

Review Questions

1. What does 'the species within the family are differentiated by DNA nucleotide sequences' mean?

2. Describe the features of primates.

3. (a) Complete the following table showing the classification of humans and apes.

Kingdom	Animalia
Phylum	
Class	
Order	
Family	

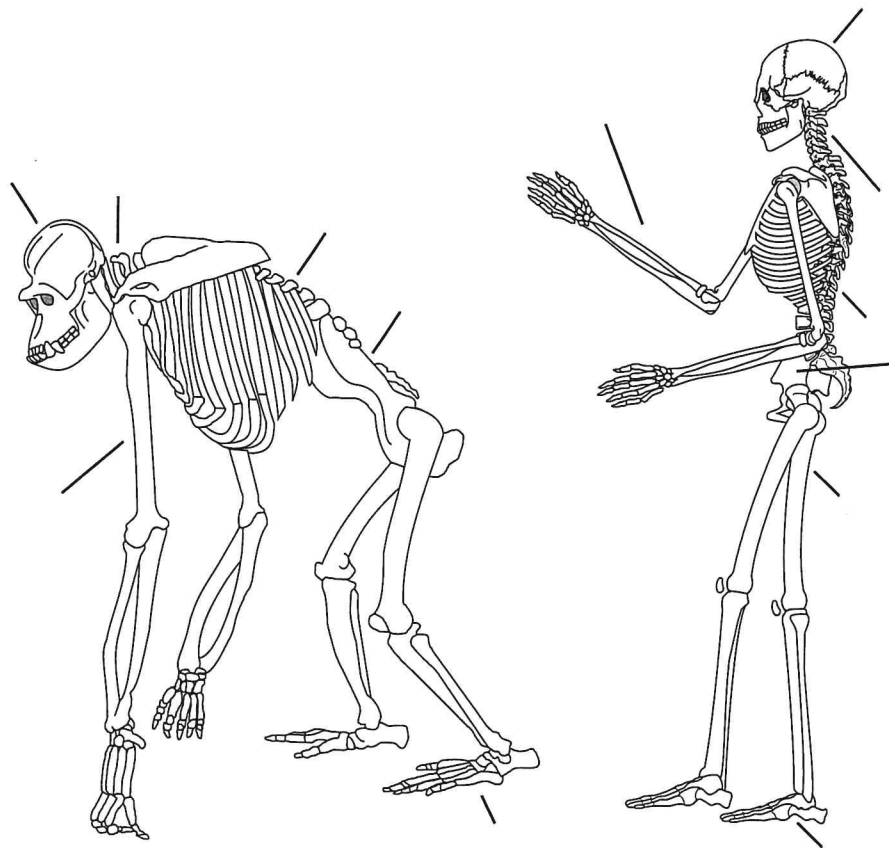
- (b) Distinguish between 'hominid' and 'hominin'.

4. Name some examples of the great apes.

5. (a) Distinguish between a 'power' grip and 'precision' grip.

- (b) Which primate group has a precision grip?

6. (a) Label these diagrams of ape and human skeletons.



- (b) Compare the differences between apes and modern human using the table below.

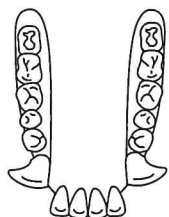
Feature	Modern Humans	Apes
Skull		
Spinal column		

Pelvis		
Legs		
Feet		
Hands		

7. List some advantages of being bipedal and explain why each is an advantage.

- i) _____
- ii) _____
- iii) _____
- iv) _____

8. Name the primates who have the following dentition.



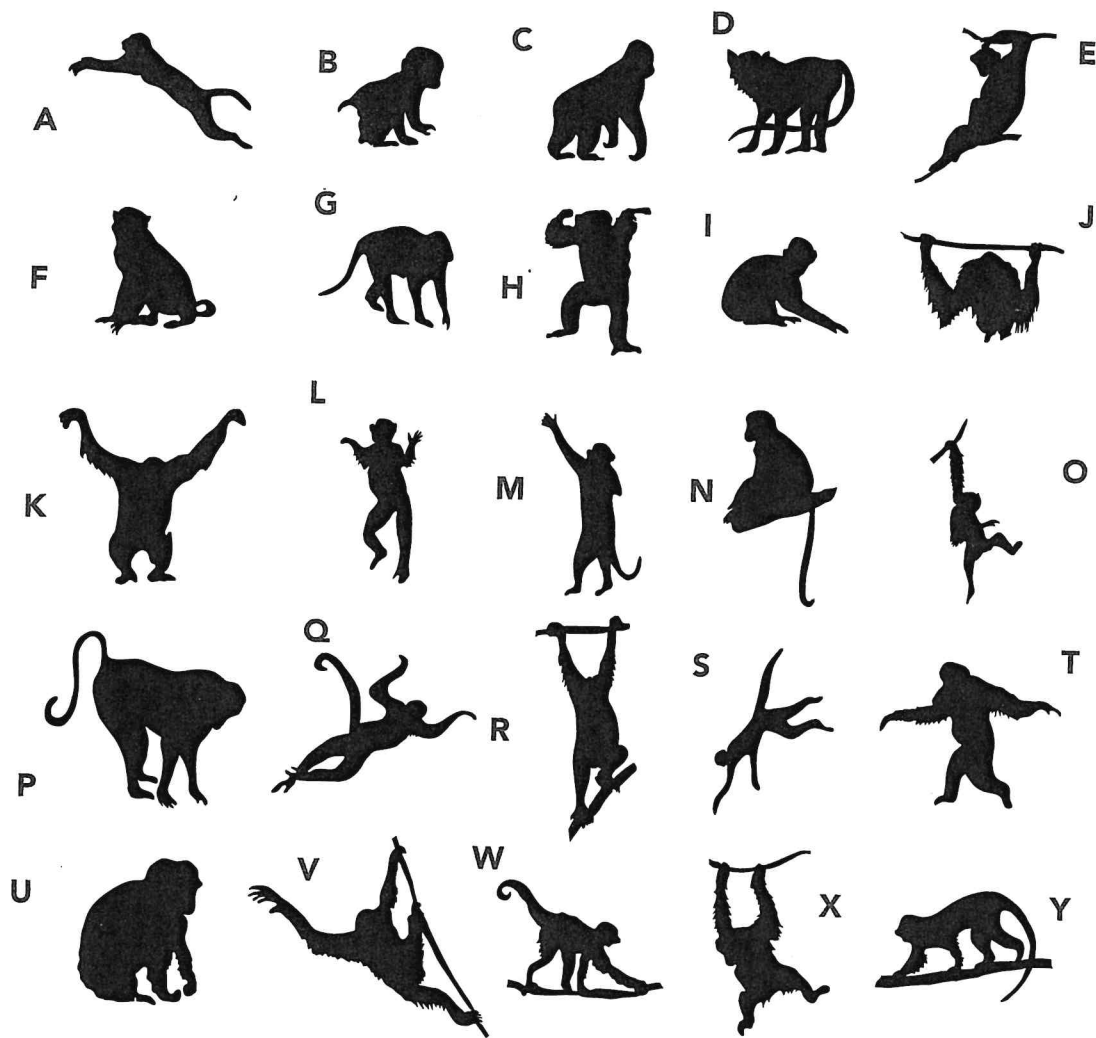
(a) _____ (b) _____ (c) _____

9. How does dentition influence the structure of the skull?

10. Use a variety of resources to find information to complete the chart below.

Hominin	Cranial capacity	Time of existence	Skull features	Dentition prognathism	Opposability of digits	Pelvis structure	Limb and foot structure	Other
<i>Australopithecus afarensis</i>								
<i>Australopithecus africanus</i>								
<i>Paranthropus robustus</i>								
<i>Homo habilis</i>								
<i>Homo erectus</i>								
<i>Homo neanderthalensis</i>								
<i>Homo sapiens</i>								

11. Circle the outlines that demonstrate brachiation.



12. The environment inhabited by our primate ancestors changed from woodland forest to savannah in our early evolution. How did this influence the method of locomotion used?

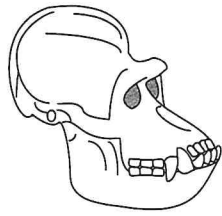
13. Which fossil hominid group first showed convincing evidence of bipedalism?

14. The information in question 10 indicates an increase in cranial capacity.

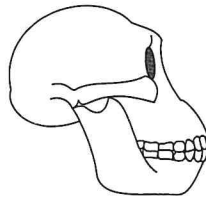
(a) Which part of the brain has increased in size?

(b) What does this indicate about the cognitive abilities of these groups?

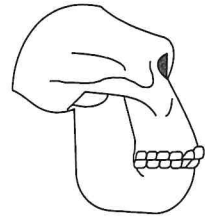
15. Identify these skulls.



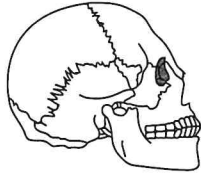
(a) _____



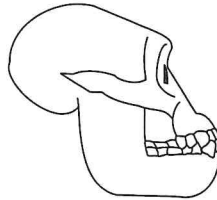
(b) _____



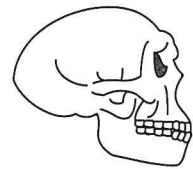
(c) _____



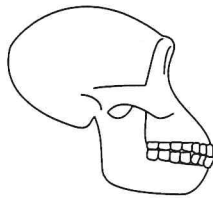
(d) _____



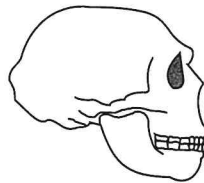
(e) _____



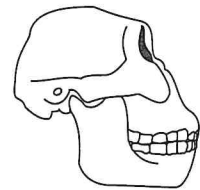
(f) _____



(g) _____



(h) _____



(i) _____

16. What are the most distinguishing features used to classify these skulls?

17. What other information would be helpful in classifying these skulls?

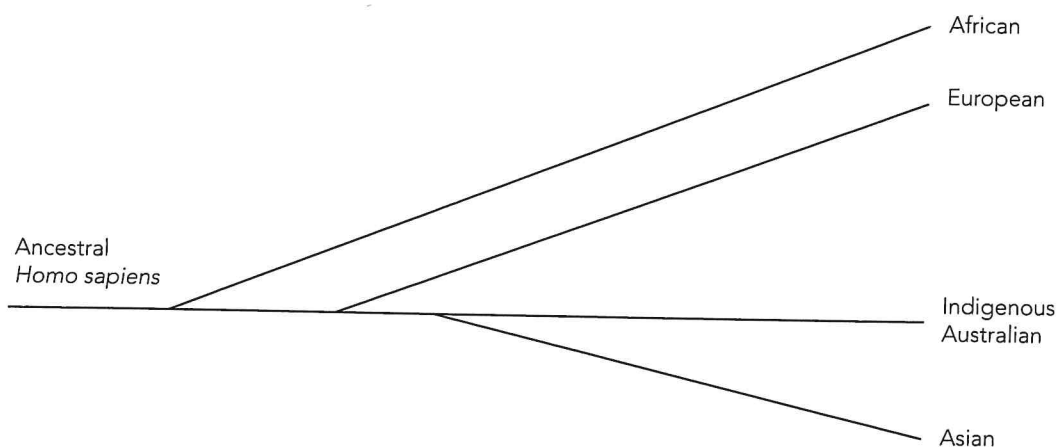
18. (a) Which hominin most probably first communicated by speech?

(b) What evidence is there to support this idea?

19. About 98 per cent of chimpanzee and human genes appear to be the same. What does this suggest about the two species?

20. The use of biotechnological techniques has enabled the sequencing of some fossil and modern human genomes. This information can then be used to show the relationships between them.

A possible relationship is shown below.



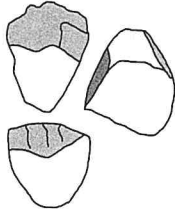
- (a) Which groups are the most closely related? Why?

- (b) What is the limitation of sequencing fossil genomes?

21. (a) What are **artefacts**? List some examples.

(b) How can these be interpreted?

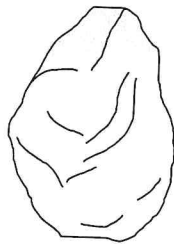
22. Identify each of the hominin groups that made these tools and name their culture.



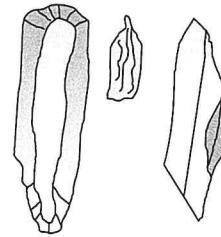
(a) Hominin: _____
Culture: _____



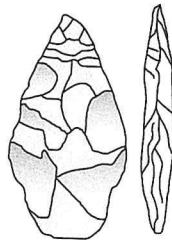
(b) Hominin: _____
Culture: _____



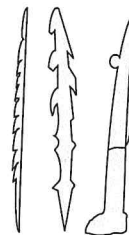
(c) Hominin: _____
Culture: _____



(d) Hominin: _____
Culture: _____

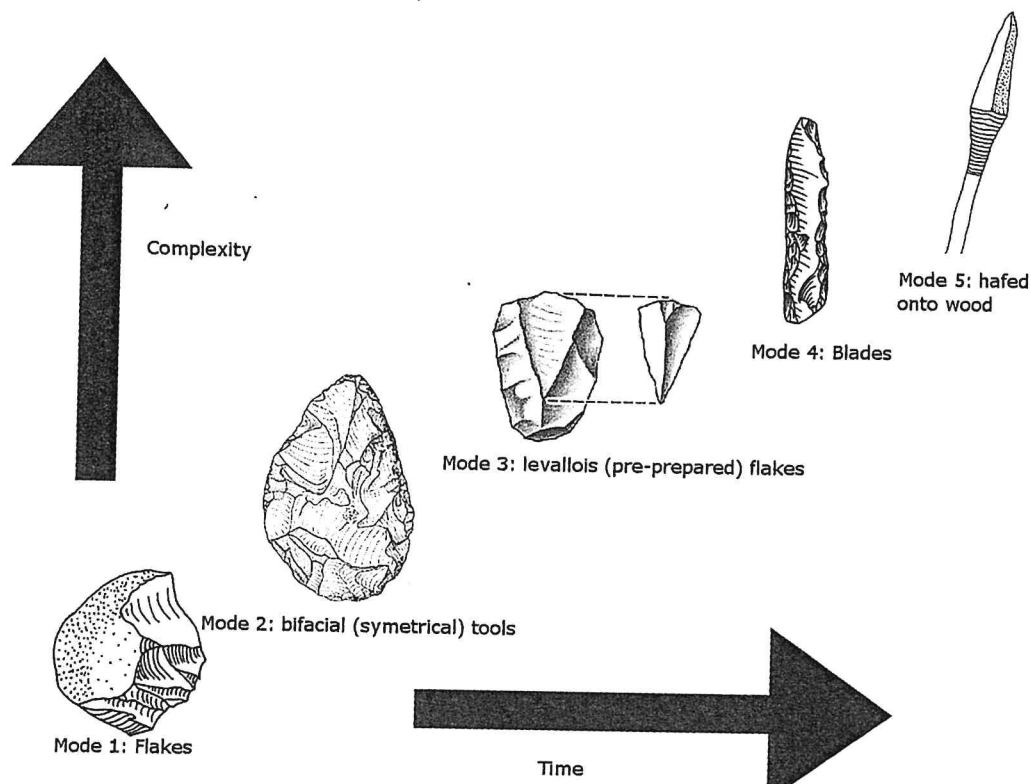


(e) Hominin: _____
Culture: _____



(f) Hominin: _____
Culture: _____

23. This image shows the development of tools across the years.



(a) How did the tools change in terms of complexity?

(b) What does the complexity of the tools indicate about the cognitive abilities of the people making them?

(c) Which groups of hominins can be associated with each tool type?

1. _____
2. _____
3. _____
4. _____
5. _____

(d) How does the specialisation of tools change over time?

- (e) How does the number of different types of tools in use by any one group change over time? Why?

24. (a) The dietary choices of early hominins may have been enhanced by the use of tools. Explain.

- (b) What advantages might the addition of meat in the diet have had for early hominins?

25. (a) What is culture?

- (b) Give some examples of cultural evolution.

- (c) How does biological evolution differ from cultural evolution?

26. (a) What is a **kitchen midden**? What can you find in one?

(b) What is the significance of kitchen middens in understanding the social and cultural aspects of the life of the people associated with them?

27. (a) Which hominin most probably first used fire?

(b) What evidence is there to support this idea?

(c) What advantages would there be in using fire?

28. (a) Which hominin most probably started to consider an afterlife or spirit world?

(b) What evidence is there to support this idea?
