Upper KS2 English Pack

Bee Aware

Bee Amazed

Bee Smart!

Sources: https://nationaldaycalendar.com/world-bee-day-may-20/

https://www.woodlandtrust.org.uk/blog/2018/07/why-are-bees-important-and-how-you-can-help-them/

Bee Prepared to Learn!

Activating prior knowledge is an important part of learning. It is when we think about what we already know about something which will be the foundation for new learning.

Make yourself a KWL grid (**K** – stands for what you **already know or think you already know**; **W** – stands for what you **want** to know and **L**- stands for what you have **learnt**)

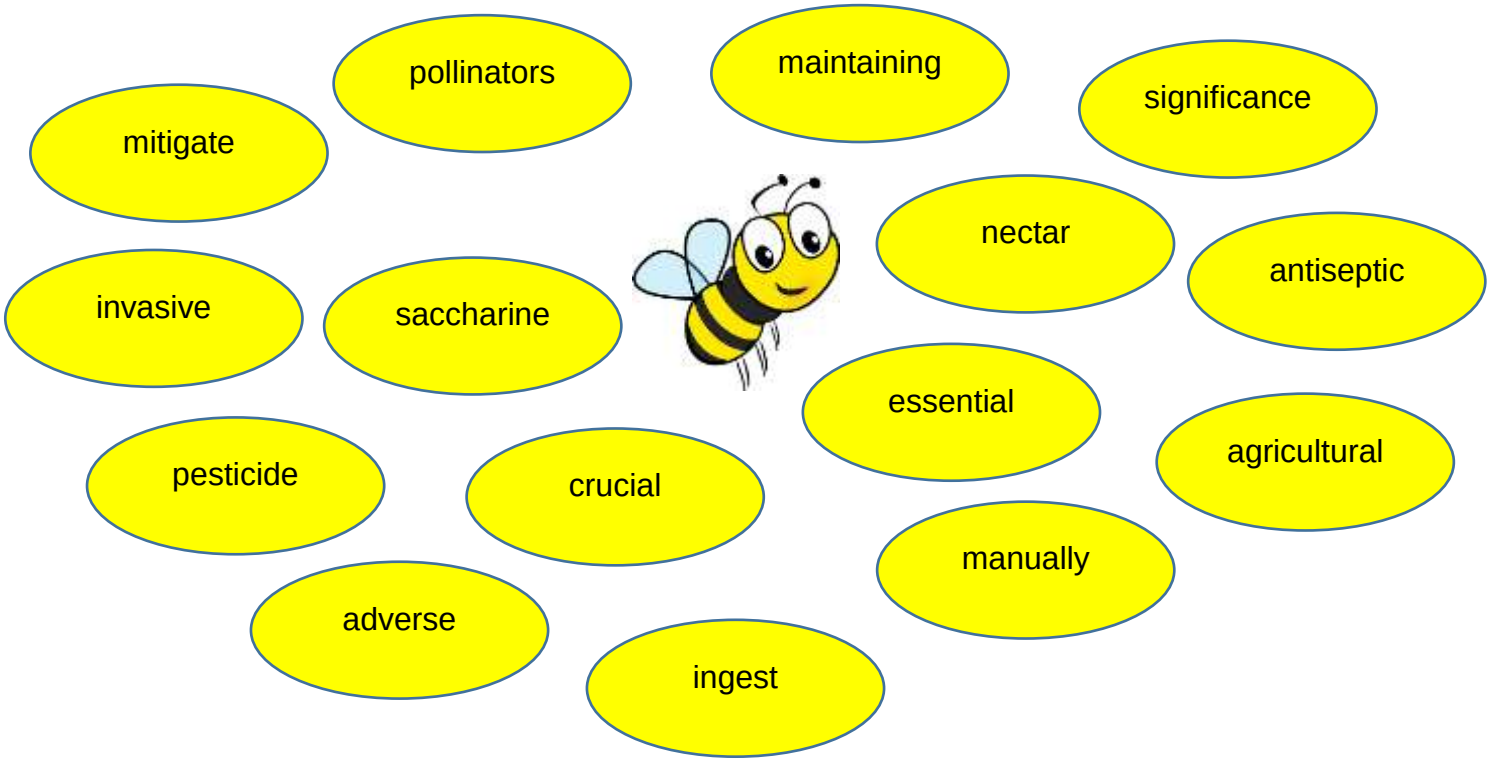
What do you know about bees?

- Parts of a bee
- Different types of bees
- Why bees are important
- Threats to bees
- How to protect bees

K	W	L

Bee Word Aware

Here are some words which may **bee** new to you



Create a Glossary

1. Copy the words into your book in alphabetical order, leaving 2 lines between each word
2. Find the correct meanings from the table below and copy next to the word

Something that takes pollen from one plant to another	To reduce, lessen, help, relieve, ease	Extremely sweet	To do something by hand	The sweet liquid that flowers make to attract insects and birds
To take into the body, usually by swallowing	Preserving, caring, protecting, looking after	When something is very important	To do with farming and growing crops	A chemical used to destroy insects or other organisms
Extremely important and significant	Bad, destructive, hostile	Importance	Something that prevents infection	Something that takes over something else

Rainbow Reading 1.

- Read the text looking out for these words
- When you find them, underline them using the following code
  - Green – if you now understand the word
  - Yellow – if you are starting to understand it
  - Red – if you find it difficult to understand

If it is yellow or red, go back to the glossary and use this to help you with your understanding. If you still do not understand it, try and find the word in a dictionary or online (you could use WordHippo -https://www.wordhippo.com/).

Also, read around the word and try and use the text to help you understand it better.

Rainbow Reading 2

- Pick another colour (or use a wiggly line)
- Read the text again
- This time, underline anything that tells us about the benefits (good things) that bees do

Here's an example:

Did you know:
1.Though bees have jointed legs, they do not possess anything like a kneecap, and therefore do not have knees.
2. Honey has **antiseptic** properties and was historically used as a dressing for wounds and a first aid treatment for burns and cuts.
3. The natural fruit sugars in honey – fructose and glucose – are quickly digested by the body. This is why sportsmen and athletes use honey to give them a natural energy boost.
4. The practice of beekeeping dates back at least 4,500 years.
5. Bees must gather **nectar** from two million flowers to make one pound of honey

The Amazing World of Bees

WORLD BEE DAY

World Bee Day is celebrated on May 20 each year. The purpose of the international day is to acknowledge the role of bees and other **pollinators** for the ecosystem.

Every year on this day, people across the world focus on the importance of preserving honey bees and all other pollinators. People are reminded of the **significance** of bees in providing for the needs of humanity.

Did you know:
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4. The practice of beekeeping dates back at least 4,500 years.

5. Bees must gather **nectar** from two million flowers to make one pound of honey
6. One bee has to fly about 90,000 miles – three times around the globe – to make one pound of honey.
7. The average bee will make only 1/12th of a teaspoon of honey in its lifetime.
8. A honey bee visits 50 to 100 flowers during a collection trip.
9. A honey bee can fly for up to six miles, and as fast as 15 miles per hour.
10. Bees communicate by dancing.

Why are bees important?

While to many they are simply the fuzzy flying insects we see darting among the flowers during the warmer months, bees are actually so much more than this and have an important part to play in **maintaining** our planet. Where trees and woods are **essential** to filter our air, bees are vital to both pollinate the food we need to survive and pollinate many of the trees and flowers that provide habitats for wildlife.

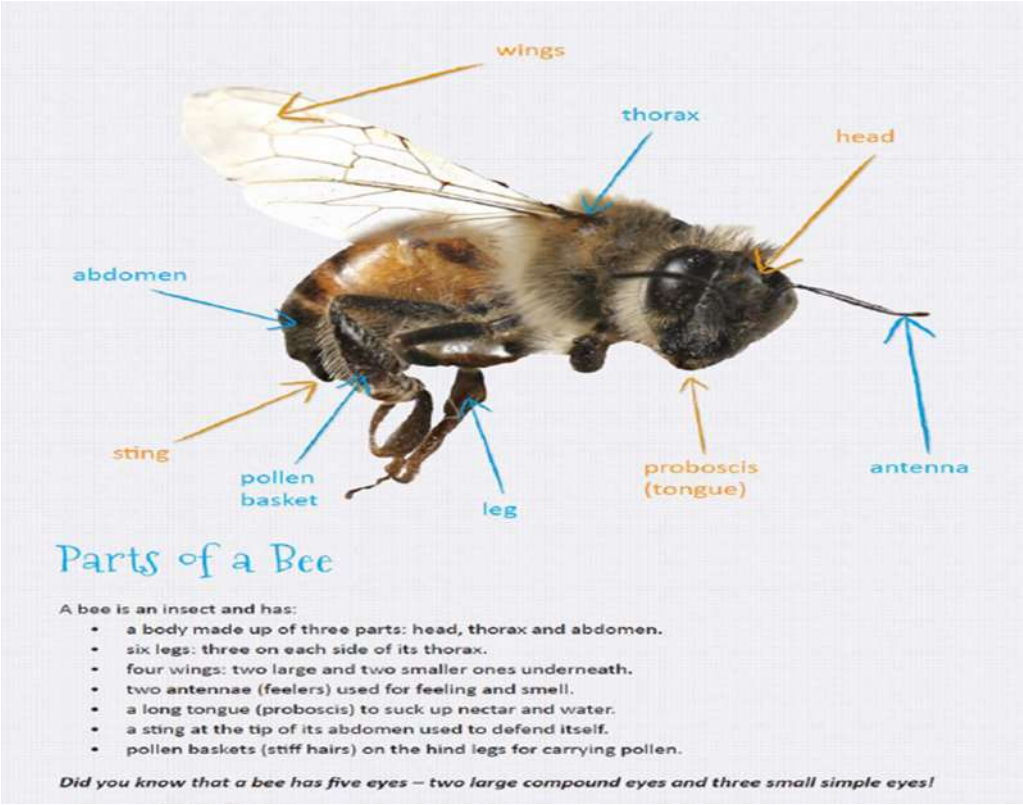
Perfect pollinators

According to the Food and **Agricultural** Organisation of the United Nations, approximately 80% of all flowering plants are specialised for pollination by animals, mostly insects (which includes bees). Pollination is **crucial** because many of our vegetables, fruits and the crops that feed our livestock rely on it to be fertilised, so without it, we could go hungry. Vegetables such as broccoli, asparagus and cucumber rely on the pollination of bees, as do apricots, strawberries, apples, tomatoes and almonds.

While there are other methods of pollination, including by the wind, birds, bats and other insects, wild bees are among the most important pollinators because they are capable of pollinating on a much bigger scale. It has been estimated that it would cost farmers in the UK an incredible £1.8 billion per year to **manually** pollinate their crops, which just further emphasises the importance of bees.

The importance of honey

As well as being pollinators, honey bees (*Apis mellifera)* also produce honey. This sickly sweet golden liquid is a valuable product not only for its **saccharine** taste, but also due to its medicinal properties and the fact it is so energy dense.



Why are bees disappearing?

Bees are in decline on a global scale as they face many threats, from habitat loss to the use of toxic **pesticides**. Many of the threats to bees share parallels with the threats to trees and woodland, so saving bees goes hand-in-hand with saving trees. If these threats aren't brought under control, we could be looking at a future without bees.

Habitat loss

An increase in urban developments and **invasive** farming methods has meant that many of the areas bees once called home no longer exist. These developments are as much a threat to bees as they are to trees and woodland. In the wild, several species of bee nest in hollow trees, so as more trees are destroyed so are the homes these bees live in. Wildflower meadows, and other areas abundant in flowering plants, are also in serious decline, meaning that bees lose an important food resource.

Use of pesticides

One of the main threats to our beloved bees is the use of toxic pesticides. Whilst pesticides are designed to kill pests, due to their intense toxicity they are having an **adverse** effect on other insects too, including bees. Neonicotinoids in particular cause bees a great deal of harm, as when they are sprayed onto plants they are absorbed. So, when a bee comes to pollinate this plant, it will **ingest** this pesticide. This can seriously damage the bee's central nervous system.

Climate change

Climate change, and the extreme weather it often causes, is another contributing factor in the decline of bees. It disrupts bee nesting behaviour and alters the normal seasonal timings, meaning flowers may bloom earlier or later than expected. Whilst the planting of more trees is helping to **mitigate** some of the effects of climate change, it is still a serious issue that could prove deadly for many of our bees.

Parasites and diseases

Parasites and diseases are another big threat to bees. The varroa mite (*Varroa destructor)* is a parasitic mite which clings to the back of the honey bee, passing diseases and viruses to it and gradually draining its strength.

Invasive species

Non-native species can pose another threat to bees. Some species in particular can cause havoc for native species – the Asian hornet (*Vespa velutina nigrithorax)* eats honey bees and so poses a huge threat.

How you can help bees?

Luckily, it's not too late to help save the bees from extinction. There are lots of things you can do to help protect these important creatures - most of which can be done from the comfort of your own garden.

Fill your garden with bee-friendly flowers

One of the easiest ways to help out bees is by planting lots of bee-friendly flowers in your garden. Bees favour a wide range of flowering plants, including foxglove, birdsfoot trefoil and red clover, which you can grow easily with a seedball bee mix. Simply scatter the seedballs in a location of your choice and watch them sprout!

Provide shelter for bees

Like most invertebrates, bees need shelter to nest and hibernate in. You can create your own shelter or buy a ready-made bee and insect house – just hang it up in a sunny sheltered spot in your garden and watch bees filling the tubes during the spring and summer months.

Do not use pesticides

Pesticides are one of the key threats to bees, and so one way to help bees is to stop using them in your own garden. Some pests provide food for crucial pollinators, so leaving them to be controlled naturally is the best choice if you want to help save bees.

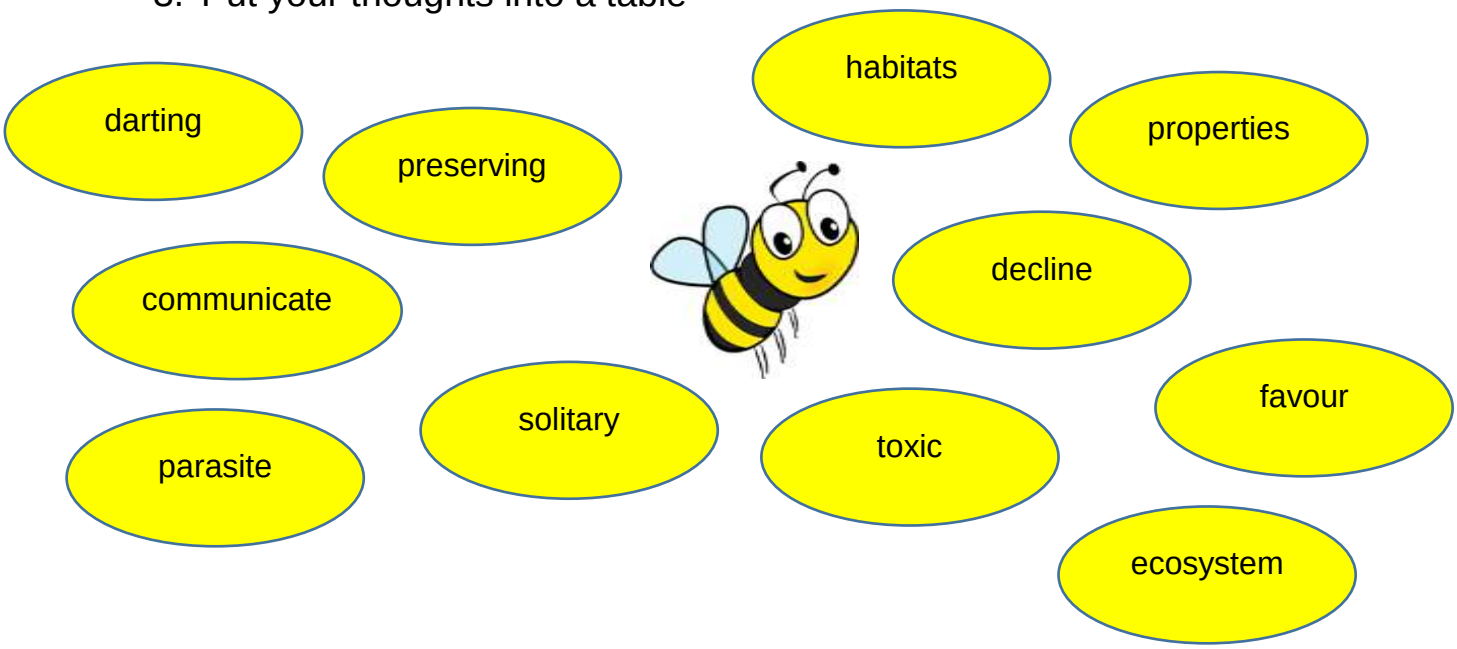
Help a bee in need

Often during the summer months you may spot a solitary bee sitting unmoving on the ground. Whilst it is easy to presume it might be dead or dying, chances are it is actually exhausted and in need of a quick pick-me-up. You can help out a tired bee by mixing two tablespoons of white, granulated sugar with one tablespoon of water, placing it near the bee so it can help itself to this homemade energy drink.

Bee Word Aware 2

Sometimes we have to work out the meaning of words for ourselves.

1. ***Scan*** the text (read quickly just looking for key words, numbers, phrases etc) to find the following words
2. Use the headings below to help you try and work out the meanings of these words
3. Put your thoughts into a table



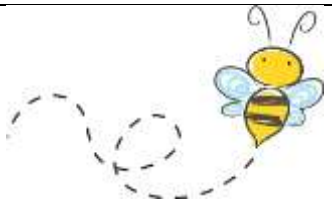
The first one has been done for you

Word	Heard Before?	Type of Word (noun, verb, adjective, adverb etc)	Any words within the word that might help?	Read around the word – what do you think it might mean	Any related words?
preserving	My aunty talks about saving jars for when she is preserving fruit from the garden	Verb	Preserv(e)	Looking after, keeping safe	Preserve Preserved Preservation

Bee a Star Reader

- See how many stars you can collect
- The one star questions are easier to get your brain warmed up and the three star questions are the challenges!
- If you did the star challenge in the previous unit, can you beat the number of stars you got then?

★	★★	★★★
Why has honey been used historically to treat wounds and burns?	Why are bees so important to pollination?	Think about all the reasons bees are important. Which do you think is the most important and why? Make your point, explain and give the evidence (PEE)
From how many flowers must bees gather nectar in order to make a pound (half a kilo) of honey?	What do you think is the easiest thing that can be done to help bees? Explain your answer	What do you think is the biggest threat to bees and why? (Again, use PEE)
Give three reasons why bees are important	What phrase in the text tells us that loss of bees is a world-wide issue?	Explain how saving trees goes 'hand in hand' with saving bees
List three things that are a threat to bees	How do bees help save money for farmers?	If you don't have a garden, what can you still do to help bees?
What can be done to help bees survive?	List three of the most interesting bee facts from this text	What fact from this text surprised you the most and why?



Beeautiful Puns!

A **pun** is a joke that makes a play on words. It usually does this by using words that sound similar but have different meanings (and sometimes different spellings eg. be and bee). It can also use different meanings of the same word to make the saying funny. Speakers and authors use puns to make the audience or readers smile, or groan!

'Bee' is a great word for a pun as we often use the word 'be' in the English language and it makes up parts of words like *beautiful, behave, because, unbelievable* etc.

- There are several 'bee' puns in this pack – how many can you find? Make a list
- How many words can you think of that have 'be' in them that could be turned into a bee pun?
- If you can get online to research information about bees – you will probably find a lot of bee puns out there – make a list

Perfect Parenthesis (no bee pun here!!)

A **parenthesis** is a word, phrase, or clause inserted into a sentence to give extra information. When a **parenthesis** is removed, the sentence around it should still make sense. A **parenthesis** is usually indicated with brackets, commas or dashes.

Commas – often used in more formal writing to explain something further

Eg. *Bumble bees, of which there are many different species, are a common sight in summer*

Brackets – often used to give more specific extra information

Eg. *As well as being pollinators, honey bees (Apis mellifera) also produce honey.*

Dashes – often used in more informal writing

Eg. *Bees – which I absolutely love – are a much-loved insect.*

The most important thing to remember is that if you take out the parenthesis, the sentence will still make sense.

Parenthesis Spotter!

Read through the text and collect all the examples of parenthesis.

Parenthesis Spotter		
Brackets	Commas	Dashes

Bee Informed!

Do your family and friends know as much about bees as you do now? Make a fun information leaflet that they will want to read but which gets across the important facts. You could include the following:

Attractive eye-catching design	Introductory paragraph	Bee puns	Parenthesis
Rhetorical questions to make the reader think	Bullet points	Fact boxes	Headings and sub-headings
Paragraphs to organise the writing	Persuasive language	Labelled illustrations	Closing paragraph