



Can animals count?

Unless you don't like cookies, you'll pick the plate with three.

Being able to tell more from less is one of the most basic math talents. And it's one that a surprising number of animals have. A *robin* (知更鸟) will pick the piece of wood with more mealworms.

A *salamander* (蝾螈) will pick the *container* (容器) with more fruit flies.

① Animals will even pick more of something when it means they get less overall. Horses, for example, will go for three tiny apples over two much larger ones.

But animals do not have math class — why would they need to count?

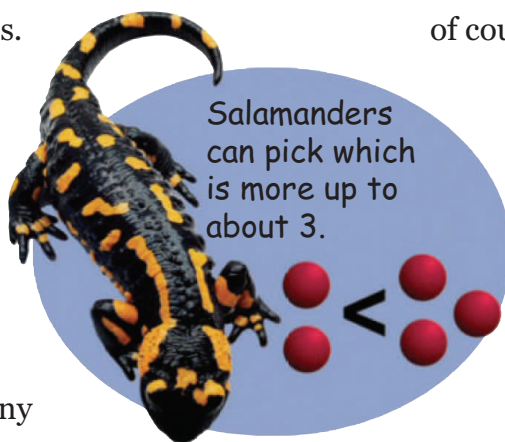
Being able to *spot* (认出) the larger of two groups is useful to animals in lots of ways. It helps them pick the bush with more berries, or run to the larger group of friends. Many fish, for example, join groups (called shoals)

for protection. If a *predator* (捕食者) comes, a fish in a shoal of 40 is less likely to become lunch than a fish in a shoal of 10. So if a fish has a choice between two shoals, it's better to join the larger one.

Many animals can also do a simple form of counting, keeping track of how many of something there is.

② Even animals we don't usually think of as smart can tell the difference between one, two, and three. Fish and honeybees can be trained to get through a maze by choosing turns marked by a certain number of dots — to find the way out, they have to count.

Some animals, including pigeons, parrots, crows, and rats, can count much higher than three. A pigeon can learn to *peck* (啄) a button exactly 24 times — no more, no less — to get a treat. It can even remember its place and continue counting if *interrupted* (被打断).



Vocabulary

I. Translate the following expressions from English to Chinese.

- | | | |
|-----------------------------|-----------------------|---------------------|
| 1. tell more from less | 3. keep track of | 5. find the way out |
| 2. the larger of two groups | 4. get through a maze | 6. get a treat |

II. Complete each sentence with the proper form of the given words.

choose count exactly offer pick protection surprising talent

1. It happened late last century — in 1895 to be _____.
2. I took the cup of milk she _____ me and drank it all up.
3. Here are some pieces of advice for _____ the right school.
4. Regular exercise may _____ you against the deadly virus.
5. There are lots of _____ in store for visitors to the gallery.
6. There are thirty-one people in the classroom, _____ the teacher.
7. We will never know if we are _____ in a subject if we don't try it.
8. As a new light source, LED has become the first _____ for many people.

Reading comprehension

Choose the best answer.

1. What can we know about animals' ability to count?
A. Animals can be taught to solve simple math problems.
B. Animals prefer to choose more of something than less.
C. Only smart animals can tell one number from another.
D. A surprisingly small number of animals can count to three.
2. How is the ability to tell more from less useful to animals, according to paragraph 5?
① It helps them enjoy more food. ② It helps them make more friends.
③ It helps them stay safe from danger. ④ It helps them get more treats.
A. ①② B. ①③ C. ②④ D. ③④
3. By mentioning the pigeon in the last paragraph, the author intended to show that _____.
A. pigeons can count up to *2-digit numbers* (两位数)
B. pigeons would peck buttons for a treat
C. pigeons can remember things very well
D. pigeons are much smarter than we think
4. This article aims to _____.
A. explain how animals develop their basic math talents
B. introduce readers to some animals that are good at counting
C. show readers animals' ability to count and remember numbers
D. discuss the difference in the math talents between humans and animals

Translation

Read the sentences below and translate them into Chinese.

1. Animals will even pick more of something when it means they get less overall.
2. Even animals we don't usually think of as smart can tell the difference between one, two, and three.