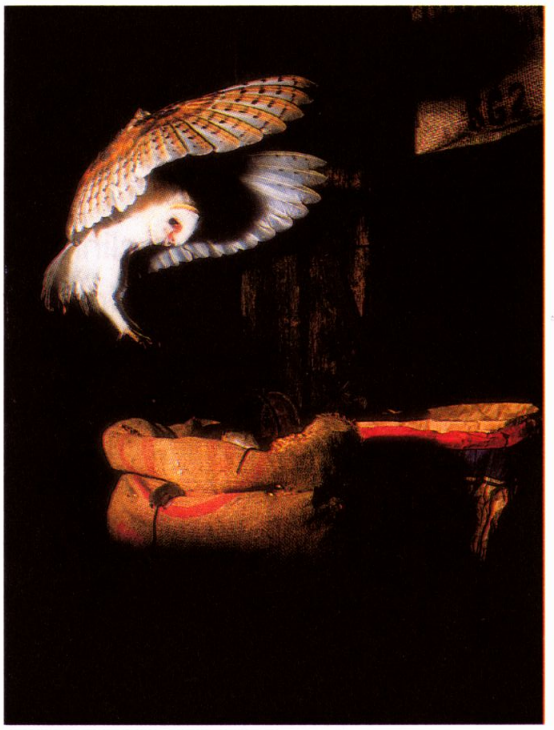
SENSES

All animals, including humans, have senses. Without them, you would not be able to see, hear, smell, taste or touch.

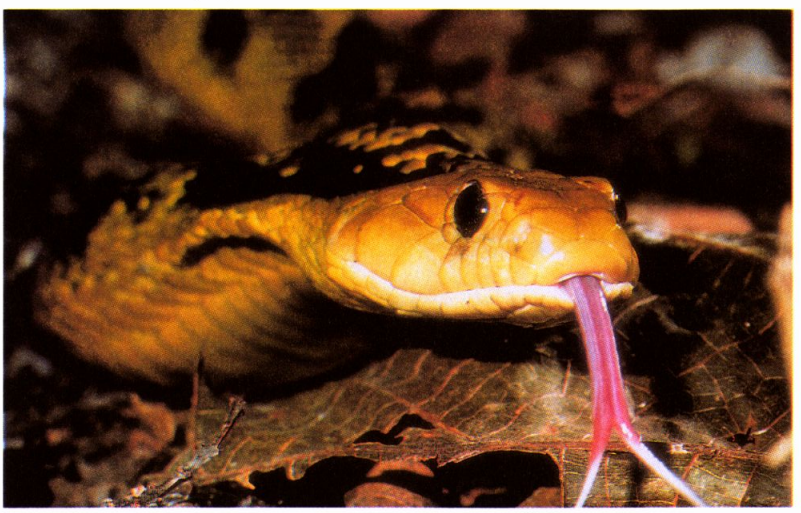
The information on the next pages will tell you more about your senses. The words in bold are explained in the glossary.

Animals and their senses



Some animals have fewer senses than humans. They develop the senses which suit their way of life best. Cats and owls, which hunt at night, can see well in the dark. It is thought that whales and dolphins can hear each other over hundreds of miles of ocean. Dogs, lions and wolves use their sense of smell to track down their prey. Snakes use their tongues to collect smells from the air. Many insects have well-developed senses to help protect them from other animals.

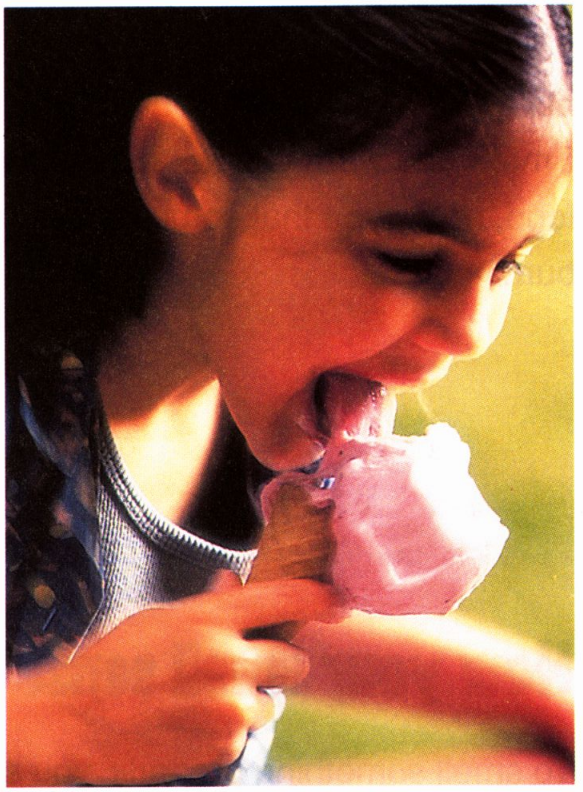
All animals need their senses to find food and to escape their enemies. We use our senses to keep us safe and to enjoy life.

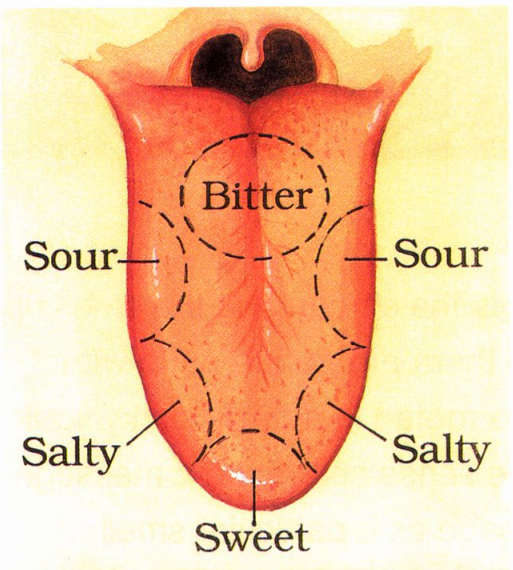


Tasting

It is easier to taste food if you can smell it too. Have you noticed that food doesn't taste as good when you have a cold?

There are four different types of taste. These tastes are sweet, salty, sour and bitter. The tongue can also sense when things are hot or cold.





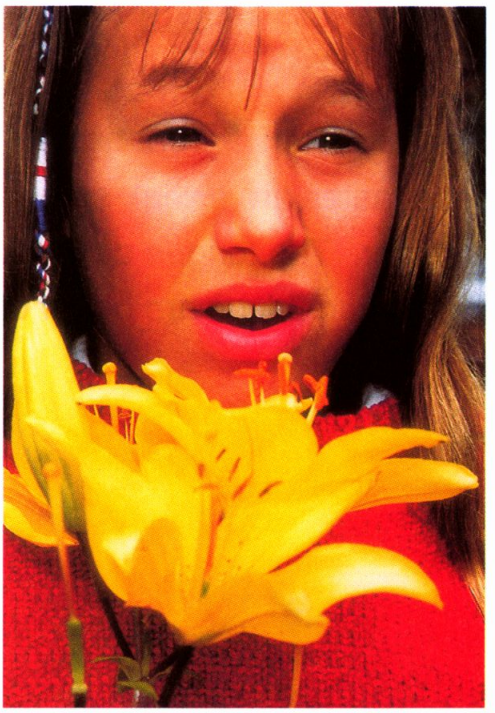
How your taste sense works

If you look at your tongue in a mirror, you can see lots of little bumps. Inside each bump there are over a hundred **taste buds** which pick up different tastes in food. Inside the taste buds there are **taste cells** which have tiny hairs on the end. The taste cells send messages to the **nerves** in the tongue. These nerves then send messages to the brain and the brain decides what the taste is.

Smelling

How many smells can you think of? Which do you like? Which do you dislike? Believe it or not, your brain can pick out over 10,000 different smells!

Some smells make you feel happy, others sad. Some make you feel hungry. Others make you feel sick. Smells can warn you not to eat bad food, or tell you that something is burning.



How your smell sense works

To smell something properly, you sniff. This pulls the air carrying the smell up to a space at the top of the nose. In this space there are **sense cells** with millions of tiny hairs at their ends. The hairs are rooted in a thick, sticky liquid – like reeds in a pond. When you breathe in, the sense cells send a message to the brain. The brain then interprets this message as a particular smell.

Glossary

sense cells	*These are areas where information is collected from inside your body.*
taste buds	*The small bumps on your tongue.*
taste cells	*These are inside the taste buds on your tongue and detect taste.*
nerves	*These carry information around your body and to and from your brain.*