Bee parasite game

Just like people, bees can get sick. Small creatures called **parasites** can live in the gut of bees. The parasites stop bees from being able to tell which flowers have nectar (bees eat nectar) and which don't. If the bees can't find nectar, they become hungry and eventually the bees can starve.

Luckily, the nectar from some flowers stops bees from getting parasites! This special nectar acts like a medicine for bees. However, the nectar cannot take away parasites the bee already has.

So, which plants are good medicines for bees? You can find out, by testing how long your (paper) bee survives in two 'Gardens' which have different plants in them.

You will need...

- Your paper bee (below)
- Your bee parasite game sheet
- Colouring pencils
- Scissors (this step needs adult help!)
- A dice
- Some paperclips (these will be the 'parasites')

What to do...

1. Colour in your bee.

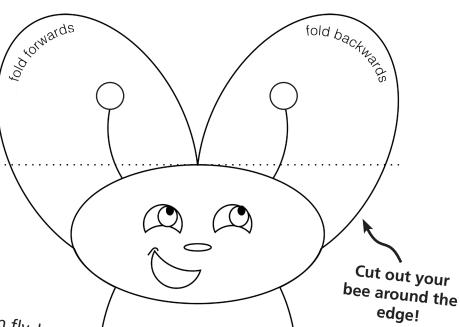
> 2. Cut out your bee with adult help

3. Fold the bee's wings along the dotted lines (one wing folds forwards, and one wing folds backwards).

> 4. Test your bee can fly, by holding it at head height, and letting it go. It should whirl around while falling slowly to

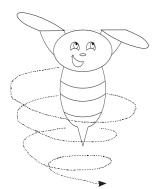
> > 5. Use your paper bee to play the bee parasite game, explained on the

Game sheet!









Game sheet

How to play...

First, your bee is going to visit *Garden 1*...

- 1. Roll the dice and see what number you get. Look at the number row in the table for Garden 1. This will tell you what plant your bee landed on.
- 2. Check which plant your bee landed on – is it a medicine?
 - a. **Yes**; great news! Your bee gets no more parasites this turn!
 - b. **No** oh dear! Your bee gets infected with a parasite! Put
 - a paperclip (the paperclip is the 'parasite') on your bee. Your bee is now a little heavier, and will struggle to fly so well.

Garden 1

Dice number	Plant	Medicine?
1	Apple tree	no
2	Lime Tree	yes
3	Rosemary	no
4	Clover	no
5	Heather	yes
6	Raspberry	no

2. Is this plant a medicine for bees?

1. Roll the dice to see which plant your

bee visits!

- 3. Test whether your bee can still fly, by holding it at head height, and letting it go. It should whirl around while falling slowly to the floor. Does it fly?
 - a. Yes, it still flies; brilliant! Your bee is okay! Add a tally to your 'number of days survived' box and go back to step 1.
 - b. No, it drops straight down; oh no! Your bee is too 'sick' to carry on looking for plants. Count how many tally's you already have in the 'number of days survived'. This is your 'total days survived' for Garden 1.



Garden 2

Dice number	Plant	Medicine?
1	Heather	yes
2	Viper's Bugloss	yes
3	lvy	no
4	Strawberry tree	yes
5	Lavender	no
6	Lime tree	yes

4. Now, repeat steps 1-3 for Garden 2! Garden 2 has more plants with nectar that stop bees getting parasites. Which garden does your bee survive for the most days in?

Fill in the table below as you play!



Which Garden is best?

Did you know? The bee parasite is called	
Crithidia bombi!	

Garden	Number of days survived (tally count)	Total days survived
1		
2		

My bee survived for more days in Garden: ___