## PART 4 Questions 31–40

Complete the notes below.

Write ONE WORD ONLY for each answer.



# **Bird Migration Theory**

Most birds are believed to migrate seasonally.

### **Hibernation theory**

- It was believed that birds hibernated underwater or buried themselves in **31** ......
- This theory was later disproved by experiments on caged birds.

#### **Transmutation theory**

- Aristotle believed birds changed from one species into another in summer and winter
  - In autumn he observed that redstarts experience the loss of
     32 ...... and thought they then turned into robins.
  - Aristotle's assumptions were logical because the two species of birds had a similar 33 ......

#### 17th century

Charles Morton popularised the idea that birds fly to the **34** ......
in winter.

## Scientific developments

- In 1822, a stork was killed in Germany which had an African spear in its **35** ......
  - previously there had been no **36** ...... that storks migrate to Africa
- Little was known about the **37** ...... and journeys of migrating birds until the practice of ringing was established.
  - It was thought large birds carried small birds on some journeys because they were considered incapable of travelling across huge 38 ......
  - Ringing depended on what is called the **39** '......' of dead birds.
- In 1931, the first **40** ...... to show the migration of European birds was printed.



