

Seventy Steps in the Ash

PASSAGE · NON-FICTION

SKILLS TRAINED

Working memory

Delayed recall

Inference

HOW TO USE THIS SHEET

About 18 minutes

- 1 Read the passage twice, slowly. Take about five minutes.
- 2 Turn to the next page and cover this one. No looking back.
- 3 Write what you remember, then mark it on the last page.

Some of the oldest evidence of how our ancestors moved is not a bone. It is a set of footprints, preserved by a piece of luck so narrow that it is hard to believe it happened at all.

The place is Laetoli, in northern Tanzania, not far from Olduvai Gorge. About three and a half million years ago a volcano threw out a fine grey ash that settled across the plain like a layer of flour. Then it rained. Damp ash takes a print beautifully. Afterwards the sun baked the layer hard, and more ash fell on top and sealed it.

Everything that crossed the plain in those few days left its mark. Excavations in the same ash found the tracks of hares, guinea fowl, antelope, rhinoceros and elephants, and the pockmarks of individual raindrops.

In 1976 a team working at Laetoli noticed shapes in an exposed patch of the hardened ash. Animal prints were identified first. Two years later, in 1978, the team uncovered what they had not dared hope for: a trail of prints unmistakably made by a creature walking upright on two feet.

The trail, excavated under the direction of the palaeontologist Mary Leakey, runs for about twenty-seven metres and holds roughly seventy prints. They were made by at least two individuals travelling in the same direction, at a walk rather than a run. One set is noticeably larger than the other.

The shape of the prints is the important part. A deep heel strike. A clear arch. A big toe lying in line with the other toes rather than sticking out to the side like a thumb, as it does on an ape's foot. The weight rolls from heel to the ball of the foot and pushes off from the front. In other words, these feet walked the way your feet walk.

That mattered because of the date. Three and a half million years ago, the brains of our ancestors were still small — nothing like the size of ours. The footprints showed that walking upright came first, long before big brains, and not the other way round. The

prints are generally attributed to *Australopithecus afarensis*, the same kind of early human relative as the famous skeleton nicknamed Lucy.

A footprint is a strange sort of fossil. A bone tells you what an animal was built like. A footprint tells you what it was doing on a particular morning, before the rain dried.

Most of the trail has now been covered again, with sand and soil, to protect it from the weather.

Cover the passage before you start.

Looking back turns this into a copying exercise. Getting it slightly wrong from memory is what makes it work.

PART A Tell it back

Write down everything you can remember about the Laetoli footprints — how they were made, how they were found, and what they showed. Order does not matter. Keep writing until you run out.

PART B 5 questions

1 How long is the footprint trail, and roughly how many prints does it hold?

2 Describe the sequence of events that preserved the prints.

3 Why did the shape of the big toe matter so much to the scientists?

4 The passage says walking upright “came first”. First before what, and how do the footprints show it?

5 The prints are called “unmistakably” the work of a creature walking on two feet. What does unmistakably mean?

PART C Mark your own work

Now go back to the passage. Tick every answer you got right. You do not need the same words as the answer below — if you wrote the same idea in your own words, it counts.

- ☐ 1 • About twenty-seven metres long, with roughly seventy prints, made by at least two individuals walking in the same direction.
- ☐ 2 • A volcano laid down fine ash, rain dampened it so it took prints, the sun baked the layer hard, and more ash fell on top and sealed it.
- ☐ 3 • On an ape's foot the big toe sticks out to the side like a thumb. Here it lay in line with the other toes, which is the shape of a foot built for walking upright rather than gripping branches.
- ☐ 4 • Before large brains. The prints are three and a half million years old, a time when our ancestors' brains were still small, yet the feet already walked as ours do.
- ☐ 5 • It means there was no room to be wrong about it — the evidence could not be confused with anything else.

FACTS RECALLED IN PART A

—

QUESTIONS CORRECT

— / 5

DATE

THE STRATEGY Explain it simply

Once you have read something, try explaining it out loud to someone who has never heard of it — a younger brother, a cat, the wall. Use ordinary words and no borrowed phrases from the page. The moment you stumble is useful information: it marks the part you had copied rather than understood, and that is the part worth going back for.

WHERE YOU ALREADY DO THIS

When was the last time you explained something to somebody and realised halfway through that you did not understand it as well as you thought?

FOR THE PARENT OR TEACHER · This sheet trains delayed recall, not reading speed. Let your child read once, then cover the passage completely before Part A — no peeking back, and no prompting, because the struggle to retrieve a half-remembered fact is what builds the memory. At this level expect the inference answers to be worded loosely; reward the reasoning rather than the phrasing.