

## Ants 1

### Ants live in colonies

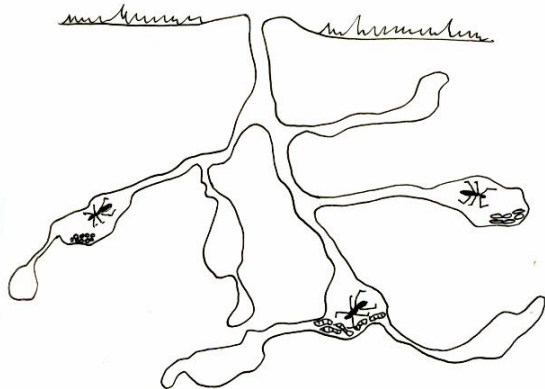
Ants are called *social* insects because they never live alone. They live in family groups called *colonies*. In one ant colony there may be several thousand ants all living together in an underground nest. The nest usually has long passages leading to chambers used for rearing the young and storing food.

In an ant colony, everything is carefully planned. There are different sections for different purposes. Here are some:

- royal quarters for the queen ant
- nurseries for the babies
- food quarters where tiny insects called aphids are kept
- mushroom gardens

The rooms are built at different levels and have different degrees of warmth and dampness. When ants first hatch out of their eggs, they are little wriggly grubs called *larvae*. As these "babies" need to be kept damp to stop their skins drying out, they are kept in a damp room. However the eggs must be kept in a warm room, but not too warm, so the worker ants move the eggs to a room further underground if it is a hot day, or move them to a room closer to the surface if it is a cold day.

**Draw an ant colony and write the functions of the rooms.**



## Ants 2

### Ants teach us about wisdom

A job that has to be done in the ant colony is garbage disposal. Each worker ant is busy keeping the nest clean, taking the rubbish to the garbage tip. Ants are very wise when it comes to looking after rubbish. It is a shame that people are not so wise about their rubbish!

The ant colony is so carefully planned. Only a wonderfully wise Creator could have made the ant to be so organized. It could not have happened by accident. God has made His creatures in such a way that we can learn from them. The ant teaches us about wisdom.

Wisdom is... *knowing the right thing to do, and doing it!*

The ant can teach us how wise it is to plan and organize. Wisdom is also thinking out the best way to do something. If you have a difficult job to do, then the best way to do it is to make a plan. Decide what you will do first, next, and so on. It is good to write down the steps for getting the job done.

Ants are intelligent builders. They are able to use all kinds of materials in making their colonies. They use earth, wood, leaves, packed mud and gravel. Perhaps their favourite home is beside a rock, where they can build many underground passages, with the rock acting as a roof.

1. What do ants do to keep their nest clean?
2. What does the careful planning of the ant colony teach us?
3. Think of a difficult job that you have to do. Make a plan for doing the job. Write down the steps.
4. What kind of materials do ants use for building homes?

### Ants 3

#### Family Members

Most members of the colony are female. There may be thousands of females but only a few hundred males. The female ants are divided into different groups. There are workers, nurses, soldiers and a few queens and princesses.

#### Workers, nurses and soldiers

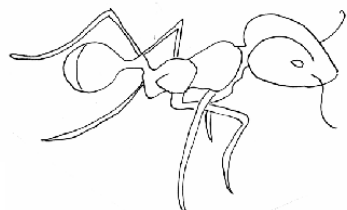
Worker ants are very busy. They look after the eggs and larvae, clean the nest, collect food and look after food storage. After the eggs have been laid by the queen, the workers take them and put them in the special chambers. The workers clean and feed the larvae. They guard the baby ants. Some of the workers repair the underground passages. Others go out and look for food. In some nests, workers open and close holes in the walls, to let more air in, or to block it out.

Nurses look after the sick or injured ants. Have you ever seen an ant carrying another ant back to the nest? The injured ants are cared for in a special hospital room.

Soldier ants can be very fierce. Some have long curved saw-toothed pincers, and a sting. They fight enemy ants from other colonies.



Worker ant



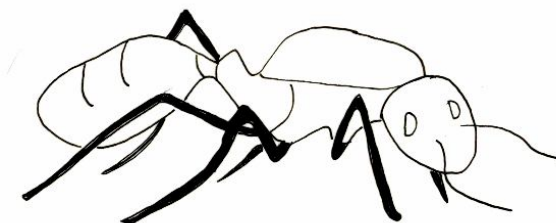
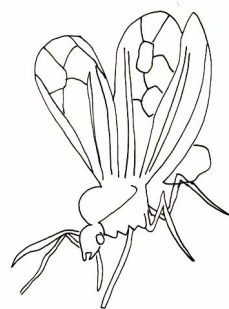
Soldier ant

**Draw the worker and the soldier. Using dot points list three facts for each.**

### Ants 4

#### Queen ant and male ants

The queens and princesses, as well as all male ants are all part of the royal family! They do no work. They have everything done for them. They are fed, combed and cleaned. It is easy to pick them out from the workers, nurses and soldiers because they are the only ones with wings.



These royal ants do nothing but prepare for mating, which happens on one particular day. All the male ants make a special mating flight and mate with the queen ants. A few days after they have mated, the male ants die. The queens fly off and each one starts a new colony. The queen finds a sheltered place, digs a hole, creeps into it and seals it up with earth. Then after a few months the queen lays her eggs. The eggs are very tiny. When the eggs hatch out into larvae she feeds them with her own saliva. In her lifetime the queen will lay thousands of eggs. She will see her nest grow from a tiny hole to a large ant city.

1. Draw the male ant and queen ant and name them.
2. Which ants have wings?
3. What happens to the males after they have mated?
4. What does the queen do after she has mated?

## Ants 5

### The Larva and Pupa

The moment the eggs are laid, workers carry them away to a nursery, and lick them all over until they stick to one another. Then they can be carried around in groups instead of one at a time. After about three weeks the larvae hatch out of the eggs, and they are fed until they are big enough to become pupae. Then they spin a silk cocoon around themselves and stay in the cocoon for another three weeks.

Inside the cocoons they gradually change into ants. When it is time for them to come out of the cocoon the nurses cut a hole in each cocoon and take the cocoon off the ant very carefully. The nurse licks off the tight skin around the baby ant and helps straighten out the legs.

The baby ants are light in colour at first but gradually get darker. When the baby ants venture out of the nest, they have to learn their way home, by the position of the sun, as well as following the smell of other ants from the same nest. The greatest danger to baby ants is getting lost, or wandering into another enemy ant colony by accident.



1. What do the worker ants do with the eggs once they are laid?
2. How do the baby ants get out of the cocoon?
3. What is the greatest danger to a baby ant?

## Ants 6

### Life cycle



Draw four pictures to show the story of how the ant develops from the egg stage to the pupae. Write a description under each drawing.

*Picture 1 The eggs* - These are laid by the queen.

*Picture 2 The larvae* - These are the hairy little grubs which hatch out of the eggs. They feed on the queen's saliva.

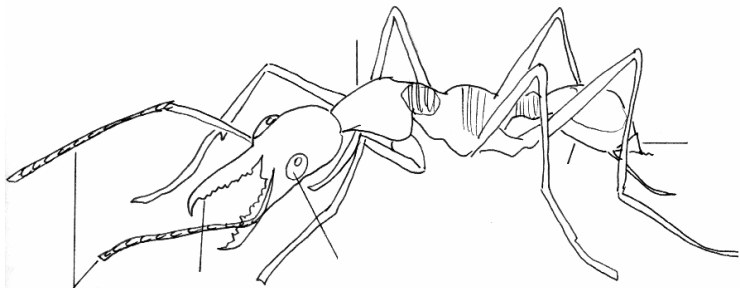
*Picture 3 The cocoon* - When the larva is fully grown it spins a cocoon. Inside, the larva changes into a pupa.

*Picture 4 The pupae* - These are the tiny ants that hatch out of the cocoon.

## Ants 7

### An ant's body

- Ants are insects. This means they have six legs.
- An ant's body has three parts.
- The abdomen is separate from the head and body. It has a distinct waist.
- Ants have *feelers* or *antennae* with a sharp bend in the middle.
- Ants have large jaws called *mandibles*, with tiny teeth, which are used in cutting.
- Male ants have two pairs of wings. Workers and soldiers do not have wings.
- Some ants have stings.
- Some worker ants can chase off intruders by squirting acid at their enemy.



### Draw the ant and write name the parts:

antennae, jaws, compound eye, thorax (body part next to the head), abdomen (tail part) and sting (on the tail)

## Ants 8

### Ants teach us to plan for the future

#### Story: The Ant and the Grasshopper

A grasshopper was sitting in the sun singing. Nearby an ant was struggling along carrying a grain of wheat.

"Isn't it a beautiful day?" sang the grasshopper. "Why don't you sing like me?"

"I'm too busy," muttered the ant as he scurried along. "What are you too busy about?" asked the grasshopper.

"I'm getting ready for the winter, when there will be no food about," replied the ant. Then off he went to fetch some more food.

"Well, I think you're silly," said the grasshopper as the ant returned with another grain. "As long as the sun shines I shall go on singing."

When the winter came the ant had plenty to eat but the grasshopper had nothing.

Ants, like many other creatures, prepare for the future by storing up food. They are wise little creatures because they work hard and think ahead. God says that people should learn a lesson from the ant. People can be prepared for the future by following Jesus. Then, no matter what happens in the future God will be with them. Christians can prepare for the future by storing God's word in their hearts.

### Write this Bible passage:

Proverbs 6:6-8

