



## Glow-worms - Why do glow-worms glow?

### Fact

- A glow-worm uses its glow to invite insects to dinner :o)
- Insects fly towards the glow and get stuck in the sticky lines that the glow worm makes like spiders web
- It also uses its glow to turn other creatures off eating it.
- It makes its tail glow using bioluminescence which is a chemical reaction between a chemical the glow worm makes called luciferin mixes with air. That chemical reaction gives off light.

### Do you know

- There are lots of different types of glow-worms but the one we have in NZ is *arachnocampa luminosa*
- A glow-worm is the larva of a two-winged insect.
- The glow-worm starts as an egg, hatches into the larva (glow-worm) turns into a pupa in a cocoon and then turns into a tiny two winged flying insect.
- Glow-worms live in caves because they are damp so the glow-worm doesn't dry out; because there are lots of hanging surfaces; because there are lots of insects and it's dark to allow the glow-worms glow to be seen.

### Experiments you can do

Glowing glow sticks

What you need:

A dark room

Glow sticks

What you do:

Inside the glow stick you can see a clear or coloured liquid. Also inside the glow stick is a little glass bubble (or ampoule) full of another chemical. When you bend the stick, the bending breaks the glass bubble and the two chemicals mix together causing a chemical reaction to occur and that reaction causes light so your glow stick glows.

Warming a glow stick under your armpit for a few minutes and cool one in the fridge for a few minutes before breaking them and see what happens. Does one glow brighter than the other? Does one last longer than the other?

### Other Investigations

One evening have a good look for flying insects around your front or back door – without turning the light on. Turn the outside light on and go back inside. Do some homework for a while then go back outside and check for insects again. Are there any insects now? Where are they and what are they doing? Why would they be doing that?

**Jokes:** Why did the bird want to eat glow worms? It wanted a light meal.