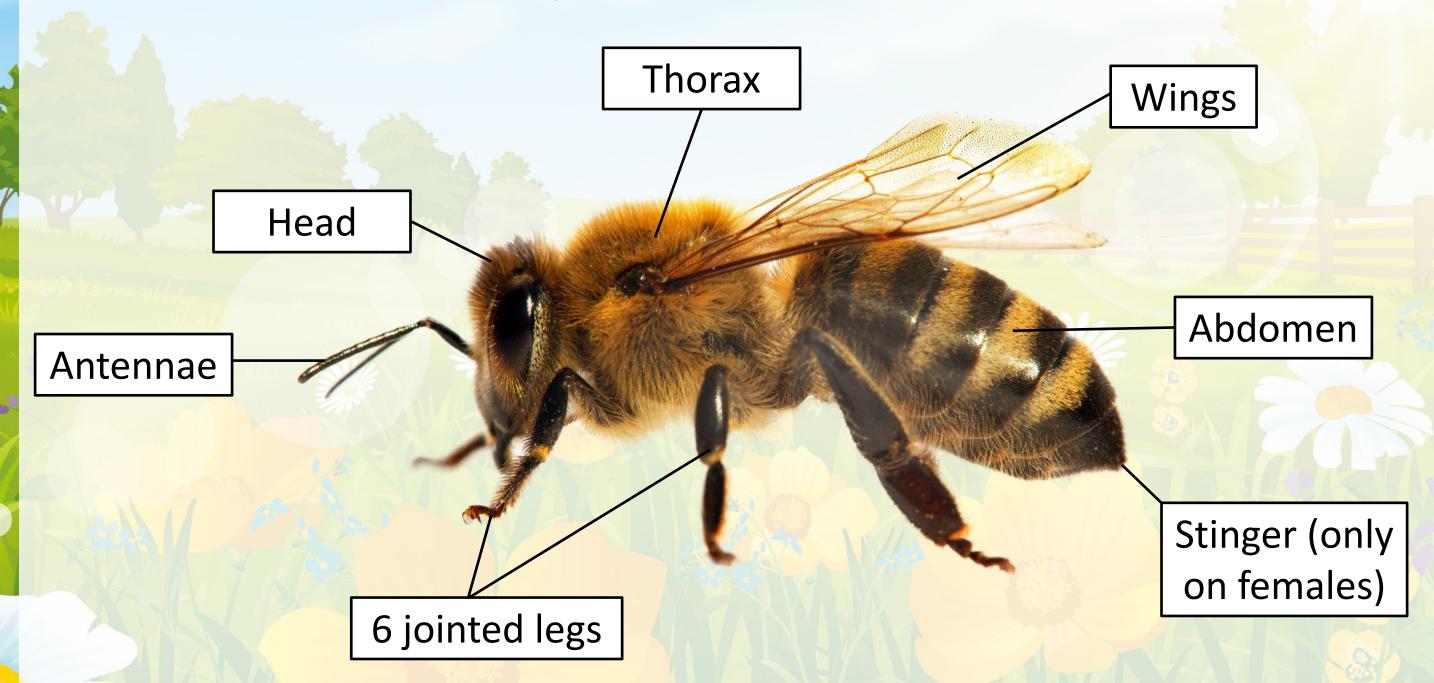


# How much do you know about bees?

- What do bees look like?
- How many different types of bees are there?
- Why do we need bees?
- What would happen if there weren't any bees?

## **Body Parts of a Bee**



# Have you met the



#### QueenyBeez



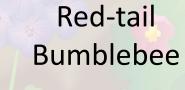


Queen Honeybee





Worker Honeybee



#### Rubee



# Have you met the

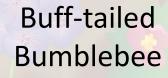


#### **Swarmzee**



#### Beep





#### Bumbuleez







#### **SOLITARY BEES**

- Live alone rather than in colonies
- Build nests in trees, underground or sheltered spots
- Drink nectar from flower and collect some for their young
- Excellent pollinators
- Common species include leaf cutter bee and red mason bee



#### BUMBLEBEES

- Very social live in colonies
- Eat nectar and pollen
- 'Typical' bee appearance, large, furry with black and yellow pattern
- Common species include garden, buff-tailed, red-tailed, whitetailed and field bumblebees



#### **HONEYBEES**

- Most recognisable of all bees
- A social bee, lives in hives with hundreds of other bees
- Make honey from pollen and nectar from flowers
- Raised by a single Queen bee

There may be just six of our Unbeelievable friends, but in reality, there are nearly **20,000** known species of bee around the world.

250 of these can be found in the UK.





A bee can flap its wings at around 240 times a second!

This helps them fly super high and power through the air, as well as being the reason for their distinctive 'buzzing' sound.

Bees have super senses (otherwise known as Electroreception) which can help them sense the invisible electric charge in the air around flowers.

This special vision makes finding nectar much easier.





There's only one queen bee.

She is the largest of the bees in the colony and her role is to produce the next generation of bees.

She can lay up to 2,000 eggs a day



Bumblebees are strong

They are able to carry up to half their own body weight in pollen

But Bumblebees do not make honey – that's the job of the honeybees

Honeybees are hard-working bees. They can visit around **2,000** flowers a day

That is a lot of visits to and from the hive!

They also have a clever trick of letting other bees know where to find pollen.

Do you know what it's called?



# The Waggle dance!



#### Let's dance!

In small groups, could you share a message like honeybees through dancing and miming?

Choose one of the messages below, or make up your own (but talking isn't allowed!)

- 'There's lots of pollen over here'
- 'We've found a water source to drink'
- 'Check out this great place for our new hive'
- 'Watch out! Danger!'
- 'Our Queen bee is missing!'



If bees didn't exist in our world, it would look like a very different place and our lives would not be the same.



# These are just some of the plants that are pollinated by bees. Which would you miss the most?

Apples Man	gos Kiwi F	ruit Plum	s Peac	hes	Nectarines	
Cranberries	Pears	Black and R	Red Currant	s Str	awberries	
Onions Cashews	Apricots	Avocados	Passion	Fruit	<b>Kidney Beans</b>	
<b>Green Beans</b>	Cherries	Guava	Celery	Coffee	Walnut	
Lychee Macadamia Nuts Sunflower Oil Lemons Figs						
Limes Carro	ots Cucur	mber Haze	lnut C	Coriander	Grapes	
Chestnut V	Vatermelon	Coconut	Tangerin	nes	<b>Brazil Nuts</b>	
Rapeseed Broccoli Caul		uliflower	flower Cabbage E		Brussels Sprouts	
Turnips Chili Peppers Red and Green Peppers Papaya Tomatoes						
Raspberries	es Blackb		Cocoa	Vanilla		

## The power of pollination

Bees are expert pollinators

As they buzz about drinking nectar or collecting pollen, bees transfer pollen grains from the anthers (pollen-producing parts) of flowers to the stigma (pollen-collecting part).

This pollinates the plant and it goes on to produce seed and more flowers



# This is why bees are important



A fully stocked supermarket produce section thanks to our bee friends



How the same supermarket would look if we didn't have the help of our bee superheroes

# But our fuzzy, buzzy friends need your help

Our bees are in danger

Can you think of some of the biggest dangers that affect bees?



#### Examples of risk to bee populations

- The growth of human towns and cities means there's less space than ever for bees to nest and feed in peace.
- New houses and roads create barriers between green spaces, which means many bees have longer journeys to reach food.
- Bees love wildflower meadows, grasslands and hedgerows but modern farms don't always include these bee-friendly features.
- Chemicals that people use on the land, such as pesticides and weedkillers, can be harmful to bees and the plants they visit.
- Climate change might affect when and where flowering plants bloom, meaning that some bees could be left with nothing to eat.

#### A world without bees means...

A world without bees means:

- Fewer flowers, trees and plants
- Less fruit and natural foods
- Fewer natural products like cotton (used to make your clothes!)
- Fewer birds and small mammals
- No honey



# What can we do to help our bees?



#### What can we do to help our bees?



Planting bee-friendly flowers in your garden or window box will provide a food source for insects throughout the year.

Leaving a wild corner in your garden or an untrimmed patch of lawn creates space for flowering weeds to grow and ground-nesting bees to live.





Planting trees, creating nature reserves and supporting local parks will help countless species including bees

### Make your own Bee Hotel

Solitary bees don't live in a hive, instead they like to live by themselves and take shelter in small spaces. You can help them out by creating your own Bee Hotel for them to stay safe.













What we now know about bees thanks to the

 Bees live in the wild – in gardens and the countryside.

 The best habitat for them is with plenty of wildflowers as they depend on them for food.

 Bees are the superheroes that we rely on every day of the week for all of our favourite foods.

