

SCHEME OF WORK

PERFECT FOR: Ages 7+; studying informative and engaging non-fiction texts, creative writing - diary entries, poetry and persuasive leaflets; learning about bees and honey; adaptation and food chains; the impact of humans on nature and animals; bee-inspired art, dance and music lessons, and making your own bee hotel!

KEY FOR CROSS-CURRICULAR OBJECTIVES:

English: Reading comprehension; Creative Writing;

Writing to Entertain and Inform;

Explanation and Recount Texts

Drama, Speaking and Listening

Design Technology & Art

Science

Computing

Geography

Music



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WEEK 1 (PAGES 8 - 9)

THE BEE'S KNEES



SUGGESTED OBJECTIVES	COMPREHENSION QUESTIONS	EXTRA ACTIVITIES
<p>Reading: Comprehension</p> <ul style="list-style-type: none">- Make predictions about a non-fiction text, using clues.- Ask questions to improve understanding of a text.- Identify how language, structure, and presentation contribute to meaning.- Retrieve and record information from non-fiction.- Learn how to use a Contents Page. <p>Design Technology & Art</p> <ul style="list-style-type: none">- Draw accurately using described details from research. <p>Science</p> <ul style="list-style-type: none">- Understand how animals are adapted to their environment.- Contrast bees and wasps, thinking about their similarities and differences.	<ol style="list-style-type: none">1. Look at the front cover of the book. On a whiteboard or post-it, record everything you can see. What sort of book do you think this is? Is it fiction or non-fiction? Why do you think this?2. Look at the Contents Page. On which pages might I find out about the following?<ul style="list-style-type: none">- Where honey comes from- Pollination- Worker bees- Swarms- How we can help bees3. Take some time to explore the book up to page 8 – is there anything that has particularly interested you? Can you choose one fact to share with a partner? Is there anything that has puzzled or confused you?4. Create a glossary of definitions for the following words: <i>thorax, abdomen, antennae, spiracles</i>.5. A honey bee's body is made up on two different sections. True or false?6. Why is the tongue of a honey bee like a straw?7. Look at the layout of the diagram of the honey bee. How does it help your understanding?8. Explain why buzzing is important to some bees.9. Why might a queen bee be considered dangerous?10. Can you think of another title for this chapter?	<p>Before beginning the book, write down everything you think you already know about bees in the circle. In the outer circle, write down where you learned this information (see Resource 1a). Share your ideas as a group.</p> <p>Pick any animal of your choosing. Use non-fiction books and the internet to conduct research into its appearance and how it is adapted to its environment. Using the illustration on these pages as inspiration, create your own labelled diagram to show how your animal is adapted to its habitat. Remember to use technical language and a ruler to label your diagram.</p> <p>Use the diagram (see Resource 1b) to compare and contrast bees and wasps. In the middle rectangles, list all the ways in which bees and wasps are similar. In the outer rectangles, list all the ways in which they are different. How does this help you better understand each insect? Now choose two more animals and carry out the same activity.</p>



WEEK 2 (PAGES 18 - 21)

WHAT IS POLLINATION?



SUGGESTED OBJECTIVES	COMPREHENSION QUESTIONS	EXTRA ACTIVITIES
<p>Reading: Comprehension</p> <ul style="list-style-type: none">- Identify how language, structure, and presentation contribute to meaning.- Retrieve and record information from non-fiction. <p>Writing to Inform and Explain</p> <ul style="list-style-type: none">- Identify features of an information text and evaluate its purpose. <p>Science</p> <ul style="list-style-type: none">- Understand the process of pollination. <p>Computing</p> <ul style="list-style-type: none">- Plan and design an engaging, informative Powerpoint presentation about bees and pollination. <p>Food Technology</p> <ul style="list-style-type: none">- Design and make a healthy breakfast snack and evaluate your product against a success menu.	<ol style="list-style-type: none">1. Look at the title on these pages. What do you predict the information on these pages will be about?2. Write a definition of 'pollination'.3. Why are some of the words on these pages written in bold or in capital letters?4. How do the numbers and arrows on the pages help you understand the process of pollination?5. Find and copy a word that means the same as 'drawn to'.6. Why are bees attracted to flowers? Give two reasons.7. What happens after a bee enters a flower to collect nectar and pollen?8. What might happen if a bee did not have a fluffy body?9. Look at the far, right hand side of page 19. Why do you think the sixth step in the pollination process is presented against a pink background? What impact does this have?10. Why do you think the information on pages 18-19 is spread across two pages? Why is there a diagram of the same flower on each page?	<p>Using the features of an information text, identify the following features on these pages: <i>introduction, titles, sub-titles, words in bold, pictures and captions, diagrams, written in present tense, charts and graphs.</i></p> <p>Write or print out information about the different stages of pollination onto six cards, using pages 18 and 19 to help you. In pairs, muddle up the stages and challenge your partner to order them correctly.</p> <p>Create a PowerPoint and prepare a presentation to be delivered to the class to answer the question, 'Why do we need pollination?'. Try to include animations, interesting slide transitions and sound clips.</p> <p>Look at page 21. Can you sort the different items into these food categories: <i>carbohydrates, sugar, fibre, protein, fat</i>? Design and make your own healthy breakfast snack, ensuring it is visually appealing, tasty, easy to make and, of course, healthy! Perhaps it can use honey as a main ingredient? Evaluate your product against the success criteria.</p>



WEEK 3 (PAGES 24 - 27)

HOW IS A WORKER BEE BORN?



SUGGESTED OBJECTIVES	COMPREHENSION QUESTIONS	EXTRA ACTIVITIES
<p>Reading: Comprehension</p> <ul style="list-style-type: none">- Identify how language, structure, and presentation contribute to meaning.- Retrieve and record information from non-fiction.- Summarise the information from a text, by choosing the most relevant information. <p>Writing to Entertain and Inform</p> <ul style="list-style-type: none">- Write a diary about the life of a worker bee.- Use imperative verbs to give instructions. <p>Design Technology & Art</p> <ul style="list-style-type: none">- Explore the style and techniques employed by the Art Deco movement and then use these to design a pair of wings for a queen bee. <p>Maths</p> <ul style="list-style-type: none">- Identify 2D shapes and discuss their properties.- Write and solve mathematical word problems.	<ol style="list-style-type: none">1. What is special about comb cells?2. How does the table on page 24 help you understand and visualise the process?3. Why is a larva similar to a baby?4. What other creatures and insects do you know that spin a cocoon?5. How does an adult bee escape from the comb cell?6. Complete this sentence: Between days 3-11, a nurse bee will...7. Which of the jobs carried out by the worker bee do you think is the most important? Use evidence from the text to support your opinion.8. How is a queen bee different to a worker bee? How is it similar? Draw up a table of differences and similarities.9. Look at the sub-titles on page 27. How do they help you understand the text? Can you think of new sub-titles for each section of the text on page 27?10. What is the most important piece of information on these pages? Summarise the contents of these pages in three sentences. Now try to do the same, but in two sentences. Can you summarise the information now in one sentence?	<p>Write a diary entitled 'A Worker Bee: A Month in My Life'. Imagine you are a worker bee in a large colony. How did you get there? What can you see, smell, hear, taste and touch? What different roles and jobs do you carry out? Write in the first person and refer to your thoughts and feelings throughout.</p> <p>A bee colony is very busy. What sort of rules might there be inside a colony? Create your own amusing rules for living in a bee colony. Can you identify and use a range of imperative verbs? You may also wish to use brackets to add extra detail to your rules.</p> <p>Look at a range of Art Deco designs. Carry out some observational drawings of bees. Create an intricate design for a queen bee's wings in an Art Deco style, thinking about your use of line, shape and colour.</p> <p>How many different 2D shapes can you see on these pages? Can you identify the shapes and discuss their properties? Across the pages, there are sixteen large hexagons. How many sides in total is that? In partners, create your own shape-based word problems based on these pages.</p>



WEEK 4 (PAGES 28 - 31)

HOW DO HONEY BEES TALK TO EACH OTHER?

SUGGESTED OBJECTIVES	COMPREHENSION QUESTIONS	EXTRA ACTIVITIES
<p>Reading: Comprehension</p> <ul style="list-style-type: none">- Identify how language, structure, and presentation contribute to meaning.- Identify whether statements are fact or opinion, by retrieving information. <p>Writing to Entertain</p> <ul style="list-style-type: none">- Create a list poem, using a variety of collective nouns, adjectives, similes and alliteration to engage the audience. <p>Physical Education</p> <ul style="list-style-type: none">- Perform a bee dance using a range of movement patterns. <p>Music</p> <ul style="list-style-type: none">- Play and perform in a group, creating atmosphere and mood through the use of the voice, body percussion and various instruments.	<ol style="list-style-type: none">1. Why do you think pages 28 and 20 are framed by red theatre curtains?2. What is the waggle dance? Why is this an appropriate name for the dance?3. The angle of the dance tells the other bees how far away the flowers are. True or false?4. Can you write your own 'true or false' questions about these pages for a partner to answer?5. Look at page 29. Why does the word 'smell' have an exclamation mark after it? How should this be read? How does the author want us to feel?6. Look at page 30. How does the author try and engage the reader? Is it successful?7. Why does a swarm form?8. Complete this sentence: The bees prepare for their flight by eating honey, but...9. Have you ever seen a swarm of bees? Why might a swarm of bees look frightening?10. Using the information from the text, decide whether these statements are fact or opinion: <i>A swarm of bees looks scary, honey bees don't talk, the waggle dance is very funny to watch, the queen bee is not a strong flier.</i>	<p>Find out the collective nouns for different groups of animals. What is a group of tigers called? What about a group of dolphins? Write your own list poem, by creating your own collective nouns for a variety of different animals. Try to include powerful adjectives, adverbs, similes and alliteration. For example:</p> <p><i>A fluff of kittens, purring quietly</i> <i>A dagger of wasps, buzzing angrily</i> <i>A laughter of monkeys, chatting loudly</i> <i>A kiss of sparkling dolphins swimming in the silent sea...</i></p> <p>Create your own dance inspired by the honey bee's waggle dance. Use a range of twisting, turning movements at different levels of height. Can you perform expressively, developing different ways of travelling and moving? Create a class parade of dancing bees!</p> <p>Create a soundscape to accompany the waggle dance. Use your voices, body percussion and various tuned and untuned instruments to create a joyful, delicate composition.</p>



WEEK 5 (PAGES 32 - 33)

WHO EATS HONEY BEES?



SUGGESTED OBJECTIVES	COMPREHENSION QUESTIONS	EXTRA ACTIVITIES
<p>Reading: Comprehension</p> <ul style="list-style-type: none">- Make predictions about a non-fiction text, using clues.- Ask questions to improve understanding of a text.- Identify how language, structure, and presentation contribute to meaning.- Retrieve and record information from non-fiction. <p>Science</p> <ul style="list-style-type: none">- Construct and interpret a variety of food chains, identifying producers, predators and prey. <p>Design Technology & Art</p> <ul style="list-style-type: none">- Explore a range of moving picture books, looking at how levers, pivots and wheel mechanisms work.- Create a new page for the book. <p>Drama, Speaking and Listening</p> <ul style="list-style-type: none">- Perform a poem in role.	<ol style="list-style-type: none">1. Can you name three types of bird that like eating honey bees?2. What does the word 'tyrant' mean? Can you use it in a sentence of your own? What sort of bird might the tyrant flycatcher be??3. How is a beewolf similar to a bald-faced hornet? How is it different?4. Can you think of three adjectives and a simile to describe the skunk?5. A raccoon is a reptile. True or false?6. Why are honey badgers a threat to the bee population?7. Which of these creatures looks the most frightening and dangerous? Why?8. Why do you think there isn't a lot of text and writing on these pages?9. How do the different rows and bands of colour help you understand the different categories of animal?10. How do the labels on the left-hand side of the page help your understanding?	<p>Work as a small group to conduct research into one of the animals or insects mentioned on these pages. Find out about their appearance, diet and how they are adapted to their environment. Create a food chain or web for one of the creatures you have researched, making sure you identify and label the producers, predators and prey.</p> <p>Create a new page for this book. What might the page be about? What information might you like to research and include? You may wish to explore a range of moving picture books and look at how levers, pivots and wheel mechanisms work. Can you construct and include a moving element for your page?</p> <p>Read the poem 'Extinct' by Mandy Coe. Discuss the main themes in the poem and the message it is trying to convey. How does this link to what you've read so far? In small groups, perform the poem in front of the class, using props to convey meaning. How might you use your voice, expression, tone and volume to show the regret and sadness throughout the poem?</p>



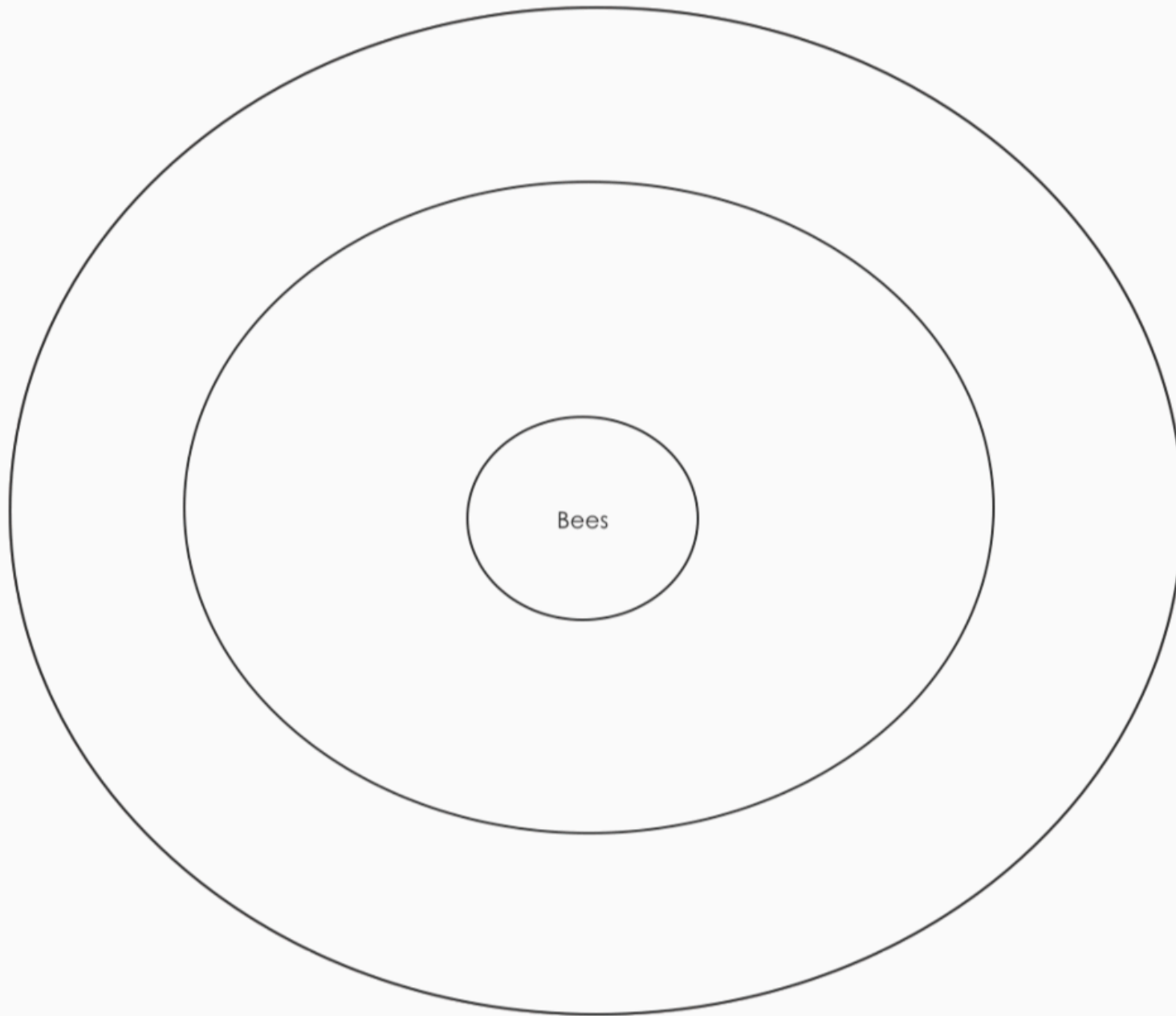
WEEK 6 (PAGES 36 - 39)

A WORLD WITHOUT BEES

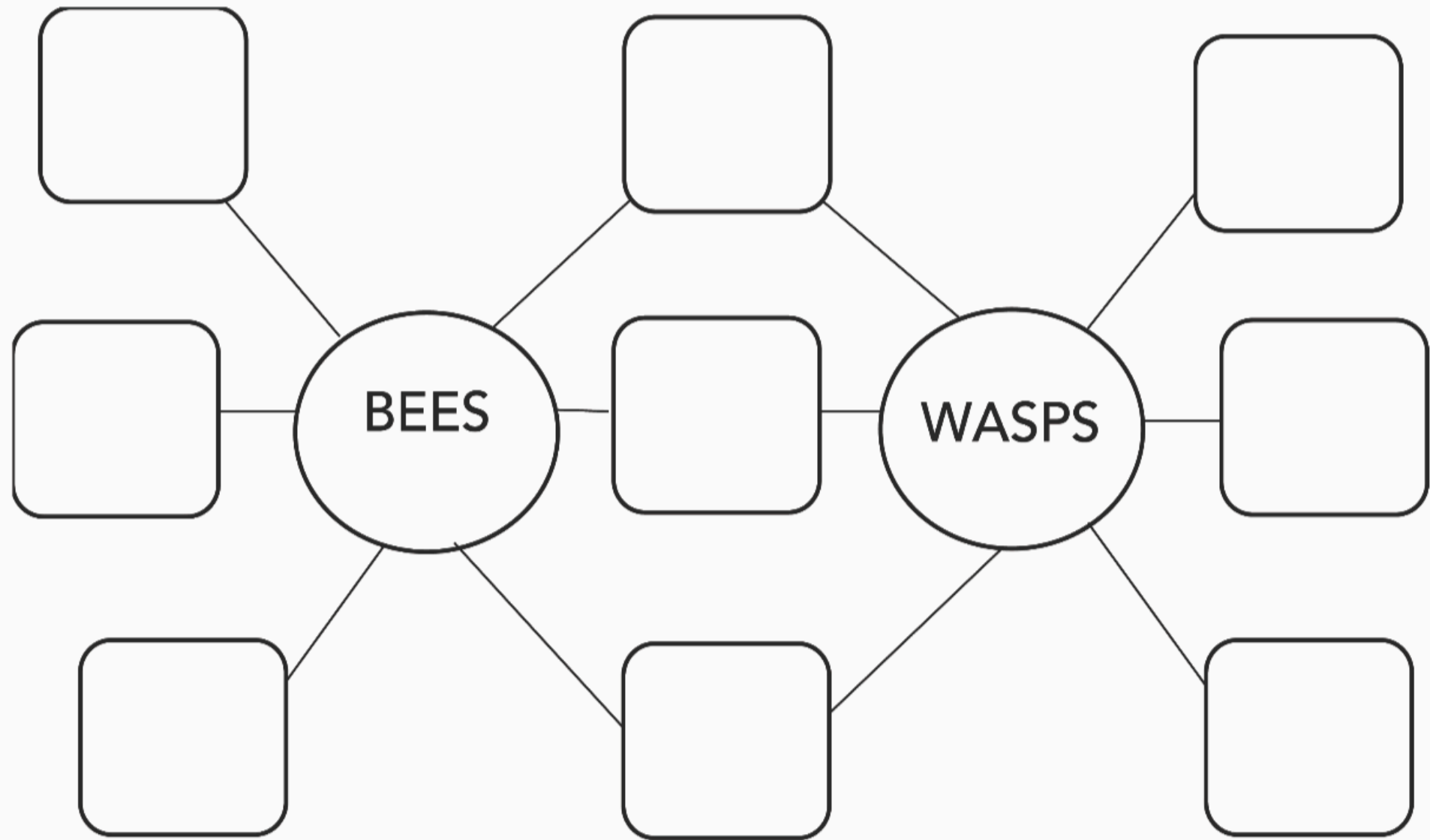


SUGGESTED OBJECTIVES	COMPREHENSION QUESTIONS	EXTRA ACTIVITIES
<p>Reading: Comprehension</p> <ul style="list-style-type: none">- Make predictions about a non-fiction text, using clues.- Ask questions to improve understanding of a text.- Identify how language, structure, and presentation contribute to meaning.- Retrieve and record information from non-fiction. <p>Writing to Entertain and Inform</p> <ul style="list-style-type: none">- Write a persuasive leaflet about bees.- Create a new page for the book, considering the information you will include and how to present the page. <p>Design Technology & Art</p> <ul style="list-style-type: none">- Plan and design a new robot, which can be used to pollinate flowers.- Design and make an inviting bee hotel. <p>Maths</p> <ul style="list-style-type: none">- Create a tally or bar graph to record the number of bees visiting a bee hotel.	<ol style="list-style-type: none">1. How might climate change affect the bee population?2. Complete this sentence: There are fewer places for bees to live because...3. Why might humans be moving bees around the world? What impact does this have?4. What are pesticides?5. With no bees, we would have less fruit and vegetables. True or false?6. What do workers do in China? Why? Would you like to do this?7. Why does the author say we could never really replace bees?8. The Robobee is an excellent invention. Do you agree? Why? Why not?9. Bees are useless insects, that do little to help humans. Do you agree with this statement? Use evidence from the text to support your ideas.10. How does the author feel about bees? How do you know? How does she want us to feel about bees? Has this book changed your mind about bees and their role in our lives?	<p>Use Resource 6a to summarise the causes and consequences of why bees are in decline. In the left-hand circle, record all the causes that have led to this. In the right-hand circles, record the consequences of the decrease in the bee population.</p> <p>Create a persuasive leaflet, discussing the plight of the honey bee and encouraging children to help the bees. Remember to include powerful adjectives, diagrams and pictures, alliteration, facts and a quiz. Think carefully about the layout of your leaflet.</p> <p>Look at page 39. Scientists are creating a Robobee. Design and create your own robot to pollinate flowers. You may wish to explore 'Until I Met Dudley' by Roger McGough and Chris Riddell and write your own explanation text for your new gadget.</p> <p>Carry out the 'Make a bee hotel' activity on pages 42 and 43. Keep a tally chart or diary to calculate the number of bees that visit your hotel over a period of time. Can you turn this into a bar graph? Now, design your own unique bee hotel. What would it look like? What special features would it have? You can draw or make it, or write a descriptive piece about it.</p>

RESOURCE 1A



RESOURCE 1B



RESOURCE 6A

