



Worksheet 1. Reading: *Birds and Animals in the Mirror*

Read the passage about birds and animals. Then review the glossary and complete the exercises that follow it.

1 A recent study has found that a certain bird called the magpie can recognize itself in a
2 mirror. Until now, scientists believed that only a few species of primates have the ability to
3 recognize themselves in a mirror. This ability to recognize oneself in a mirror indicates a
4 degree of intelligence, the scientists believe.

5 In humans, the ability to recognize oneself in a mirror develops around the age of 18
6 months. It appears around the same time that the first signs of social behavior appear.

7 In addition to humans, only four kinds of apes — bonobos, chimpanzees, orangutans, and
8 gorillas — along with Asian elephants and some dolphins — have this ability. The discovery
9 that a bird, too, can recognize itself surprised the scientists. They note, however, that this
10 bird does have a large brain, by bird standards.

11 A scientist from Emory University says: "Magpies are known for their ability to steal shiny
12 objects and to hide away their loot." Scientists think that this kind of behavior, actually a
13 kind of planned robbery, indicates a high degree of mental activity. Magpies are from the
14 same bird family as crows, which, researchers discovered, have tool-making skills: they can
15 twist a wire into a hook and lift food out of a tube.

16 To find out whether an animal or a bird has this self-awareness, scientists give their
17 subjects a "mirror mark test." In this test, they place a red mark on the animal's neck. The
18 animal can notice the mark only when it sees its own reflection in the mirror. The magpies
19 in this test scratched at the same place on their necks where the red mark was in the mirror
20 image. This action is a clear indication that they recognized the image in the mirror as their
21 own.

22 The scientists had performed a similar test with a group of elephants. One female elephant
23 named Happy responded especially well. The scientists had marked her with a large red
24 spot on one side of her neck. When she saw herself in the mirror, she saw the spot. Then,
25 she investigated the spot in the same place on her own body. She kept poking it with her
26 trunk as she watched herself in the mirror.



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- 27 Dogs and cats usually ignore their reflections, and most birds often attack their own
28 reflections. The few animals and birds that do understand the image in the mirror are self-
29 aware, and this self-awareness indicates a high degree of cognitive ability.

Glossary

- Line 1 *magpie* — a kind of bird
Line 2 *primates* — a class of large mammals
Line 7 *apes* — an animal that is similar to a monkey but has no tail or only a very short tail
bonobos, chimpanzees, orangutans, and gorillas are kinds of *apes*
Line 8 *dolphin* — a very intelligent sea animal like a fish with a long grey pointed nose
Line 12 *loot* — things that have been stolen
Line 29 *cognitive ability* — the ability to know, understand, and learn things

Comprehension practice

Check all the statements that are true, according to the reading.

1. The magpie is a mammal.
2. Magpies can recognize themselves in a mirror.
3. A baby can recognize himself or herself in the mirror before the age of one year.
4. Chimpanzees are apes.
5. Crows are birds that steal things and hide them.
6. Some birds can perform complicated tasks which involve planning ahead.
7. In the reading, a male elephant named Happy saw himself in the mirror.
8. When dogs and cats see themselves in the mirror, they usually attack the image.
9. The fact that a bird or animal understands the mirror image indicates a certain degree of intelligence.
10. Most animals can recognize themselves in a mirror