23 Days of Bees

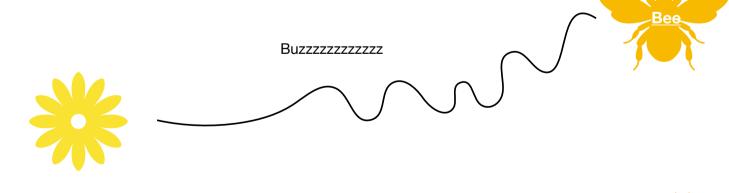
- Spend 23 days, (or less or more!) exploring the amazing world of bees.
- * The activities are suitable for home, or for school, with many linked to the curriculum.
- ☆ 23 Days of Bees works well used as a calendar, with a bee-themed activity every day, building on learning from previous days.
- \Rightarrow Or you can just choose a hexagon that looks interesting to you and follow the link.
- Some of the activities are very quick, less than five minutes, while others take much longer.
- * There are extra links to follow on most pages, so that you can find out even more about bees.

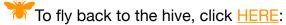
Key

This symbol indicates a creative activity for you to carry out at home or at school. Some of the activities need an adult to supervise them, so please read the instructions and check with an adult before you start.

There is a cost involved with this activity, as you may need to buy materials for it.

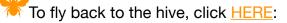
To set off on your 23 Days of Bees, just click on the bee.











Pollination by Honey Bees

This Key Stage 2 **BBC Bitesize** video explains how and why bees are attracted to flowers.

https://www.bbc.co.uk/bitesize/topics/zy66fg8/articles/zx4ktv4

This **Countryside Classroom** activity helps you understand the parts of a plant and how bees carry pollen from one plant to another.

(Scroll to page 6 for this one but also have a look through the other activities for more ideas for outdoor learning).

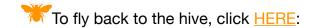
https://www.countrysideclassroom.org.uk/storage/resource/downloads/421388ff-2191-4a5c-85d3-d5f06e3f70df/original/ face-gamescmyk-17.pdf



How about making a giant flower? Here's one that's been started. What could you use to make the carpels and stamens? How about using Wotsits for anthers?!

And here's another activity to carry out, either in your garden, or if you are able to go out, in a park or other local green space.

https://www.plantlife.org.uk/uk/our-work/publications/wild-about-plants-family-expeditions-spring



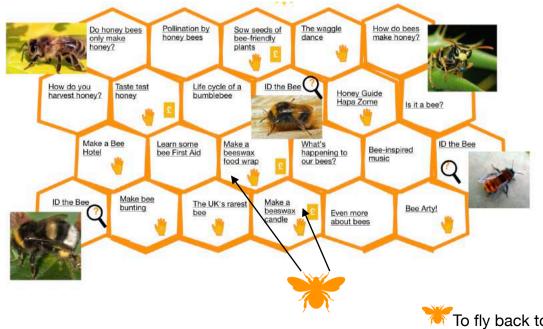
Do bees only make honey?

Bees make a lot more than just honey. Read about some of their other produce in this article by the **British Beekeepers Association**.

https://www.bbka.org.uk/faqs/bee-produce-yes-honey-bees-make-alsorts-of-wonderful-things-as-well-as-honey

Further down in the 23 Days of Bees hive, there is an activity to make a beeswax candle. If you are planning to carry out this activity, it would be a good idea to order the beeswax sheets and wax now.

There is another activity where you can make a beeswax food wrap. If you are planning to carry out this activity, it would be a good idea to order the beeswax pellets now and to check that you have some 100% cotton fabric to use.



ID the Bee

Look closely at the photograph of the bee. Use the links to the **Bumblebee Conservation Trust** Identification Key <u>https://www.bumblebeeconservation.org/identify-a-bumblebee/</u>

and

the Woodland Trust 'Types of bee in the UK' web page to find out which bees are shown in the 23 Days of Bees hive. <u>https://www.woodlandtrust.org.uk/blog/2019/05/types-of-bee-in-the-uk/</u>

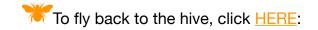
You'll need to use both websites to identify all three bees and, if you can, open them in a separate tab, so that you can keep looking at the photograph.

If you get *really* stuck, click on the question mark in the magnifying glass.



How many types of bee can you identify in this photograph?

Go outside and see how many bees you can identify. Take a photograph of the bee if you are able to.



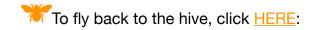
The Honey Taste Test

You will need:

- At least two different types of honey
- Enough spoons for each person to use clean spoon in each honey. (Don't put a spoon that you have licked back into the honey! Why not?)



You are going to compare the different types of honey. What could you compare? Think about using all your senses to compare the different types of honey. How can you organise your findings? Did everyone like the same honey?



How do Bees Make Honey?

This **YouTube** video (approximately 4 minutes) shows how bees produce honey.

https://www.youtube.com/watch?v=AECtOFpbgVs

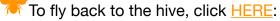
This simple **BBC Teach** video about how bees make honey is suitable for Key Stage 1. The website has some other simple videos about food production, including milk and orchards.

https://www.bbc.co.uk/teach/class-clips-video/geography-ks1-how-honey-is-made/z7j76v4

Why is honey important? Find out about more honey facts in this F.A.Q. from the **British Beekeepers Association**.

https://www.bbka.org.uk/FAQs/bees-and-health-faqs





Make a Beeswax Candle

You will need:

Beeswax sheets and wicks. You can buy these from online suppliers, for example:

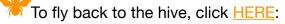
https://www.thorne.co.uk/candlemaking

Instructions

- 1. Your beeswax sheet should be at room temperature, so that it is easy to work with.
- 2. Cut the wick so that it is approximately 1.5 c.m. longer than the length of the sheet at one end.
- 3. Firmly press the wick along one edge of the wax sheet to keep it in place.
- 4. Slowly roll the wax sheet (away from you) over the wick, keeping the roll tight and even.
- 5. When you reach the end of the sheet, gently press the edge into the candle to hold it in place.





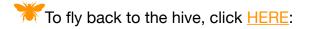


Life Cycle of a Bumblebee

Scroll down the page on this **Bumblebee Conservation Trust** page to find out about the life cycle of a bumblebee.

https://www.bumblebeeconservation.org/bumble-kids/





Sow Seeds of Bee-Friendly Plants

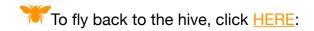
The **Grow Wild** website has information and instructions about how to sow and grow wildflowers, as well as lots more information about bees and other pollinators.

https://www.growwilduk.com/wildflowers/how-grow-wildflowers



And how about making a seed 'bomb'?

https://www.wildlifetrusts.org/actions/how-make-seed-bomb



Waggle Dance

This **Friends of the Earth** waggle dance activity can be done by a whole class in a school setting or at home, as a family activity. You will also come across other creative activities by following this link.

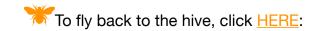
https://cdn.friendsoftheearth.uk/sites/default/files/downloads/Waggle%20dance%20game.pdf

Here is a beekeeper performing a waggle dance for a school group! Notice how the photograph is slightly blurred where he is making rapid arm movements to mimic the wings of the honey bee.



Find out how the bees find their flowers from this **British Beekeepers Association** web page.

https://www.bbka.org.uk/how-far-does-a-bee-fly-how-does-it-navigate



Make a Bee Hotel

In this **Buglife** practical activity, you can use simple materials that may be available at home to construct a bee hotel.

https://cdn.buglife.org.uk/2019/07/Bee-hotel-v.2.pdf

Or scroll down through this **CBBC** page about World Bee Day and find another way of making a Bee B and B.

https://www.bbc.co.uk/newsround/48308339

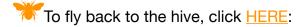
The photograph below shows an insect 'mansion'.



What are the advantages of having different-sized holes?

Can you think of any *disadvantages* of bee mansions, compared to simple bee 'hotels'

Carry out some online research to answer these questions - there is plenty of information out there!



Honey Guide Hapa Zome

Hapa Zome means 'leaf dye' but this Japanese art of 'leaf-bashing' can be used to make beautiful, detailed prints of flowers. Honey guides are the markings on petals, used to guide bees towards the source of nectar, deep inside the petals. Some of these honey guides are only revealed by ultra violet light but others are visible to us. You can make the prints on paper or fabric.

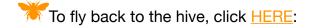
You will need:

- Something to bash the flower with (small hammer, rolling pin or flat stone)
- A flower with honey guides (markings leading onto the centre of the flower)
- Sheet of kitchen roll
- Piece of paper or plain fabric
- Flat surface to work on



Instructions

- 1. Place the paper or fabric on the flat surface, with the flower positioned where you would like your print.
- 2. Place the sheet of kitchen roll over the flower
- 3. Repeatedly tap the kitchen roll with your hammer / rolling pin / stone you want to release the dyes from the flower but not smash it into pieces!
- 4. When you are sure that every part of your flower has been tapped (you will probably see a slight dampness in the kitchen roll over every part of the flower that you have successfully tapped), carefully peel off the kitchen roll. Then, very carefully, peel off the flower you should see a print of your flower, complete with honey guides.



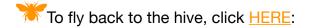
How do you Harvest Honey?

This YouTube video (approximately 9 minutes) shows the process of harvesting honey from a bee hive.

How do you harvest honey?



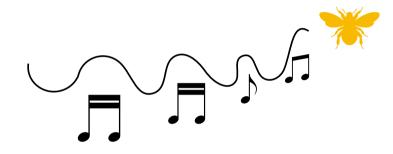




Bee-inspired music

Listen to a piece of music by following this link:

https://www.youtube.com/watch?v=aYAJopwEYv8



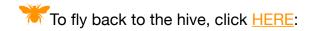
Do you like this music?

If you do, can you explain why?

And if you don't like it, why not?

Do you think that the title of the piece of music is a good choice for this tune?

Why do you think this?



The UKs Rarest Bee



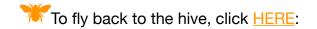
Find out more about our rarest bee, from this **Bumblebee Conservation Trust** factsheet.

https://www.bumblebeeconservation.org/wp-content/uploads/2017/11/Slater-Shrill-carder-bee-Factsheet-02.15.pdf

Then make a shrill carder bee kazoo

Create a simple instrument that mimics the sound of a shrill carder bee with this **Back from the Brink** activity.

https://naturebftb.co.uk/2019/12/03/how-to-make-a-shrill-carder-bee-kazoo/v



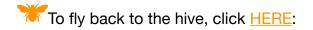
What's Happening To Our Bees?

Our bees are under threat - but the reasons and solutions may not be as straightforward as we might think.

This **Countryside Classroom** activity explores some of the issues and encourages us to think more deeply about what is happening to our bees.

https://www.countrysideclassroom.org.uk/resources/961





Make Bee Bunting

Create your own swarm of bees! Using images of bees from websites or books, draw a bee on paper.

Look closely at the image and try to colour your drawing as accurately has possible.

To make the wings, either use paper or, even better, clear cellophane (from envelope windows or food packaging). You may be able to draw veins on the wings if you have pens that can write on clear plastic.

Stick the wings on the bee.

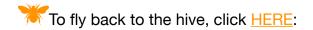
Repeat for either the same type or for different types of bee.

Use ribbon or string to join your bees together and hang up in a chain of bees.



Have you drawn the right numbers of all the parts of your bee? Check, with this F.A.Q from the **British Beekeepers Association**.

https://www.bbka.org.uk/FAQs/six-legs-four-wings-five-eyes



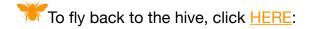
Make a Beeswax Food Wrap

If you would like to make a plastic-free alternative to clingfilm, you will need:

- Cosmetic grade beeswax pellets (you can order these online from many suppliers)
- 100% cotton fabric
- Scissors or pinking shears
- Baking sheet
- Baking parchment
- Brush

These simple instructions are from **American Good Housekeeping** (<u>https://www.goodhousekeeping.com/home/craft-ideas/g25642328/diy-beeswax-reusuable-wraps/</u>) but other methods can be found elsewhere online.

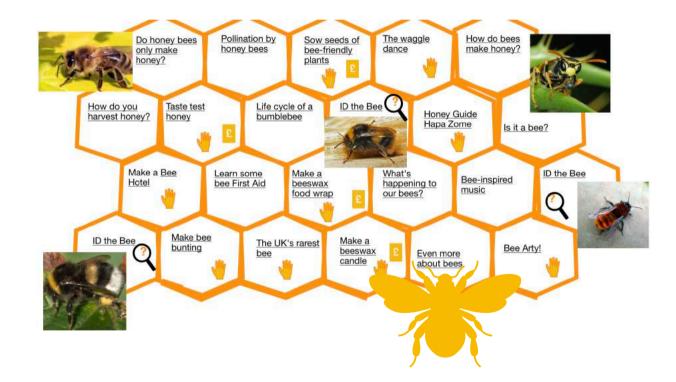
- 1. Preheat the oven to 200°F or the lowest setting. Cut the fabric into sizes that will fit on your baking sheet. For a snack bag, use a 7" by 14" piece of fabric. A 14" by 14" square will cover most sandwiches. Pinking shears will help prevent your swatches from fraying, but scissors will also get the job done.
- 2. Line a baking sheet with parchment paper and place the fabric on top. If your fabric is one-sided, place the patterned side facedown. Use a fresh piece of parchment paper each time you make another wrap.
- 3. Evenly distribute a liberal amount of beeswax pellets all over the fabric. Make sure you get pellets near the edges too.
- 4. Place the sheet in the oven for about 4-8 minutes. When the pellets melt completely, take the tray out and use a paintbrush to spread the wax evenly over the entire fabric.
- 5. NOTE: The beeswax will stick to the brush, so use one you're okay discarding or saving to make future beeswax wraps.
- 6. Using tongs, remove the fabric from the baking sheet. It should feel cool to the touch after waving it for a few seconds in the air. Hang the fabric up to dry or set it on the back of a chair with the beeswax side facing up.
- 7. Once the beeswax has set and is not very tacky, you can add buttons or hand-sew them into small pouches.
- 8. Wash your wraps by hand in cool water with a mild dish soap. Place them on a drying rack or clothesline to dry. Avoid any heat such as hot water, microwaves, or ovens that will cause the beeswax can melt, ruining your wraps.

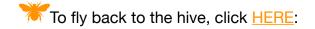


Learn some Bee First Aid

Sometimes, during the summer, you may come across a bee sitting still on the ground. Before you assume that it is dead or dying, find out if it is just tired out and in need of a quick boost. Mix two tablespoons of white, granulated sugar with one tablespoon of water, and place it near the bee. If it is just tired, it may help itself to your homemade energy drink and soon be ready to buzz off.

If this activity has made you want to do more to help bees, go to the Even more about bees link.



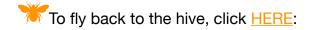


<u>Is</u> it a bee?

It's striped and buzzing around but is it a bee? Take a look at this **CBBC** video to learn more.

https://www.bbc.co.uk/newsround/45194754





Even more about bees

This booklet from the **Wildlife Trusts**, brings together many of the ideas you may have already explored during 23 Days of Bees, plus a few new ones for you to try.

https://www.wildlifetrusts.org/sites/default/files/2017-12/ecxt.pdf

Now, how confident are you feeling about your bee knowledge?

True or false?

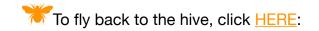
Decide whether you believe the following statements to be true or false, then follow the link below to check your answers.

- 1. Honeybees dance for each other.
- 2. Honeybees can dream.
- 3. Honeybees can be used to sniff out explosives (like sniffer dogs)

https://www.cbc.ca/natureofthings/features/they-dance-and-may-even-dream-six-things-you-may-not-know-abouthoneybees

And maybe your final activity could be the **BBC Newsround** quiz 'Which Bee Would You Be?'!

https://www.bbc.co.uk/cbbc/quizzes/which-bee-would-you-be-quiz



Bee Arty

Bumblebee thumb prints are very easy to make. You will need:

- Watercolour paint in yellow or orange, or a yellow ink-pad
- Black pen
- Paper (you could make wrapping paper, or a greetings card, or a poster)
- Your thumb!

Instructions

- 1. Dip your thumb in the yellow paint
- 2. Stamp it on the paper, to make as many bees as you want
- 3. When the paint is dry, use the black pen to add the stripes, wings and, if you want to add them, legs.

Or, if you'd rather draw a bumblebee, <u>https://www.howtodrawit.com/bee.html</u>

If you'd like to colour in a bee template https://www.sussex.ac.uk/lasi/documents/bee-colourin-sheet.pdf

Answers to ID the bee

- 1. Early bumblebee
- 2. White-tailed bumblebee
- 3. Tawny mining bee

