

# Classrooms without Walls

EXPLORE - DISCOVER - LEARN - LOVE

#### **Bat babies**

#### What we will learn this week:



- Why it's such hard work being a mother bat
- · What a maternity roost is
- What makes a good maternity roost
- What a young bat must learn to survive



Hi it's Spike here. This lesson is all about baby bats, but because I'm male it's not something I know much about. Daddy bats don't help to look after baby bats. So I'm passing over to the experts

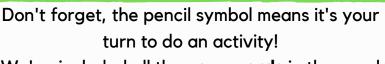


Hi I'm Saba, you might know me as Dingan's bat, an African yellow bat, a yellow bellied house bat or the African yellow house bat. I have twin babies, they just know me as "mum"!"



Hi I'm Bongi. I'm a Botswanan brown long-eared bat. I'm the very proud mum of baby Logan.

Looking after one baby is very hard work I don't know how Saba manages with two.



We've included all the **new words** in the word list at the end!

#### You will need:



a pencil



a calculator



#### Bat mums are the best!

At the end of spring, when the nights are getting warmer and when there is enough food about, bat mums start getting ready to have their babies. First they must find a warm, safe place to roost in, ideally a place that's close to good food supplies. This will be their maternity roost.

This is where they will shelter;

- · while they are pregnant,
- where they will give birth,
- where they look after their baby until it is; big enough to fly, able to find its own food and to live without its mother.



# 2 Maternity roosts/Nursery roosts



A place used by mother and baby bats is called a maternity roost or a nursery roost. Once mother bats have found a good maternity roost they will try to go back to it every year to have their next baby.

A female bat will go back to the place where she was born when she is expecting her baby (if it is still there). It's possible that she will find her own mother, grandmother, great grandmother and lots of her aunties also back in that roost, each expecting a baby too.

If a maternity roost is lost, for example if a tree falls down, a building is demolished or a quiet cave becomes noisy due to tourism, the mother bats must find a new roost. Finding one with just the right conditions, (warm, safe and close to food) can be difficult and make life even harder for pregnant bats.



A maternity roost will contain adult females (the mother bats) and both male and female babies/young bats. Adult males don't help to look after babies and they live in different roosts.



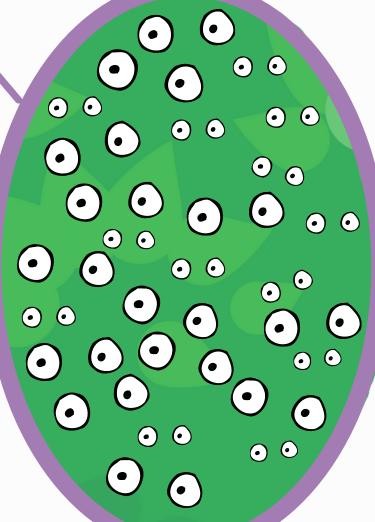


# Activity 1: How many mums and baby bats can you count in this picture?

In this tree roost there are lots of mums with their babies, snuggling up together keeping nice and warm. How many mums (big eyes) and babies (small eyes) can you count?











#### 3 Pregnancy / Gestation

Small bats (like Bongi and Saba) are usually pregnant for 6 to 9 weeks. This is a relatively long time for such a small mammal. (A mouse is usually pregnant for about three weeks.)

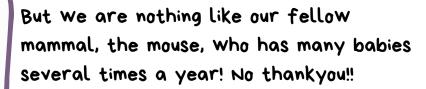
The length of time an animal is pregnant is called the gestation period.

An adult female bat in good health will usually have one baby a year. Some species of bats have twins, but this is a bit special. Most species have only one baby.



| knew | was special. Having twins is a bit unusual!

Well one at a time is quite enough for me!













### 4 Baby bats at birth

It must be very hard work for the mother bat to give birth.

When the baby is born it is very big relative to the size of its mother.





"Logan was 2.5 grams when he was born, it might not sound much to you but | only weighed 7 grams before | was pregnant. He was just over a third of my normal weight!"

"| was 50 grams when | was born, that was about a sixth of my mum's normal weight (300 grams). By the time | was weaned | weighed 135 grams."





#### Activity 2: Baby weight

You might like to work out what fraction of your mum's weight you were at birth.

To do this divide your mum's normal weight (before she was pregnant) with your birth weight. (It's probably easiest to work in kilograms rather than stones, pounds and ounces). Then put your answer under 1 e.g if mum's weight divided by baby's weight = 19, the fraction is 1\19th.

If your mum can't remember here is an example:

Mum's weight before pregnant = 60Kg Baby's weight at birth = 3kg

#### Answer:







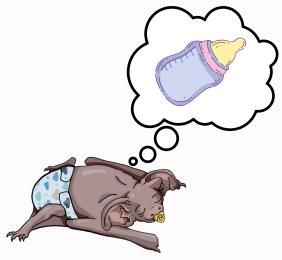


## 5 Hang in there baby!

Bat babies are born pretty helpless, their eyes are closed, they have no fur but they know how to hang on to their mum right away. They will latch onto her nipple with their mouth and hold onto her body with their toes. That way they are fed, warm and snuggled up safe.



#### 6 Feeding and flying



At first, mum and baby spend all their time together. The baby feeds on milk from its mother. The mother must be able to feed herself well in order to make plenty of milk for her growing baby. This means the mother must leave the roost to feed herself.

Mum can even fly with her baby holding on to her. She can fly like this usually until her baby is about a week old or with fruit bats until the baby is about one third of her weight. After that, she will make the baby bat wait for her with all the other babies in the colony, to keep each other warm while she goes out to hunt. One mother bat might stay behind to keep them safe, but mothers will come and go all night to feed their babies milk.

When a mother returns to the maternity roost she will recognize her own

baby in the colony by its cry and it's smell.

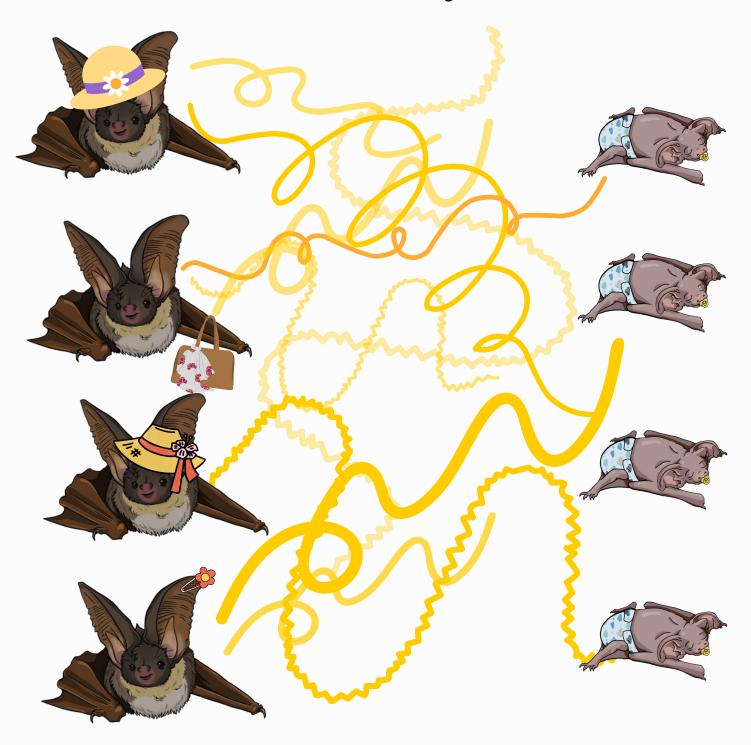






#### Activity 3: Match mum to her pup

Can you match the bat baby to his/her mum? Follow the lines to see who belongs to who!





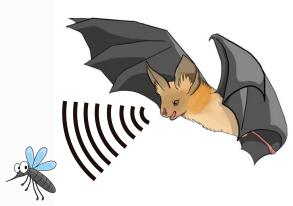
# 7 Growing up is hard to do

Bat babies have a lot to learn, they have to learn;



For some bats finding food also means catching it, (Logan has to catch moths and other insects, imagine trying to fly with a wriggling moth in your mouth or held in your foot),

how to find food (sniffing out ripe fruit, pollen or nectar or hunting live prey).



and many bats need to learn how to echolocate! (Fruit bats don't but all the others do).

All this in 4 to 6 weeks, which is the usual time it takes a baby bat to leave the roost. Some baby bats learn how to fly by holding onto mum, and flapping their wings upside down.

Once they have learned to fly there are lots more skills they need...

#### **Skills needed:**

- · avoiding predators,
- · how to find their way home,
- how to navigate around where they live,
- where there are other roosts to shelter in,
- how to save energy (by going torpid) when food is scarce.





The first year of a bat's life is very difficult, there is so much to learn!

I think I'll just sleep for now! Goodnight!



# Glossary (words we have learned today!)

**Gestation** - is the time it takes a baby to grow inside it's mother until it is ready to be born. (The time the mother is pregnant.)

**Maternity colony** – a group of female bats who roost together while they are pregnant, giving birth and looking after their babies.

**Maternity roost** - a place used for shelter by female bats while they are pregnant, giving birth and looking after their babies. A good maternity roost should be warm, safe (from predators or disturbance) and close to good feeding areas.



I hope you learned a lot today!

See you next week, to learn all about fantastic fliers!

Don't forget; the solutions to the activities will be available on the Bats Without Borders Facebook page!



