8Jb/2 Magnetic pigeons

Some people keep homing pigeons for sport. Birds are taken hundreds of miles away from their home in a lorry, and then they are all released together. The owner of the first bird to fly back to its own loft wins the pigeon race.

How do all these birds find their way? Some scientists think that the birds use the angle of the Sun to tell them which way to go. Some people think that the birds use the Earth's magnetism.

German scientists tried an experiment to find out if pigeons used magnetism or the Sun. They hatched three sets of pigeons. Group A grew up normally, and could see the Sun all day. The other two groups only saw the Sun in the



afternoons. The birds were taken a long way from home, and released on a sunny morning.

- The birds in Group A flew straight home.
- Group B birds, which had never seen the angle of the Sun in the morning, also flew home normally.
- Group C birds had small magnets glued to their backs. These magnets were strong enough to stop the pigeons detecting the Earth's magnetism. The birds in this group could not find their way back home.

1 How does a pigeon race work?

- **2** There are two things that pigeons might use to find their way home. What are they?
- **3** The German scientists thought that the pigeons in Group B were *not* using the Sun to find their way home.
 - **a** Why did they think this?
 - **b** What could they have been using instead?
- **4** How did the Group C pigeons show that pigeons normally use the Earth's magnetism to find their way?
- **5** Some birds and other kinds of animals migrate, or travel long distances each year. Research the migrations of one of these animals:
 - swallows geese whales lemmings salmon
 - Monarch butterflies
- wildebeest
- Find out where the animals or birds live, when they migrate, and why they migrate. You could also try to find out *how* they know where to go.

literacy, knowledge, research