

GCSE Biology B (Twenty First Century Science)

J257/02 Depth in Biology (Foundation)

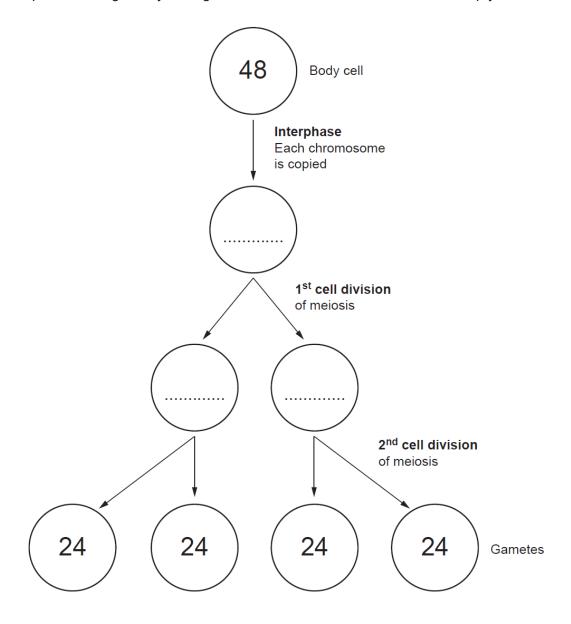
Question Set 14

1	Gan	netes are types of cells used in sexual reproduction.	
	(a)	What is the name of the human male gametes?	[1]
	(b)	How many gametes are required to make a new human life during sexual reproduction?	[1]
	(c)	Fertilisation takes place. The male gamete has the sex chromosome Y.	
		What sex chromosomes will the baby have, and what sex will it be?	[2]
	(d)	Human female gametes are released during ovulation. Ovulation can be prevented by taking hormone contraceptive pills.	
		Eve starts taking hormone contraceptive pills to prevent getting pregnant.	
		Explain why Eve could still become pregnant if she has unprotected sex after taking the contraceptive pill.	[2]

(e) Gametes are made by a type of cell division called meiosis.

Meiosis in monkeys is shown in the diagram and it starts with a body cell. In monkeys, each body cell has 48 chromosomes.

Complete the diagram by writing the number of chromosomes in each empty cell.



Total Marks for Question Set 14: 8

[2]



work is used in this paper. To avoid the issue of disclosure of answer-related information to candidates, all copyright acknowledgements are reproduced in the OCR Copyright Acknowledgements Booklet. This is produced for each series of examinations and is freely available to download from our public website (www.ocr.org.uk) after the live examination series.

If OCR has unwittingly failed to correctly acknowledge or clear any third-party content in this assessment material, OCR will be happy to correct its mistake at the earliest possible opportunity.

For queries or further information please contact The OCR Copyright Team, The Triangle Building, Shaftesbury Road, Cambridge CB2 8EA.

OCR is part of the Cambridge Assessment Group; Cambridge Assessment is the brand name of University of Cambridge Local Examinations Syndicate (UCLES), which is itself a department of the University of Cambridge