

Killgerm<sup>®</sup>  
TRAINING



# Happy Holidays





# Hello Adventurer

## Welcome to the Killgerm Training Explorers Workbook!

Get ready to discover and adventure as we dive into the great outdoors!

This resource has been carefully crafted to make your summer vacation an exciting and enriching experience. Say goodbye to boredom and hello to endless opportunities to explore and connect with the wonders of nature that surround you.

This workbook is your passport to a world teeming with fascinating creatures, awe-inspiring landscapes, and natural marvels waiting to be uncovered.

Our mission is simple: to inspire you to step outside and discover the world around you.

Inside these pages, you'll find a treasure trove of activities, games, and challenges designed to spark your curiosity and awaken the nature explorer within. From scavenger hunts that lead you to hidden wonders to tracking animal footprints in the dirt, you'll learn to observe and appreciate all that surrounds you.

So, get ready to unleash your inner explorer and make this summer one you'll remember. The great outdoors awaits you - let's dive in together!





# We're going on a bug hunt!

Before we start our adventure, safety comes first. Always remember to have a **responsible adult** with you whenever you explore, and please **don't wander off** into unknown places.

To make sure you're all set for your explorations, here's a checklist of things you'll need:

- 1. Suitable Shoes:** A great explorer needs sturdy shoes to walk and run comfortably while discovering nature's wonders
- 2. Bottle of Water:** Stay hydrated and keep your energy up with a refreshing bottle of water by your side.
- 3. Sunscreen:** Protect your skin from the sun's rays with sunscreen to enjoy sunny days without worries.
- 4. Be Cautious:** When crossing roads, look both ways and wait for an adult's signal to stay safe.
- 5. Be Kind to Critters:** We might meet some little critters on our journey, but remember to admire them from a distance. No poking, please!

Now, we're all set to dive into the magical world of nature! From colourful flowers to fascinating insects and chirpy birds, there's so much to explore and learn. So, please put on your adventure hat and let's explore the incredible wildlife and nature that's waiting for us this summer. Happy exploring!



# Discovery

Can you find me?

## Scavenger Hunt!



Cloud



Snail



Flower



Ladybird



Bee



Plant Pot



Recycle bin



Leaf



Bird



Feather



Ant



Grass



Soil



Clover



Butterfly



Hose



Caterpillar



Stones



Worm



Tree



Watering Can



Fence



Slug



Web





# Journal

Use the following pages to log all the amazing things you find on your adventures!





# Journal

DATE:     /     /

Journal page with horizontal lines for writing.



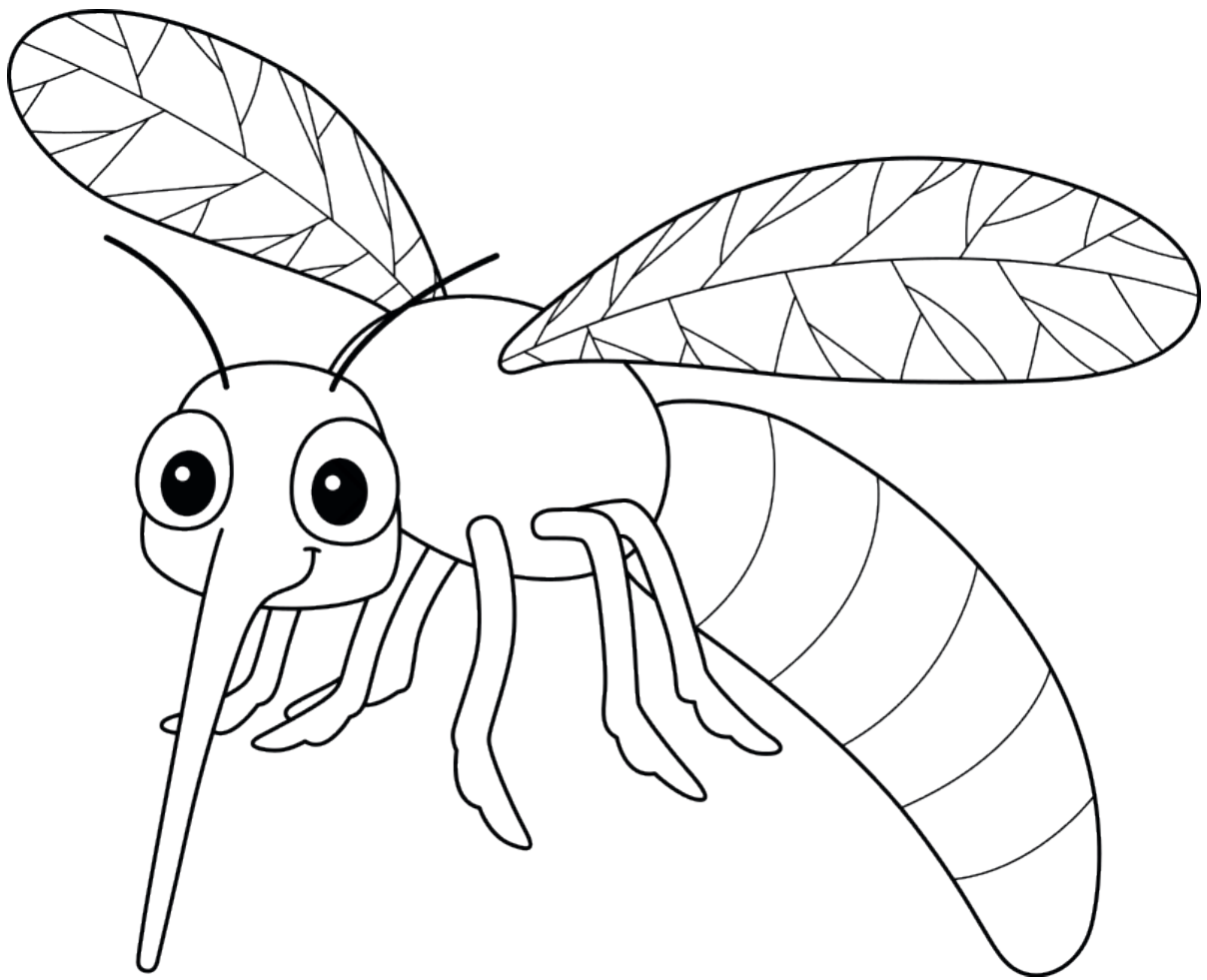
# Journal

DATE:     /     /

Journal page with horizontal lines for writing. The page is ruled with 20 horizontal lines, with a dotted line at the top and bottom. The page is blank, ready for writing.

# Discovery

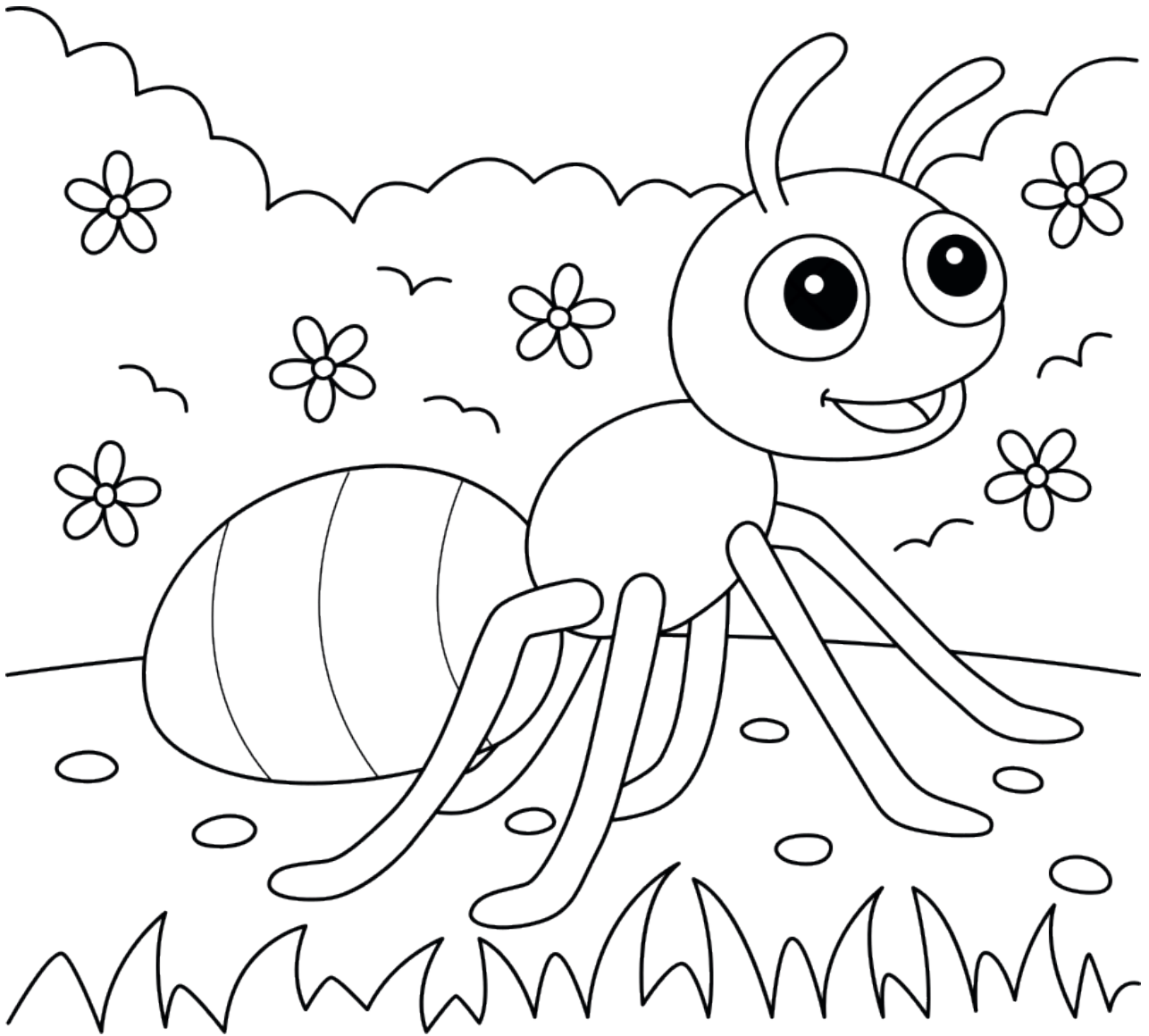
Colour me in!





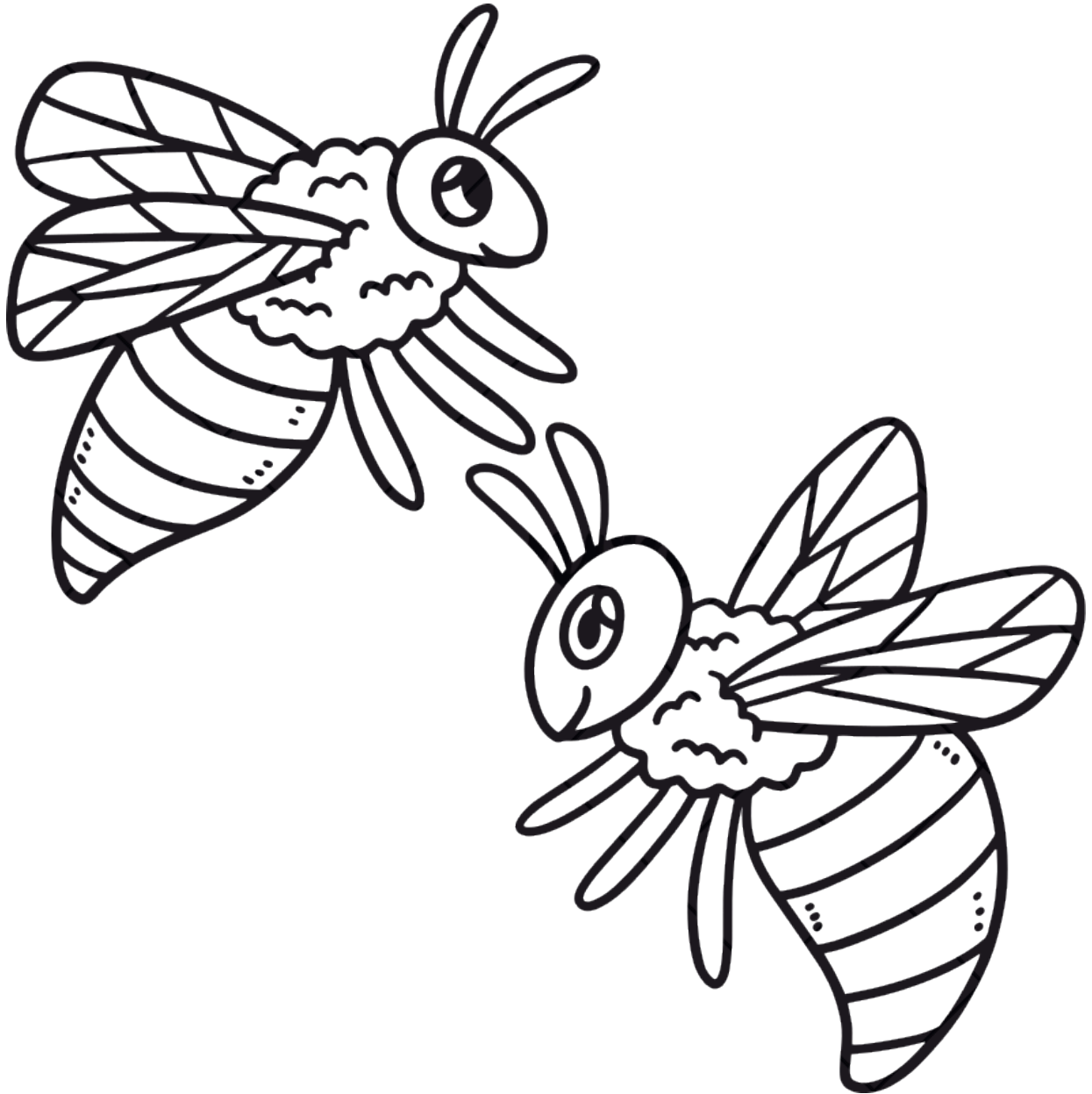
# Discovery

Colour me in!



# Discovery

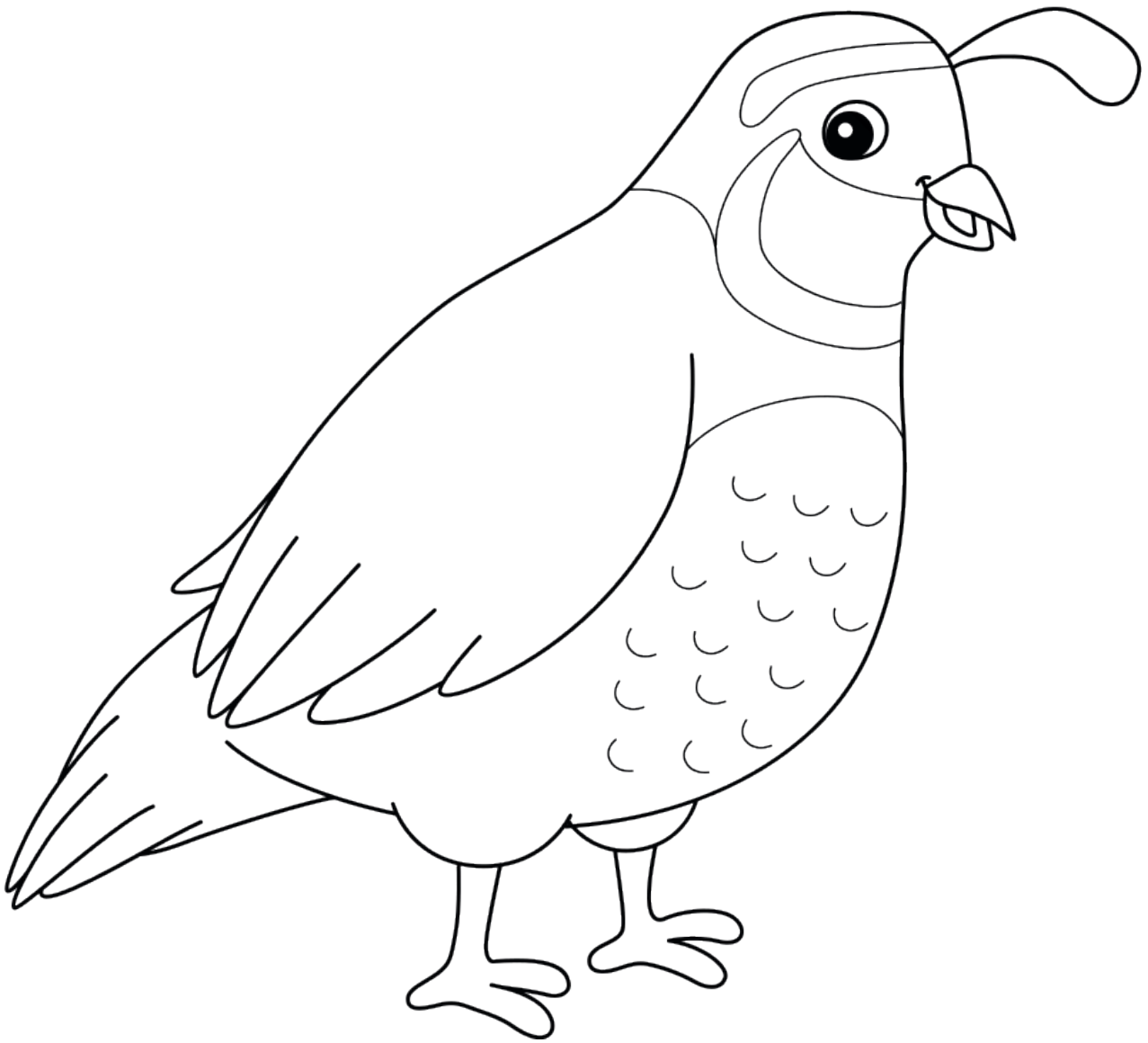
Colour me in!





# Discovery

Colour me in!



# Discovery

## Word Search!

S	B	I	R	D	F	L	O	W	E	R	S
O	E	B	U	T	T	E	R	F	L	Y	N
I	H	A	Q	C	L	O	U	D	E	G	A
L	O	C	L	O	V	E	R	U	A	R	I
B	P	L	A	N	T	P	O	T	F	A	L
E	F	L	A	D	Y	B	I	R	D	S	K
E	F	F	E	A	T	H	E	R	W	S	P
R	E	C	Y	C	L	I	N	G	B	I	N

Find the following words in the puzzle.  
Words are hidden → and ↓ .

RECYCLINGBIN  
BUTTERFLY  
LADYBIRD  
PLANTPOT  
FEATHER  
FLOWER

CLOVER  
CLOUD  
SNAIL  
GRASS  
LEAF  
BIRD

SOIL  
BEE  
ANT





# Facts



I bet you didn't know this...

1) A ladybird might eat more than **5,000** insects in its lifetime!



2) Fruit flies were the first living creatures to be sent into space.

3) Dragonflies have been on earth for **300** million years!



4) A bee's wings beat **190** times a second, that's **11,400** times a minute.



5) The stag beetle is the largest species of insect to be found in the UK.



6) Caterpillars have **12** eyes!



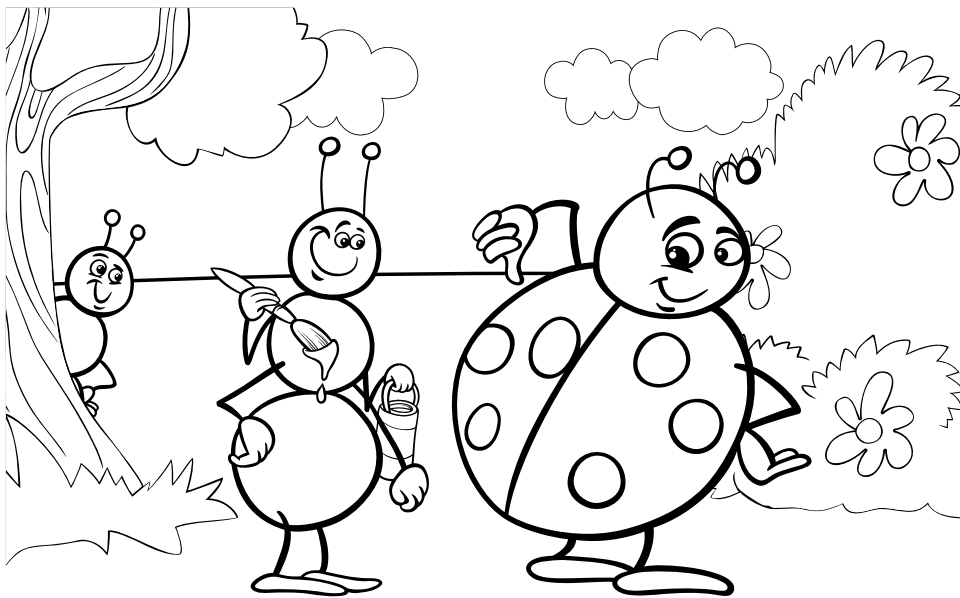
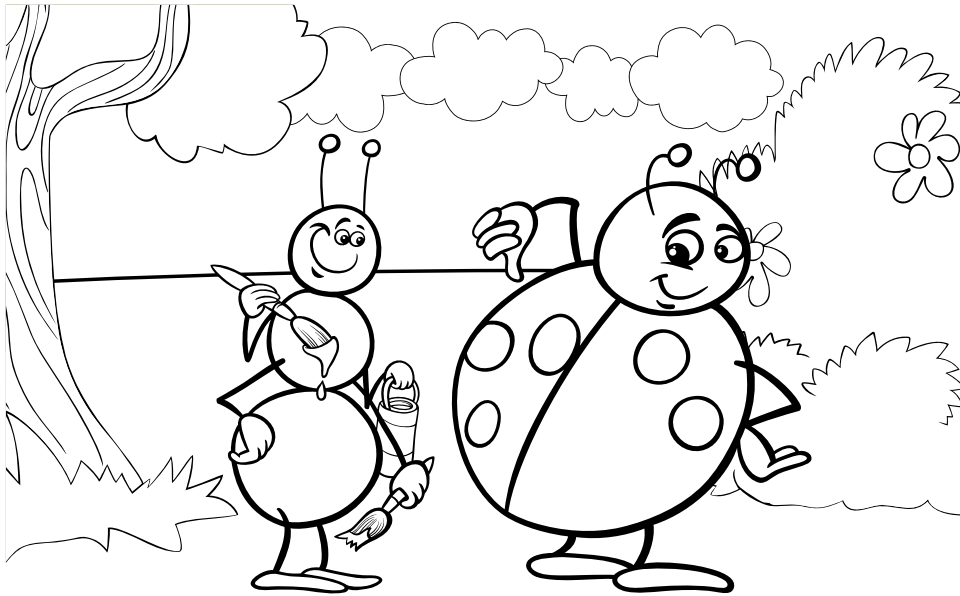


# Competition

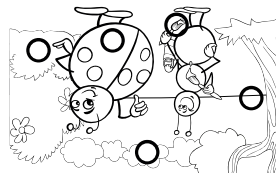
What did you find?



# Spot the Difference!



FIND  
5  
DIFFERENCES





# Insect ID

**House sparrow**  
*Passer domesticus*



## INTRODUCTION

The cheeky little house sparrow is a regular sight throughout the country where it is often in close contact with man.

House sparrows are regularly seen in or near buildings and it is here that their nests are often built. Constructed mainly by male birds, the nests are made of straw and dried grass. They can be in holes in walls, in chimneys, rainwater down-pipes and under eaves of houses. The nests can also be found in adjacent shrubbery, ivy etc and house sparrows can even make nests of old nests of other bird species including the swallow (*Hirundo rustica*) and the house martin (*Delichon urbica*).

## LIFE CYCLE

The breeding season runs from April to August. Clutches generally contain 4-6 eggs which are grey/white in colour, speckled with darker brown. Up to 3 broods can be reared each year. Incubation takes about 12 days. After hatching, the young are fed by both adults and fledge after 11 to 18 days, depending on weather and food supply.

## SIZE: 40 - 150 MM

Plumage:

**Male:** Brown with black speckles, grey rump and crown, white wing bar. **Female:** Dull brown. Grey rump, crown and wing bar absent. **Sexing:** See plumage.

Flocks are very much a part of sparrow life as they are an effective means of exploiting local abundances of food and also offer considerable protection from predators. They generally form in late summer and are often composed largely of juvenile birds. Flocks can roam over several miles to feeding grounds.

## DIET AND SIGNIFICANCE

The house sparrow is generally a grain feeder and can be seen in large numbers in fields at harvest time. In the urban environment, where populations may spend the whole year, sparrows have learned to exploit stored food, especially groceries such as cakes, pastries or bread, where they will feed straight from the product or after pecking through the wrappers.

Their presence inside units where animal food or human food is handled in bulk or where livestock is housed can create a serious health risk. Ideally, birds other than poultry are prohibited in poultry units.

# Insect ID

## Bumblebee

*Bombus spp*



### KEY FEATURES

These relatively large stout insects are between 12 and 30 mm in length. The thorax and abdomen are normally covered in dense hairs varying in colour from yellow to orange interspersed amongst black, often in clear stripes. Two pairs of wings are present, often appearing very small in relation to the body size.

### BIOLOGY

The bumblebees form annual colonies started by queens which have overwintered. Each queen will build a nest beneath the ground comprising wax cells in amongst grassy debris.

The bumblebees often use old mouse holes as places to build their nests. Moss, grass, abandoned birds' nests, barns and garden sheds may also be utilised. The young bee larvae are reared in the cells of the nest, being fed on pollen and nectar supplied by the queen.

The colony then expands with the workers of successive generations being considerably larger as the food supply improves during the summer months.

Males are produced in the late summer and the fertilised queens overwinter. Each nest contains about 100 - 200 individuals.

### DISTRIBUTION

Worldwide.

### SIGNIFICANCE

Bumblebees are large imposing insects and as such often cause alarm when they are encountered. They are in fact docile and relatively harmless and although they do possess a sting they rarely use it, only when greatly provoked.

After honey bees, bumblebees are the second most important pollinators. They are particularly important in pollinating trumpet-shaped flowers for which honey bees have too short a proboscis.

Illustration: *Bombus lucorum*.







# Looking after our planet!





Taking care of our planet is super important, and guess what? You can be a part of it too! Our beautiful countryside and nature areas are like special homes for all the plants and animals that live there. But, sometimes, people leave their waste on the ground, which is not good for our environment. Even though it might seem easier to toss something away instead of finding a bin, that litter can cause big problems for the animals and wildlife around. For example, birds and other critters might eat plastic by accident, and it makes them really sick.

But don't worry, because we can make a difference! By being responsible and picking up after ourselves, we can keep our nature areas clean and safe for all the animals. Let's work together to protect our planet and the wonderful creatures that call it home. Remember, every little action you take can have a big impact on making our world a better place. So, let's team up and become amazing Nature Heroes, caring for our planet one step at a time! You've got the power to make a difference!





# How can you help this summer?

There are several ways you can make a difference by recycling and stopping littering:

- Lead by Example: Show others how it's done! Always use the recycling bins correctly and never litter. When your friends see you doing it, they might follow your lead.
- Organize Clean-up Days: Get your friends and family together for a fun clean-up day at a local park or beach. Pick up litter and recyclables, and you'll make the area cleaner and safer for everyone. (please use Personal Protective Equipment (PPE) and correct equipment).
- Create Art from Trash: Get creative and turn recyclable materials into cool artwork. Not only will it look awesome, but it will also remind others not to throw away useful things.
- Start a Recycling Challenge: Challenge your friends or classmates to see who can recycle the most in a week. It'll be a fun way to get everyone involved and excited about recycling.
- Reduce and Reuse: Help your family find ways to use less plastic and create less waste. Use reusable water bottles, lunch boxes, and bags to reduce waste.
- Be Proud of Your Efforts: Remember that every small action counts! Be proud of yourself for making a difference and inspiring others to do the same.
- You have the power to be a superhero for our planet! By working together, we can make the Earth a cleaner, greener, and happier place for all living creatures. Keep up the fantastic work!





# Have You heard of Global Warming?

You know how our Earth has an atmosphere around it, like a cozy blanket? This atmosphere helps keep us warm by trapping some of the sun's heat, just like how a blanket keeps you warm at night.

But over the years, people have been doing things that release extra gases into the air, like carbon dioxide, methane, and others. These gases act like extra layers on our atmosphere's blanket, making it thicker. When the blanket gets too thick, it traps more heat than usual.

So, instead of just the right amount of warmth, the Earth gets a bit too hot. This extra heat can cause lots of changes, like melting ice in the polar regions, making the sea levels rise, and making some places very hot.

It's like when you leave a toy car out in the sun for too long, and it gets too hot to touch. That's what's happening to our Earth, and it's not a good thing. But don't worry, because we can help! By using less energy, like turning off lights when we don't need them and using more clean energy from the sun and wind, we can make our atmosphere's blanket thinner and cooler again.

We can also plant more trees, because they love to eat up carbon dioxide, and they give us fresh air to breathe. So, remember, global warming means our Earth is getting a bit too toasty because of the extra gases we're adding to the air. But if we work together and take care of our planet, we can help make things better and keep the Earth a wonderful place for all living beings.







# Weather Tracker

See how the environment changes around you.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Monday					

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tuesday					

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wednesday					

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Thursday					

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Friday					

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Saturday					

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sunday					



# Flower Pressing

Did you know that you can preserve flowers by pressing them?

Pressing flowers is like making a beautiful, flat memory book for flowers. It's a fun and easy way to keep their colorful beauty even after they're picked.

## Here's how you can press flowers:

1. Find Pretty Flowers: First, go on a flower-hunting adventure! Find some lovely flowers that you like, but remember to ask an adult before picking them.
2. Get Ready: Lay a sheet of paper on a hard surface, like a table. Then, fold the paper in half like a book.
3. Place the Flowers: Open your paper "book" and carefully put the flowers inside. Make sure they don't overlap or get squished too much.
4. Pressing Magic: Now, close the paper book gently, so the flowers are snug inside. Put some heavy books or other flat things on top of the paper book. It's like giving the flowers a warm hug!
5. Waiting Time: Leave the flowers pressed for about 1 to 2 weeks. During this time, the flowers will get flatter, and their colors will stay preserved.
6. Ta-da! Your Pressed Flowers: Open your paper book carefully after 1 to 2 weeks. You'll see that the flowers are now flat and ready to be admired!

You can keep your pressed flowers in a special folder or use them for crafting. They make pretty decorations for cards, bookmarks, and art projects!

Remember, pressing flowers is like capturing a piece of nature's art. It's a wonderful way to cherish the beauty of flowers and enjoy them even when they're not blooming in the garden. Happy pressing, little flower enthusiast!







# Killgerm<sup>®</sup> TRAINING

# Tots

