

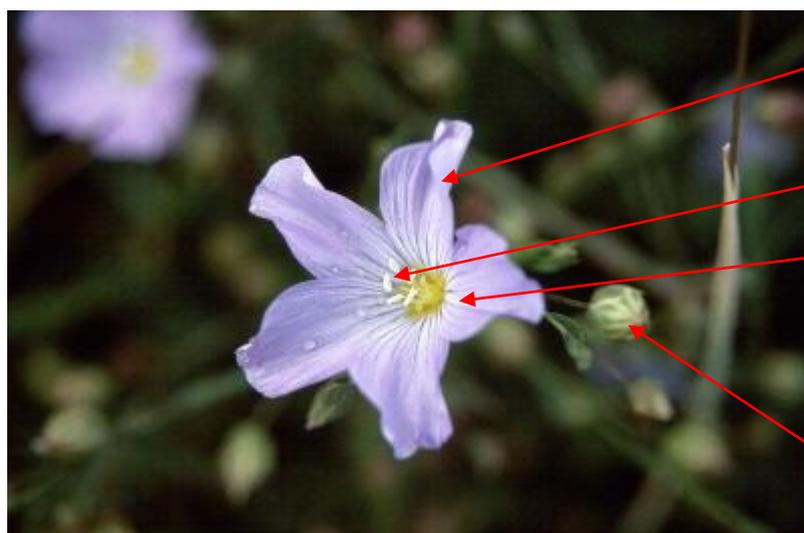
Badgery Science Fun 10

Gemma had gone out with some friends to watch badgers. They made sure they were sitting downwind from the sett, so that the badgers couldn't smell them too easily. They'd not put on any perfumes, etc., as the badgers would notice them quickly! They'd all come dressed in clothes that didn't rustle, such as fleeces, so that the badgers wouldn't hear them.

They'd got themselves comfortable behind a big tree, where they could look down on the badgers, but they wouldn't be spotted easily. It was still a little before sunset, so the badgers would still be underground.

Gemma sat there, absent-mindedly looking at the flowers around her. The bees were buzzing from plant to plant, looking for pollen and nectar. It occurred to Gemma how much both we, *and the badgers* relied on green plants, (and, of course, the bees! She was pleased that she'd made a bee energy drink to help her local bees. *'Two tablespoons of sugar to one spoon of water, placed in a saucer, placed in the garden.'*) **Without the flowers and bees, there'd be no nuts, grains or berries to eat!**

She looked carefully at the flowers, and could see all of the important parts.



Petal (Attracts insects)

Stamen (Male part - makes pollen)

Stigma (Female part - pollen moves down to ovary to fertilise the ovules - the seeds.)

Flower bud
(covered by sepals to protect it.)



Stem - (holds the plant up.)

Leaves - (The 'food factory' of the plant)



Once the ovules are fertilised, the plant cuts off nutrient to the petals. They shrivel and die. Then the seed head prepares the seeds for dispersal - by wind, water, animals,

Badgery Science Fun 10 Cont.

Making the Bee Energy Drink

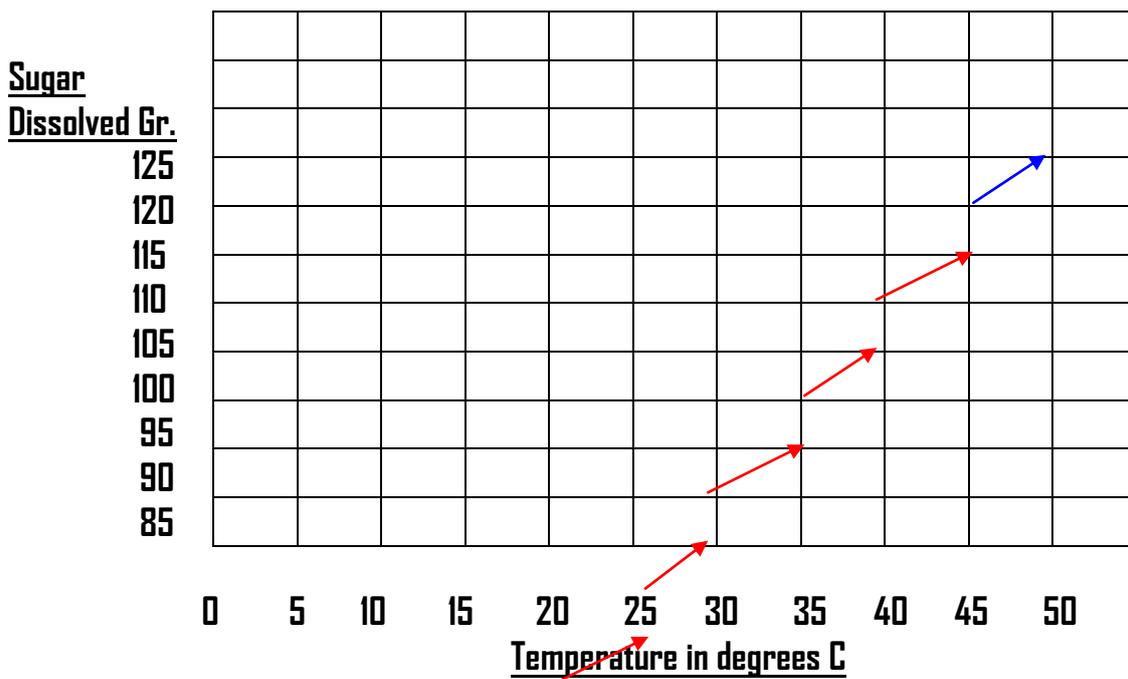
Gemma is making her bee energy drink. She's got the recipe, but made it with cold water. It didn't dissolve very well. She decided to experiment.

Gemma wondered if the temperature of the water would affect how much sugar she could dissolve. She added sugar to 50 cu. cm of water. Then she measured how much sugar would dissolve when she changed the temperature.

Here are Gemma's results:

| | | | | | | |
|-----------------|-----|-----|-----|-----|-----|-----|
| Temp, in C | 20 | 25 | 30 | 35 | 40 | 45 |
| Sugar dissolved | 100 | 105 | 110 | 115 | 120 | 125 |

Can you draw a graph below to show Gemma's results?



How much sugar do you think will dissolve at 15 degrees C? 95 gr
 How much would dissolve at 50 degrees C? 130 gr.

