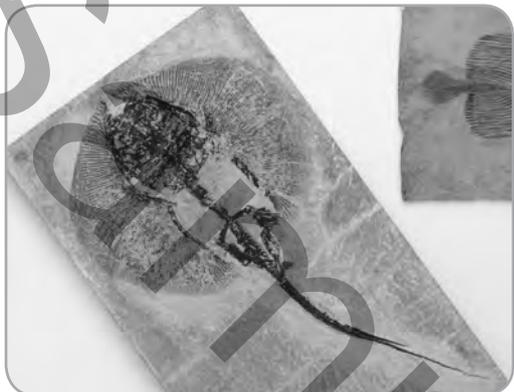


Knowledge and understanding

L Literacy **WE** Work and enterprise

Each of these photos shows a different fossilised organism.

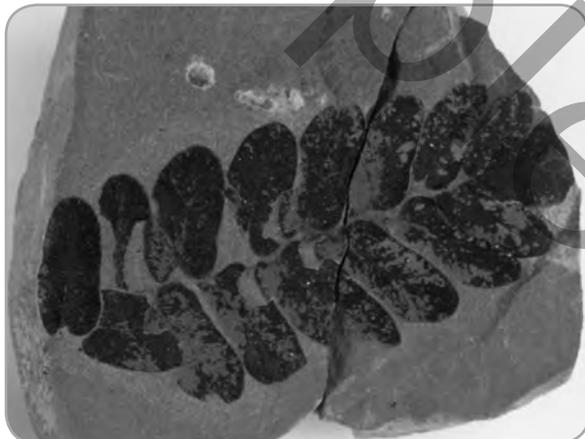
(a)



(b)



(c)



(d)

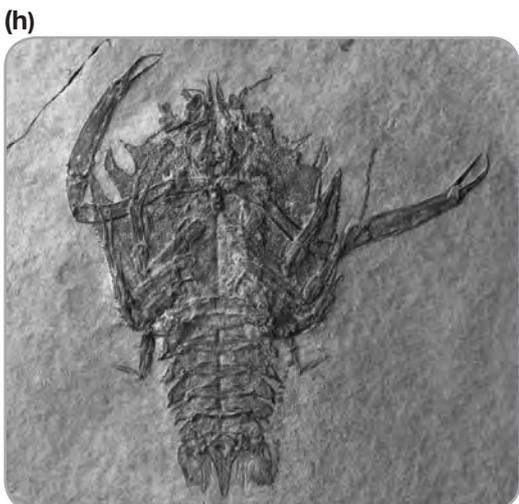
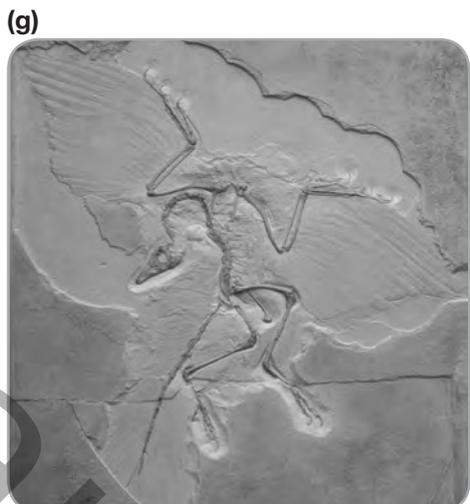


(e)



(f)





1 Identify each type of organism that has been fossilised. Choose the correct name from the box. The first one has been done for you.

bird/dinosaur	horse	✓ ray (fish)	seastar	beetle
frog	plant	dinosaur	crustacean (lobster)	turtle

- (a) _____ ray (fish) _____
- (c) _____
- (e) _____
- (g) _____
- (i) _____

- (b) _____
- (d) _____
- (f) _____
- (h) _____
- (j) _____

2 Identify a fossil that is probably a carbon film.

3 Identify the six vertebrate fossils.

4 Name some types of fossils that are not shown in these photos.

HINT
 Types of fossils include original fossils, replacement fossils, carbon film fossils, moulds and casts.

5 Fossil (**j**) is a replacement fossil in which the bones have turned to silica, whereas fossil (**d**) is an original fossil in which the animal has been preserved by falling in a tar pit.

(a) **Explain** some differences in the way fossils (**j**) and (**d**) were formed.

(b) **Explain** what information you could obtain from fossil (**d**) about its original body chemicals that you could not obtain from fossil (**j**).

6 Fossil (**g**) is one of the most famous fossils ever found. It belongs to an animal called *Archaeopteryx*. When it was first discovered, palaeontologists thought it was a dinosaur. But along with the bones, something else was fossilised. **Name and describe** this other feature you can see in the fossil.

HINT

Look closely at the marks around the limbs. What could they suggest?

7 **Explain** what is meant by the *fossil record*.

silica (n)
a mineral

preserve (v)
to keep; to save

tar pit (n)
a hole filled with thick, sticky oil