

Brilliant Bees



We hope that you enjoy using the activities in this challenge as much as we enjoyed designing it.

All you have to do to gain the badge is complete five activities. The activities within this pack are ideas rather than definitive so feel free to expand on them. The most important bit is that you have fun!

Stourbridge Trefoil Guild
Raising funds for the Blackmore Barn Reburishment Project

Brilliant Bees

Bee populations worldwide are rapidly declining due to loss of habitat, insecticides and disease. Changes in agricultural practice mean that there is no longer the variety of plants for bees to feed from. This is not just through the use of weed killers, but also through the destruction of hedgerows and mowing of roadside verges.

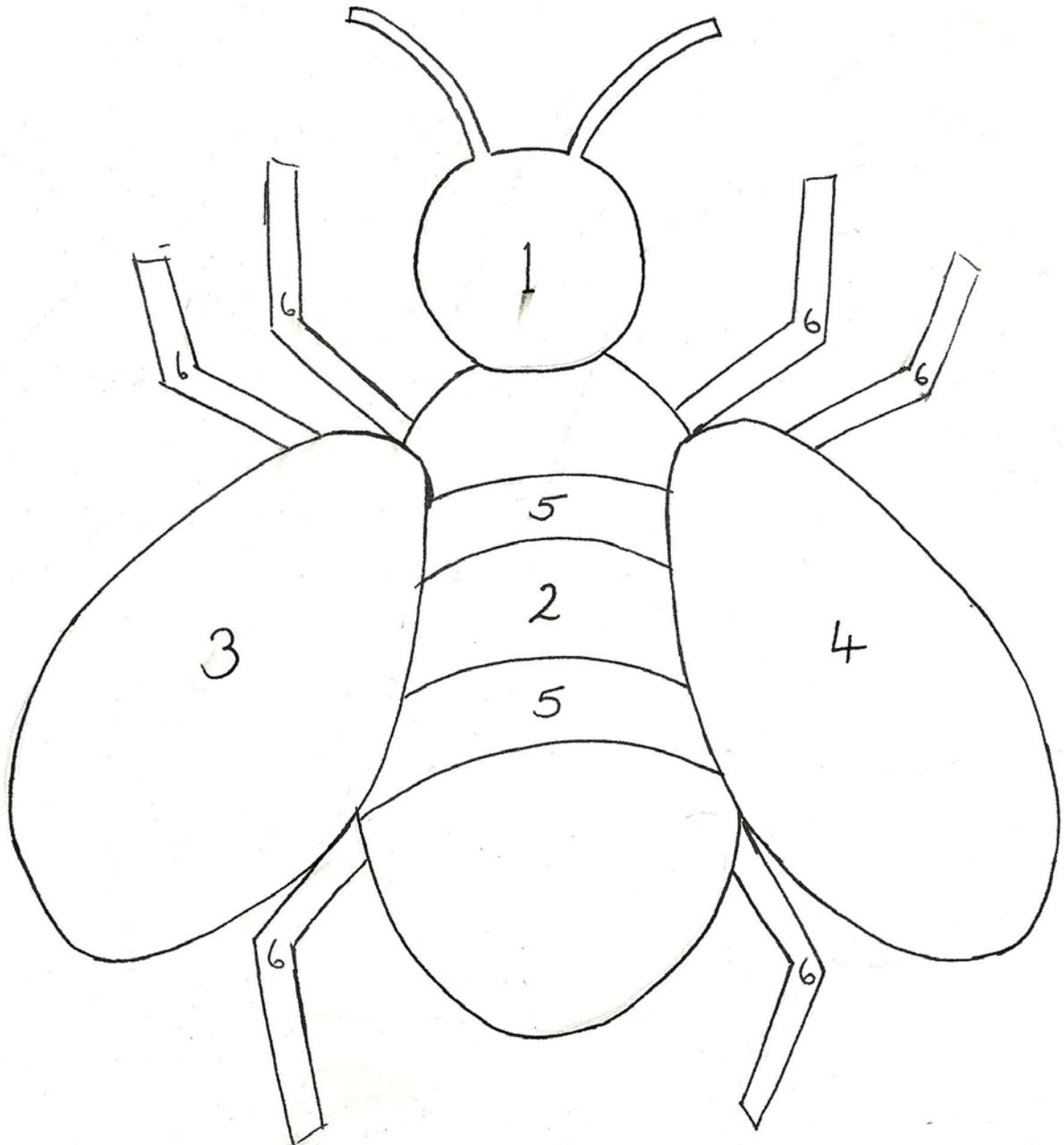
Bee facts

- 🐝 There are currently 24 species of bee in the UK. There are 20 000 species worldwide.
- 🐝 Bees eat nectar and pollen. This makes them important pollinators, allowing plants to reproduce. If a plant is not pollinated, it will not produce seed and will die out.
- 🐝 40% of the food we eat depends on plants being pollinated by insects, including bees.
- 🐝 Albert Einstein allegedly said that without bees to pollinate our crops, we would die out within 4 years.
- 🐝 Bees live in colonies of up to 70 000 bees with one queen.
- 🐝 Without a queen, a bee colony will not survive. Only the queen bee lays eggs.
- 🐝 Worker bees feed larvae nectar and pollen. To create a queen, the larva is fed royal jelly.
- 🐝 Bees store nectar for food as honey. After they have collected it, they regurgitate it into honeycombs!
- 🐝 Some people keep honey bees and harvest their honey and wax. This is called beekeeping or apiculture. A beekeeper is called an apiarist.
- 🐝 Bee hives dating back to 900 BC were discovered in Israel. The Ancient Egyptians, Greeks and Romans all kept bees.
- 🐝 Royal jelly? There are bee hives at Buckingham palace and also on the roof of Fortnum and Mason.
- 🐝 Honey has been used medicinally since the Ancient Greeks and Romans. It has antibacterial properties and is still used today as a wound dressing and for soothing sore throats. It is also used in beauty products.

Games & Fillers

Beetle drive

Use the template to make a beetle drive for each six/patrol. Cut each bee up, so that each individual part has a number and place in a central pile.



How to play:

Taking turns, each player throws the die. When a player throws a 'one', they may claim a head from the central pile. They continue to throw the die until a 'two' is rolled. The winner is the first six/patrol to complete their bee. The bee must be assembled in numerical order.

Queen Bee

Pick one girl to be the queen bee. The queen bee picks an object (like i-spy) and says;

“Bumble bee, bumble bee,
I see something you don't see,
And the colour of it is... (*insert colour of object*)”

The other girls then guess which object she has picked.

Word search

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

Apiary
Beeswax
Buzz
Flower
Hive
Honey
Nectar
Pollen
Queen Bee
Royal Jelly

Quiz

Make up a quiz using the bee facts on the first page.

Poet's Corner

Challenge girls to make up a poem or song about bees.

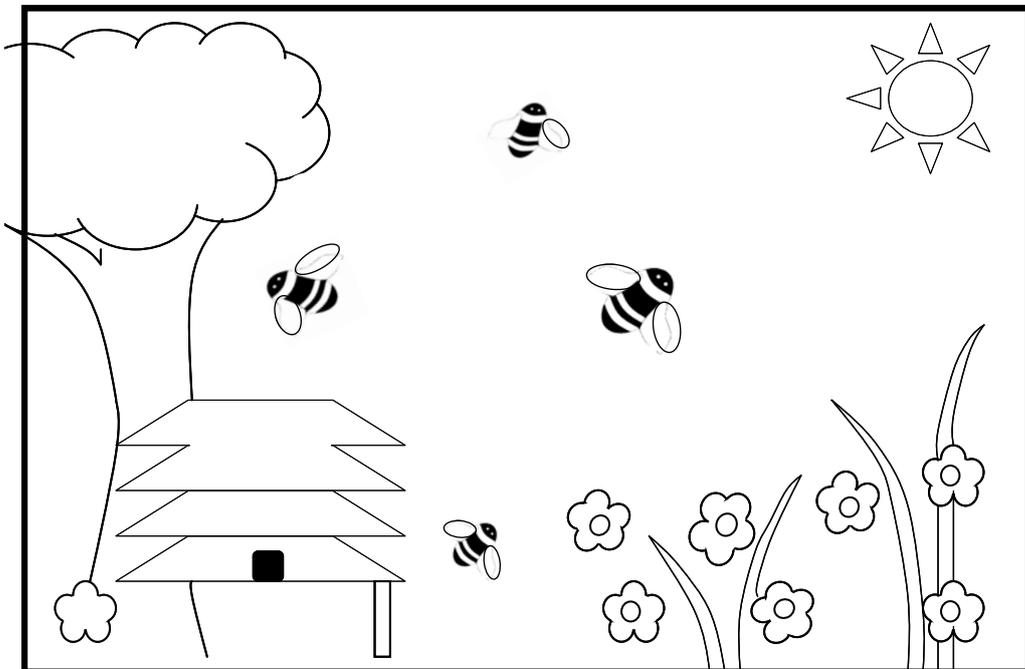
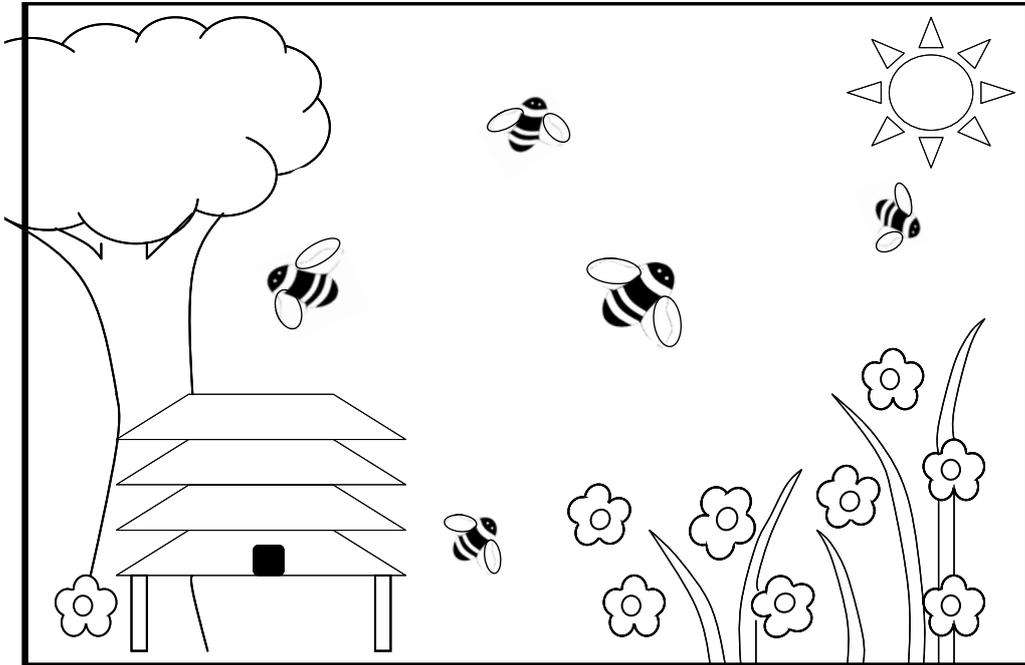
Waggle Dance

What is a waggle dance, and why do bees do it? Could girls make up their own dance?

Poems and dances could be performed at a bumblebee ball.

Spot the difference

There are 10 differences between the pictures. Can you find them all?



Craft

Beeswax candles

Beeswax is made from honeycomb and has been used for centuries in a variety of products, including the mouthpieces of didgeridoos. Beeswax candles can be made by gently warming sheets of wax and rolling them around a wick.

Sun catcher

You will need:

Paper

Acetate

Outliner paste

Glass paints or glass painting pens

1. Draw a design onto the paper.
2. Place the acetate on top of the paper, and trace the design using the outliner paste.
3. Use the paints or pens to colour the design. When dry, cut out and make a small hole at the top.
4. Thread cotton or a ribbon through the hole so that the sun catcher can be hung in a window.

Food and drink

Honey glazed grilled fruit kebabs (serves 6)

Ingredients:

1 fresh pineapple

3 bananas

1 mango

Runny honey

Lemon juice

Skewers

1. Chop the fruit into chunks and skewer to create a kebab. Place the kebabs in a large dish.
2. Mix 4tbs of honey with 2tbs lemon juice. Pour the glaze over the kebabs and leave to marinate for 30 minutes, turning once.
3. Cook the kebabs under a hot grill or on a barbeque for 5 minutes, turning frequently, until the fruit is hot.

Apple and honey muffins (makes 12 large muffins)

Ingredients:

3 cups of self-raising flour

3/4 cup of vegetable oil

1 cup of sugar
1 cup of yoghurt
3 eggs
1 cup of peeled and chopped apple
4 tbsp honey
1/2tsp cinnamon

1. Preheat the oven to gas mark 7.
2. Mix the flour, sugar, oil, and yoghurt together. Beat the eggs and add to the mixture.
3. Add the apple, cinnamon and honey to the batter and stir.
4. Divide the batter between muffin cases and cook for 20 minutes or until golden.

NB. It doesn't matter what size cup is used as long as the same one is used for all ingredients (obviously a large cup will produce a larger volume of batter than a small cup).

Banana, honey and yoghurt smoothie (serves 1)

Ingredients:

½ banana
Natural yoghurt
Orange juice
Honey
Lemon juice

Place half a banana, 100ml of yoghurt and 50ml of orange juice in a blender with 1tsp of honey and a splash of lemon juice and blend.

Honey, lemon and ginger

Place a small amount of peeled and chopped root ginger (about 1tsp) in a mug with a couple of slices of lemon and 1tsp of honey. Pour over boiling water and stir. Leave for a couple of minutes to infuse before drinking.

Bee Friendly

Make your own beehive

You will need:

A 1 litre tetrapak drinks carton (rinsed)
Paper straws
Newspaper
Cotton wool
Scissors
String

1. Cut away the bottom of the carton.
2. Cut 15 paper straws in half and tie together top and bottom in a bundle.
3. Wrap some squares of newspaper around the bundle of straws, with some cotton wool. This will keep the bees warm.
4. Put the bundle in the carton and fill any spaces with spare stuffing.
5. Tie a piece of string to the top of the carton, and hang it in a sunny position near a flowerbed about 1m above the ground.

How do bees build a hive (either in the wild or within a frame)?

Bee friendly gardening

Girls could grow a bee-friendly plant from seed or plant a bee friendly flowerbed at your meeting place. Many bee friendly plants will attract other insects such as butterflies.

Mint, thyme, rosemary, sage, sunflowers, lavender, lupins and hollyhocks are some bee friendly plants which can be grown from seed. Why not have a competition to see who can grow the tallest sunflower? Alternatively, visit someone who keeps bees or an insect friendly garden.

Useful websites

- 🐝 Operation Bumblebee <http://www.operationbumblebee.co.uk/>
- 🐝 Bumblebee Conservation Trust: www.bumblebeeconservation.org.uk
- 🐝 The Bumblebee Pages: www.bumblebee.org
- 🐝 Innocent drinks: www.innocentdrinks.co.uk/bees
- 🐝 Rowse honey: www.rowsehoney.co.uk
- 🐝 Bee friendly plants: www.wildaboutplants.org.uk ;
<http://www.complete-gardens.co.uk/online/online-gardening-plant-solutions-category.php?cat=24>
- 🐝 Honey Association: <http://www.honeyassociation.com/index.htm>

Badge order form

Thank you for completing the Brilliant Bees badge. The badge is as illustrated on the first page of the pack (colours may change slightly) and 8cm diameter.

	Quantity	Cost
Number of badges required @ £1.25 each		
Postage and packing	1 - 20 badges - £1.50 21 - 50 badges £2.50	
	Total	

Please make cheques payable to **Stourbridge Trefoil Guild**.

Contact name _____

Unit _____

Address _____

Telephone number/email address _____

Comments _____

Completed order forms and cheques to: Stourbridge Trefoil Guild
4 Whitmore Road
Wollaston
Stourbridge
West Midlands
DY8 3RE

Badges will be delivered as soon as possible.
Profits will be donated to the Blackmore Barn Refurbishment Fund.