Clara realised that Bella needed to go back to the hive, and although this made her feel sad, she knew that Bella's role was important.





The next day Bella sat on the handlebars of Clara's bike as she rode down the lane. Clara stopped at a gate and when Bella looked up, she recognised the beautiful flowers that filled the field and the bees that were busy buzzing around the flowers. This was it; she was home! "Thank you!" said Bella, as she buzzed around Clara's head in

"Thank you for teaching me about bees" said Clara.

"Please come back and see me whenever you want" shouted Clara as Bella disappeared into the field.

Clara watched her new friend for a few minutes and then slowly rode her bicycle home, feeling sad and happy all at the same time.

The next night, while Clara was in bed, she heard a noise, a gentle 'tap tap' on the glass of her window. When she looked over, she couldn't believe her eyes, Bella the bee was back, her eyes swimming with stories of adventure. Clara opened the window and Bella flew in, sat herself on the pillow next to Clara and began to share stories of the nectar filled flowers in the fields near Clara's home.

Clara listened intently as Bella described fields of beautiful flowers and how her hive had created more honey than ever before. Clara smiled and closed her eyes, knowing that although Bella would be gone when she opened them, she would be back soon with more adventure stories.



A LITTLE BIRDY TOLD ME...

Pigeons are the birds you see everywhere you go.

The nuisance birds who surround you when you drop a crumb of whatever you eat if you're outdoors, and the ones who poo on the floor from the sky and seem to make a mess of almost everywhere they go. But let's have a look at some of the brighter sides of pigeons and why they're not all terrible...





- Pigeons are one of only a small number of species who can recognise their own reflection in a mirror. They can also recognise each letter of the human alphabet and differentiate between photographs.
- The most expensive racing pigeon sold for \$132,517.
- Pigeons can find their way back to their nest when they're released from 1300 miles away.
- They saved thousands of human lives during World War 1 and World War 2 by delivering critical updates. One pigeon named Cher Ami delivered a message that led to the rescue of 194 stranded U.S. soldiers on 4th October 1918.
- Pigeons have around 10,000 feathers.
- Pigeons can move their wings ten times per second and maintain heartbeats at the rate of 600 beats per minute.
- Pigeons have exceptional eyesight and ability to identify objects from 26 miles away.

- Pigeons have very sensitive hearing. They can detect distant storms, earthquakes and volcanic eruptions.
- Mike Tyson first got into boxing when another boy hurt his pet pigeons.
- The reason you never see a baby pigeon is because they live in the nest for 30 days, and by then they look like adult pigeons.
- Wimbledon employs a bird of prey, Rufus the Hawk, to keep pigeons away from the tennis courts.
- Scientists have discovered the secret of pigeons' ability to navigate perfectly over journeys of several hundred miles, they do this by smell. Research found that pigeons create 'odour' maps

of their neighbourhoods and use these to direct themselves.



TO MAKE YOUR VERY O

Spider Cupcakes

Ingredients

Serves: 8

For the cupcakes

110g (4oz) self-rasing flour 110g (4oz) margarine 110g (4oz) caster sugar 1 tablespoon cocoa powder 1 teaspoon baking powder 2 eggs

For the topping

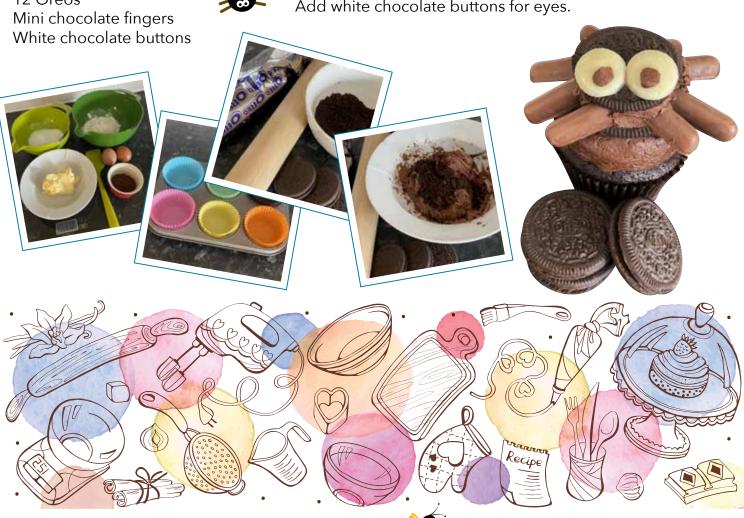
125g soft unsalted butter 250g icing sugar 1 tablespoon cocoa powder 1 tablespoon milk 12 Oreos

Method

Prep:10min > Cook:17min > Ready in:27min



- 1. Preheat the oven to 190° C / Gas 5.
- 2. Sieve the flour, cocoa powder and baking powder into a bowl, then mix in the margarine and caster sugar. Add the eggs into the mixture one at a time, beating well after each addition. Whisk until light and fluffy. Divide mixture into 8 cupcake cases.
- **3.** Bake for 15 to 17 minutes until a skewer inserted into the centre comes out clean. Allow to cool before icing.
- **4.** Mix together the unsalted butter, icing sugar, cocoa powder and milk. Bash 4 of the Oreos until they resemble breadcrumbs and add to your buttercream.
- 5. Take the remaining Oreos, seperate the sides and add buttercream and chocolate fingers to make your spiders. Add white chocolate buttons for eyes.



WORD HUNT!

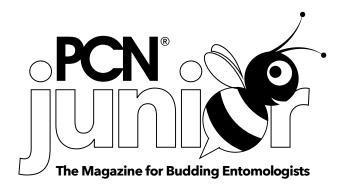
If you can't be out looking for pests, you can look for these pest-related words below! Good luck!

Ε	Т	N	Р	R	0	0	F	I	N	G	N	I	Р
Ε	G	0	N	P	Ε	R	Ε	Ε	L	Ε	Ε	L	I
R	Ε	D	I	P	S	E	U	L	В	N	P	В	G
0	Ε	S	U	0	М	С	F	0	Ε	L	F	Ε	E
Ε	R	Т	D	В	E	R	S	М	E	В	L	E	0
В	Α	E	L	F	N	Т	L	М	K	I	Α	Р	N
Ε	M	D	С	D	Т	I	Ε	S	Ε	I	D	0	R
D	В	P	I	Ε	0	В	R	0	Ε	N	Υ	L	В
В	Ε	E	R	0	М	В	R	М	P	S	В	R	E
U	Ε	F	0	T	0	Α	I	М	E	E	I	Α	F
G	T	S	D	P	L	R	U	S	R	С	R	W	P
Υ	L	P	Ε	P	0	L	Q	Ι	Ε	T	D	Α	E
В	Ε	R	N	S	G	Ε	S	0	В	S	Ε	S	I
Р	Ε	K	T	E	Υ	R	E	I	Y	E	T	P	P

- Mouse○ Flea○ Rabbit
- Mole Rodent
 - O Bedbug
- Squirrel Pigeon
- Entomology
- Spider Wasp
- O Beetle
- Ladybird Insect
- O Proofing O Beekeeper













The Magazine for Budding Pest Controllers



FUN FACTS





LADYBIRDS



- Ladybirds are actually beetles, not bugs!
- They're not just red and black. Ladybirds can also be yellow, orange, brown or other colour
- Aphids are tiny insects like greenflies, and each ladybird eats around 5,000 of them in their lifetime
- Ladybirds have spots to warn potential predators against eating them
- Ladybirds release an oily, yukky, yellow fluid from joints in their legs when threatened

