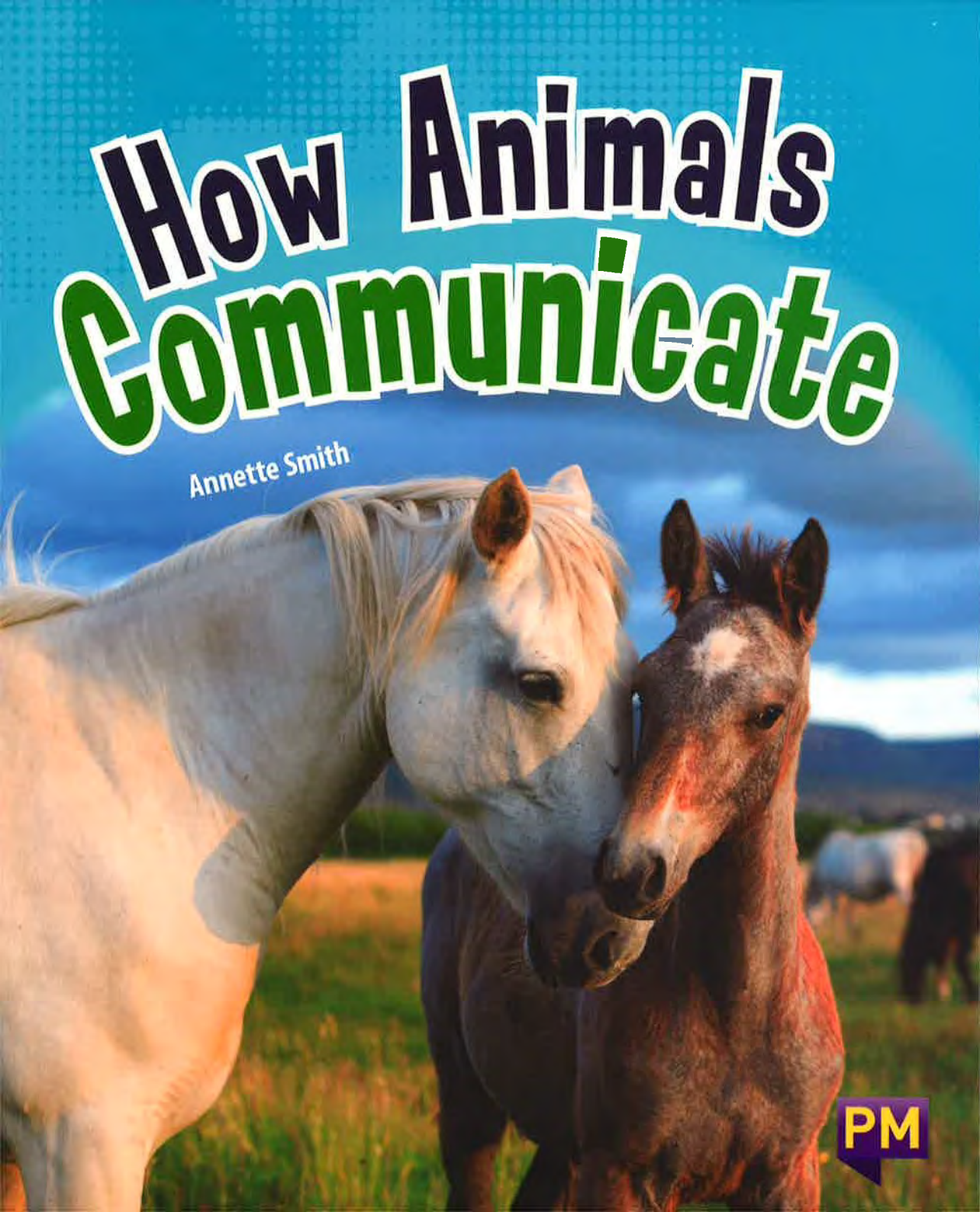
How Animals Communicate

Annette Smith



PM

For teachers' inspection ONLY

How Animals Communicate

Level 27 **Curriculum Area** Science

Running Words 2399 **Text Types** Information Report (Informative) pages 2–25
Explanation (Informative) pages 26–30

Retelling to encourage critical thinking about the content

Ask each student to retell the information report and explanation in his or her own words. Record the retellings for further discussion and reflection.

Think and Talk About ...

Fact boxes in the book encourage each student to explore the statements further and to share the information with others.

Questions to reinforce meaning and stimulate discussion

Literal

1 How do snakes identify scents in the air?
2 How does a peacock attract a mate?
3 What is the waggle dance of the Honey Bee?

Inferential

4 Why do soldier ants need to guard the queen ant?
5 Why do many animals travel in groups?
6 Why would large grazing animals such as bison have been a threat to rattlesnakes?
7 If a male gorilla is frowning or pouting, what is it likely to do next?
8 After moulting, why does a male Fiddler Crab hide away until its new shell hardens?
9 How would penguins in a huddle know when to change places with those on the outside?
10 Why do elephants stroke the face and ears of other elephants that are feeling unsure?

Applied Knowledge

11 Why have ants been able to exist on Earth for millions of years?
12 Why is the speed of sound far greater in water than on land?
13 Why is the sign of trust important to some animals?

Vocabulary

Replace the adjective 'pulsating' in this sentence:
When whales are working as a group, they use whistles and pulsating calls.

Links with other PM Guided Reading Books and Cards

Level 27	Book	Information Report/Response	*Motorbikes*
Level 28	Book	Information Report	*Southern Skies*

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Contents

Animal Senses 2
Scent 4
Sound 8
Sight 14
Touch 20
Communication for a Purpose 24
How Humans Train Young Working Dogs 26
Glossary 31
Index 32

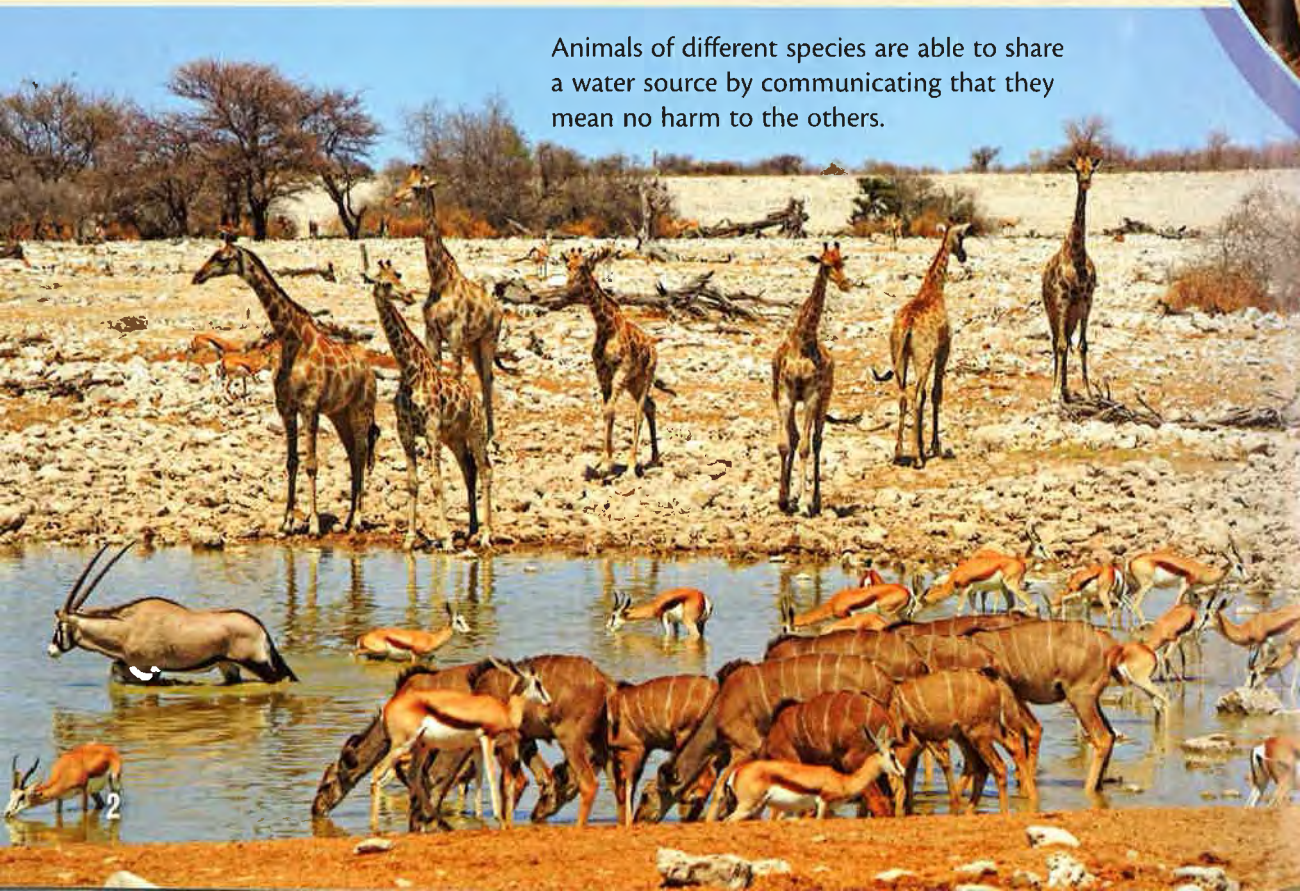
Animal Senses

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Animals communicate through their senses for survival. They use their senses to find food and water, inform others, attract a mate and scare predators.

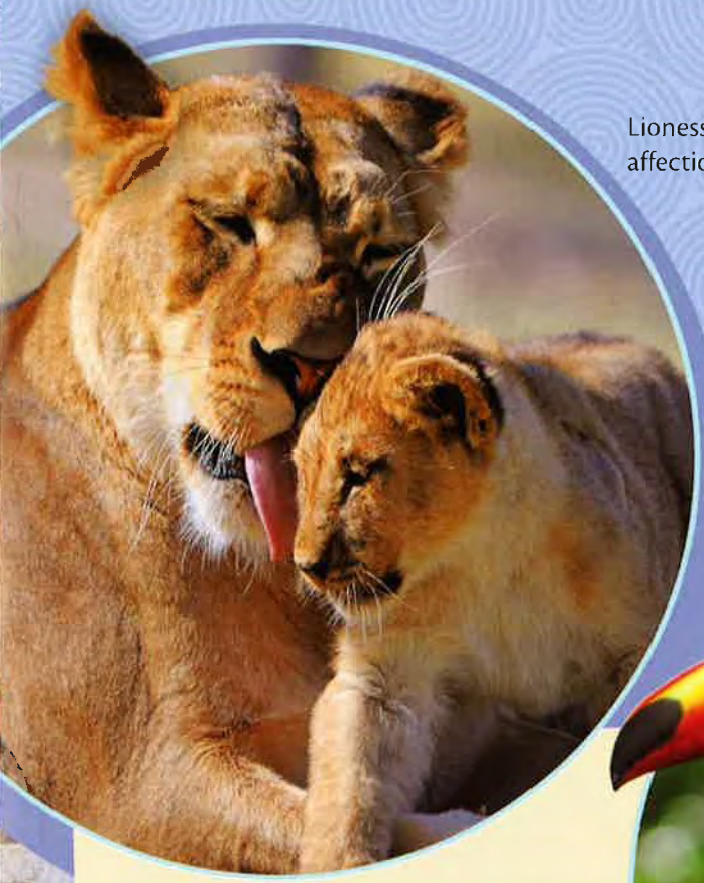
Animals send signals or messages to other animals or groups of animals, of the same or different species, through smell, sound, sight and touch.

A strong scent can attract other animals. A loud piercing sound or a bright colour can frighten predators away from a specific area. A caressing touch from a female can help her young feel safe and secure.



Animals of different species are able to share a water source by communicating that they mean no harm to the others.

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Lionesses lick their cubs to express affection and keep them clean.

Toucans use their large, colourful bills to reach food, to fight with other toucans and to intimidate competitors for food.



Many animals living together use specific signals to direct the movements of the whole group from one place to another. The strength of the signal or mixture of signals usually controls the reactions and behaviour of the animals receiving the information.

THINK AND TALK ABOUT ...

Spring is a special time of the year for birdsong.

Scent

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Sharks' nostrils are used only for detecting scent; they breathe through the gills on the sides of their body.

Animal communication through the sense of smell is very common. Some animals and insects produce strong scents called **pheromones**. When a pheromone is released, it can change the behaviour of nearby animals of the same species.

Sharks have a very effective sense of smell. Some species of shark can even detect drops of blood in the ocean, indicating a wounded prey that can be easily overpowered. A shark has two nostrils, called nares, on the underside of its snout. Water continually flows through the nostrils into a nasal chamber. A shark does not breathe air through its nostrils.

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Snakes have an unusual means of identifying scents in the air. A snake flicks out its tongue, then brings it back to touch a special **gland** in the roof of its mouth.

Some animals, such as hippopotamuses, leave large piles of droppings to mark their territory. Dogs spray urine as a warning to other dogs to stay away from a particular area.



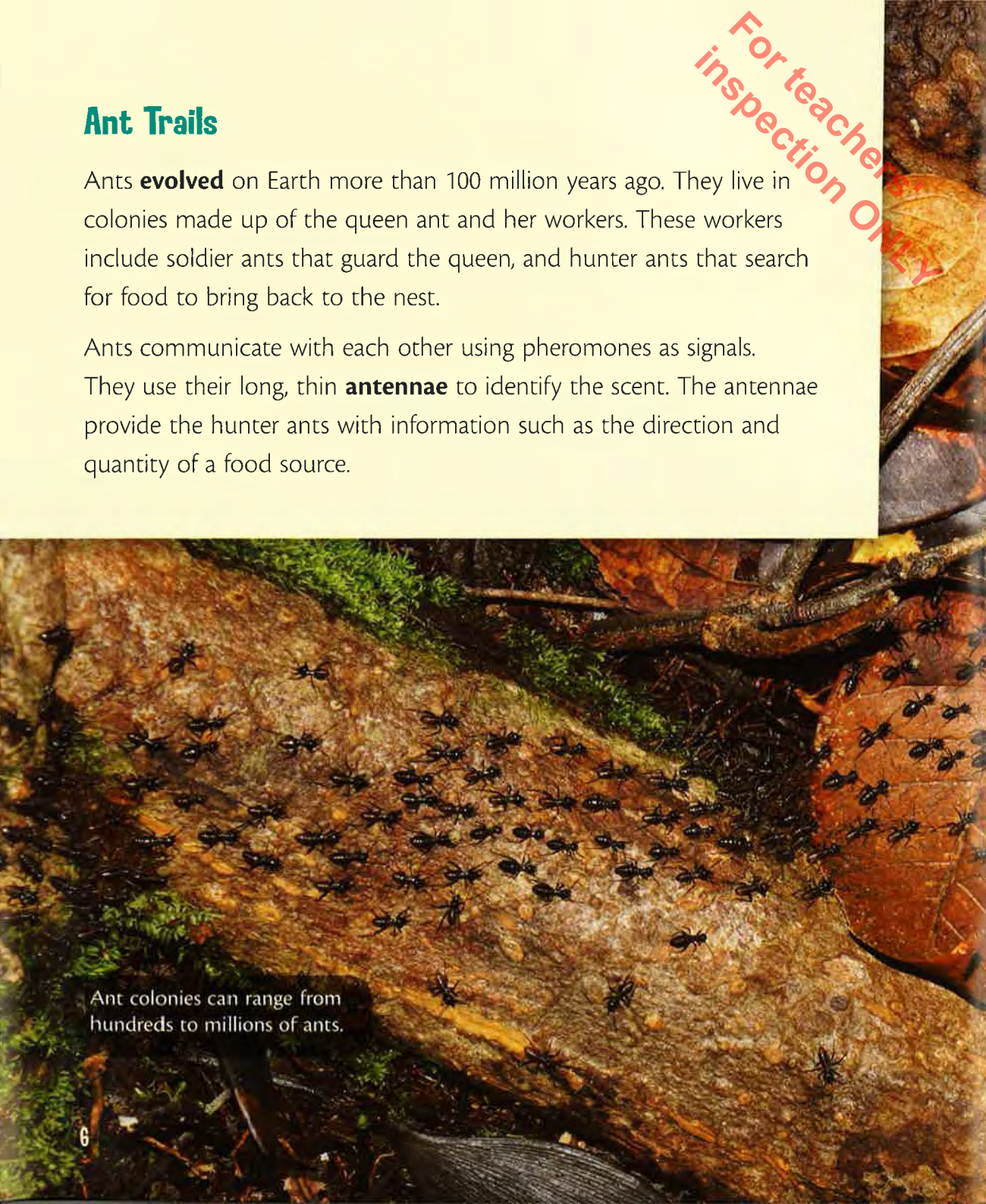
Unlike most other animals, snakes "taste" the air to detect scents.

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Ant Trails

Ants **evolved** on Earth more than 100 million years ago. They live in colonies made up of the queen ant and her workers. These workers include soldier ants that guard the queen, and hunter ants that search for food to bring back to the nest.

Ants communicate with each other using pheromones as signals. They use their long, thin **antennae** to identify the scent. The antennae provide the hunter ants with information such as the direction and quantity of a food source.



Ant colonies can range from hundreds to millions of ants.



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When hunter ants find food, they mark their trails with pheromones on the way back to the colony. Other ants follow these trails and also mark them with similar pheromones as they return with food. Once the food supply has been reduced, no further scents are added to the trails.

THINK AND TALK ABOUT ...

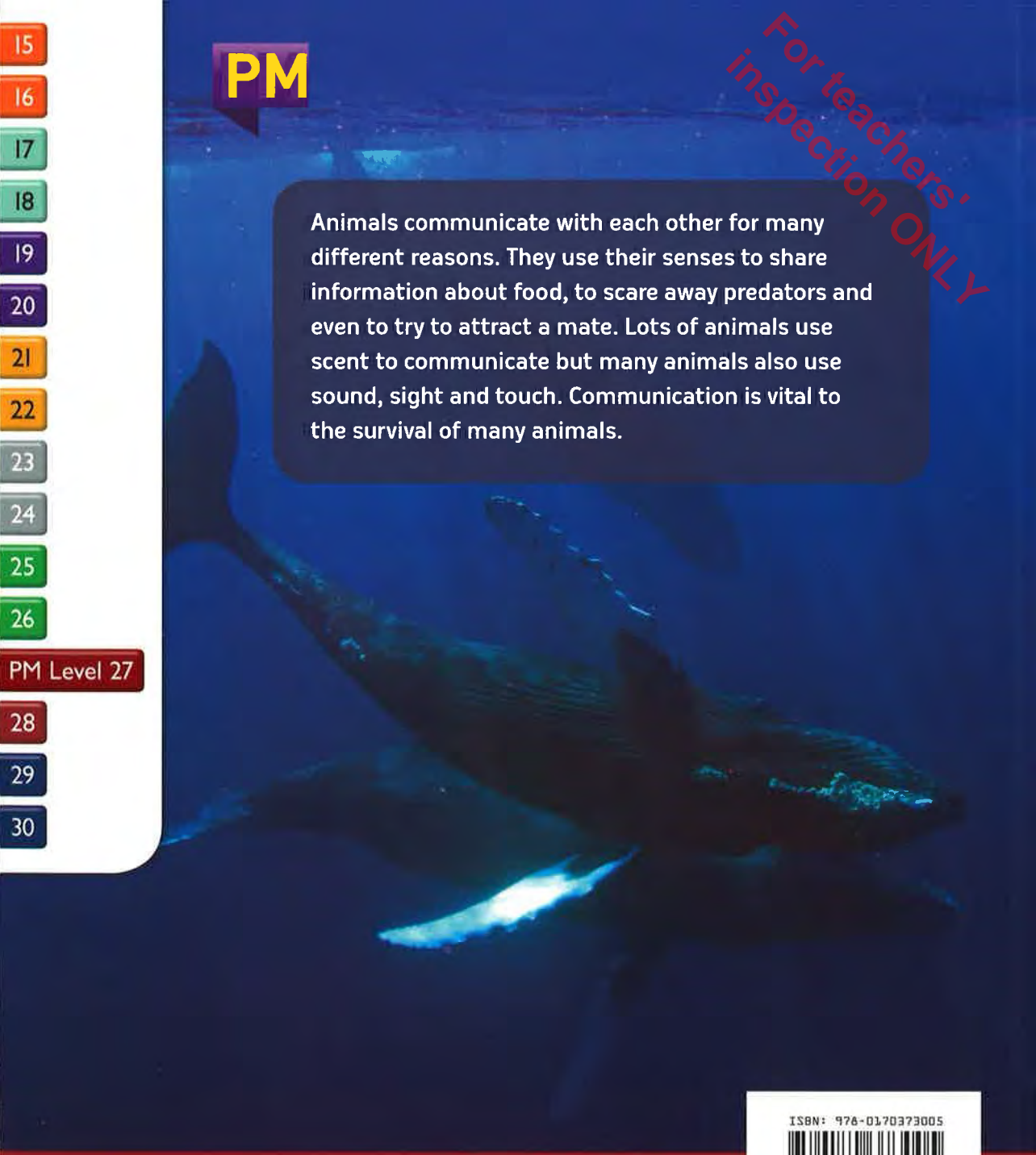
Ants communicate with each other to solve difficult problems.

15
16
17
18
19
20
21
22
23
24
25
26
PM Level 27
28
29
30

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Animals communicate with each other for many different reasons. They use their senses to share information about food, to scare away predators and even to try to attract a mate. Lots of animals use scent to communicate but many animals also use sound, sight and touch. Communication is vital to the survival of many animals.



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