



## Buzzing Schools teacher sheet: Using and constructing a Bumblebee ID Key



**Bumblebee  
Conservation  
Trust**

Pollinating the Peak

**Topic(s):** Variation and classification, ecosystems

**Intention:** Starter activity

**Target audience:** KS3/KS4

**Curriculum links:** methods of identifying species and measuring distribution, frequency and abundance of species within a habitat, the importance of biodiversity

**Overview of resources:** This resource pack is a taster pack from the 'Buzzing Schools' education programme, a Heritage Lottery funded project currently in its development phase, set in Peak District and Derbyshire. We aim to raise awareness of our native, wild pollinators and their importance for our natural heritage, enjoyment of wildflowers and food security. The education programme will bring fun, engaging, relevant and interesting pollinator science to schools in the local area with strong links to the curriculum.

*If you would like to get involved and help us develop this programme tso we may tailor the outputs to best provide for your needs as teachers and the needs of your students, please contact me: [ida.griffiths@bumblebeeconservation.org](mailto:ida.griffiths@bumblebeeconservation.org). I hope you enjoy the resource!*

### **Content:**

- Three levelled activity sheets for using and constructing keys;
- A bumblebee ID guide for the 'big 8' most common and widespread species in the UK

### **Background:**

Bumblebees are endearing and familiar insects. Their animated behaviour and deep buzz as they fly from flower to flower makes them a delight to watch. Sadly though, our bumblebees have been declining because of changes in agricultural practices that have largely removed flowers from the landscape, leaving the bumblebees with little to feed upon. Most UK species have declined greatly in recent years, and two have become extinct in the UK since 1940.

There are around 275 species of bumblebee in the world, and most of these are found in the northern hemisphere, although South America has a few native species, and New Zealand has some which were introduced from Britain.

In the UK there are **24 species** of bumblebee (25 if you count the reintroduced Short-haired bumblebee) but only eight are commonly found in most places. Bumblebees are found in a variety of habitats and most people should be able to attract them to their gardens if they have the right kinds of flowering plants.

*For more detailed information on bumblebees, including how you can help to protect them, check out our website: [www.bumblebeeconservation.org](http://www.bumblebeeconservation.org)*



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[bumblebeeconservation.org](http://bumblebeeconservation.org)





# Buzzing Schools teacher sheet: Using and constructing a Bumblebee ID Key



Pollinating the Peak

Look at the images of the bumblebee species below. Use the key at the bottom of the page to identify which species each bumblebee belongs to based on their features. Cut out the images below and stick them in the correct positions provided on the key.



Does it have a  
white tail?

Yes

No

Does it  
have yellow  
stripes?

Does it  
have a red  
tail?

Yes

No

Yes

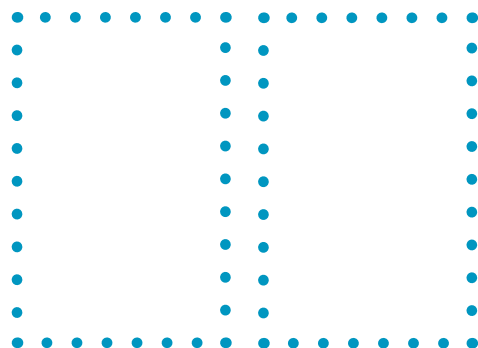
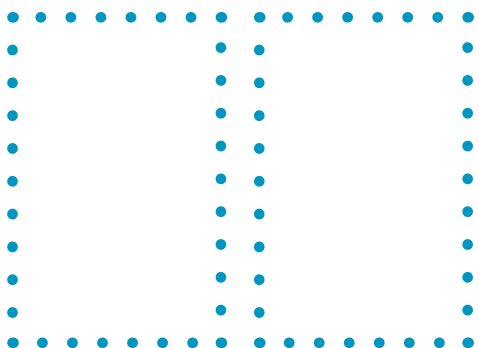
No

White-tailed  
bumblebee

Tree  
bumblebee

Red-tailed  
bumblebee

Common carder  
bumblebee



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[bumblebeeconservation.org](http://bumblebeeconservation.org)



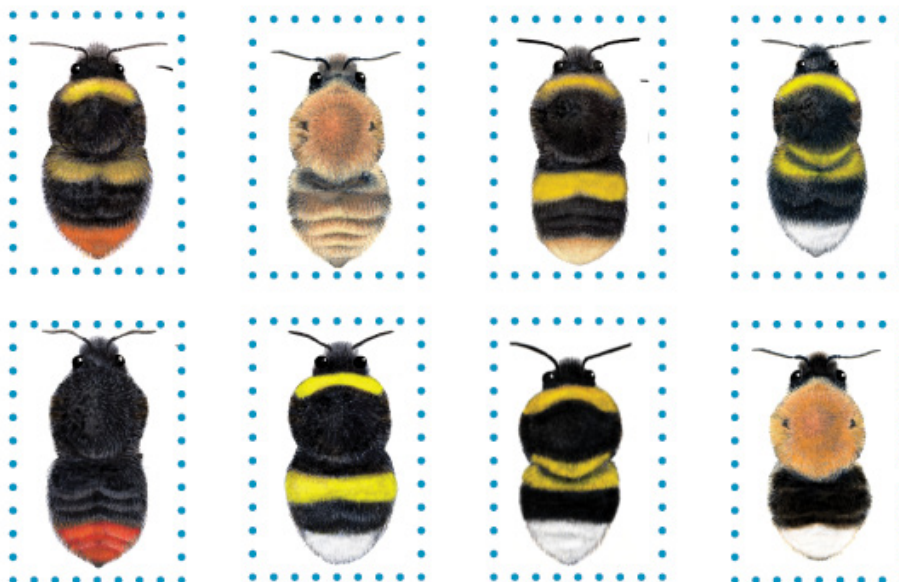
# Buzzing Schools activity sheet: Constructing a Bumblebee ID Key

Look at the images of the bumblebee species below. Use their features to construct your own identification key for the bumblebees (you can draw your key in pencil in the box at the bottom of this page). Test this out on a classmate to see if your key is successful in separating all the bumblebees. If not, use this feedback to make changes to your key (why we used a pencil!) and try again.



# Buzzing Schools activity sheet: Constructing a Bumblebee ID Key

Look at the images of the bumblebee species below. Use their features to construct your own identification key for the bumblebees (you can draw your key in pencil in the box at the bottom of this page). Test this out on a classmate to see if your key is successful in separating all the bumblebees. If not, use this feedback to make changes to your key (why we used a pencil!) and try again.



# The Big8 UK bumblebees

## Buff-tailed bumblebee



Worker/male      Queen

Queens are very large.  
The queen's tail is blonde, but worker and male tails are white, with a thin blonde edge.



## Early bumblebee



Male      Worker      Queen

The queens and males have two clear yellow bands, but workers often only have one. The tail is red.



## White-tailed bumblebee



Male      Queen/worker

Queens and workers have a clean white tail and two lemon-yellow bands. The males have more yellow hair, and have yellow tufts of hair on the head and face.



## Red-tailed bumblebee



Male      Queen/worker

The queens and workers are completely black, except for a dark red tail. The males look similar, but have some yellow hair.



## Common carder bee



Queen/worker/male



This bee is mostly brown or ginger and sometimes has thin black bands.

Queens, workers and males all look very similar.

## Tree bumblebee



Queen/worker/male

The Tree bumblebee is a new arrival to the UK. It can be found in most of England and Wales, and was first spotted in Scotland in 2013.

It is the only one of our bees to have a ginger and black body, with a white tail. It usually nests above ground, often in bird boxes and trees.

## Garden bumblebee



Queen/worker/male



This bee has three yellow bands on its body, with a clean white tail.

The queen, workers and males all look similar.

It has a longer face than other bumblebees.

## Heath bumblebee



Queen/worker/male



The Heath bumblebee is similar to the Garden bumblebee, which also has three yellow stripes and a white tail. However, the face of the Heath bumblebee is more round than that of the Garden bumblebee.

