

GCSE Biology

Worksheet: Contraception

TIME 30 min	TOTAL 27 marks	CALCULATOR Allowed	DIFFICULTY Easy, Medium
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Topics: Contraception

NAME	CLASS	DATE
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- Use black ink or black ball-point pen. Pencil should only be used for drawing.
- Answer all questions in the spaces provided.
- In all calculations, show clearly how you work out your answer.
- The marks for questions are shown in brackets.

0 1

There are many different methods of contraception.

0 1 . 1

Which method of contraception is a barrier method?

Tick (✓) **one** box.

Contraceptive implant

☐

Contraceptive injection

☐

Diaphragm

☐

Oral contraceptive pill

☐

[1 mark]

0 1 . 2

Which **two** methods of contraception contain hormones?

Tick (✓) **two** boxes.

Condom

☐

Contraceptive skin patch

☐

Diaphragm

☐

Oral contraceptive pill

☐

Spermicide

☐

[2 marks]

0 1 . 3

How do spermicidal agents prevent pregnancy?

.....

.....

[1 mark]

0 1 . 4

Give **one** surgical method of contraception.

.....

.....

[1 mark]

0 2

There are many different methods of contraception, some hormonal and some non-hormonal.

0 2 . 1

Which of these is a hormonal method of contraception?

Tick (✓) **one** box.

Condom

☐

Diaphragm

☐

Oral contraceptive pill

☐

Spermicide

☐

[1 mark]

0 2 . 2

Name **one** method of contraception that releases progesterone slowly over several months or years.

.....

.....

.....

.....

[1 mark]

0 2 . 3

Male sterilisation (vasectomy) involves cutting or tying which tubes?

.....

.....

.....

[1 mark]

0 2 . 4

Describe how a barrier method of contraception, such as a condom, prevents pregnancy.

.....

.....

[1 mark]

0 3

Fertility can be controlled by hormonal and non-hormonal methods of contraception.

0 3 . 1

Which method of contraception kills or disables sperm?

Tick (✓) **one** box.

Condom

☐

Contraceptive implant

☐

Diaphragm

☐

Spermicide

☐

[1 mark]

0 3 . 2

Which method of contraception also protects against sexually transmitted infections?

Tick (✓) **one** box.

Condom

☐

Contraceptive implant

☐

Intrauterine device (IUD)

☐

Oral contraceptive pill

☐

[1 mark]

0 3 . 3

Oral contraceptives contain hormones that stop eggs maturing.
Which hormone do they inhibit?

.....

.....

.....

.....
[1 mark]

0 3 . 4

Some couples avoid intercourse at the time an egg may be in the oviduct rather than use other methods of contraception.
Give **one** reason why.

.....

.....

[1 mark]

0 4

Some methods of contraception do not use hormones.

0 4 . 1

Some couples avoid having sexual intercourse at the times when an egg may be in the oviduct.
Explain why this method often fails.

.....

.....

.....

.....

[2 marks]

0 4 . 2

Give **one** advantage and **one** disadvantage of sterilisation as a method of contraception.

.....

.....

.....

.....

[2 marks]

0 4 . 3

A diaphragm is a barrier method. It is often used together with a spermicide. Explain how using both together reduces the chance of pregnancy.

.....

.....

.....

.....

[2 marks]

.....

0 5

Table 1 compares the 'perfect use' failure rate (when a method is used exactly as instructed) with the 'typical use' failure rate (as people actually use it) for two methods, in the number of women in every 100 who become pregnant in one year.

Table 1

Method	Perfect use	Typical use
combined pill	0.3	7
male condom	2	13

0 5 . 1

Calculate how many times higher the typical-use failure rate is than the perfect-use failure rate for the combined pill.

Give your answer to 3 significant figures.

.....

.....

.....

.....

.....
[2 marks]

0 5 . 2

Suggest why there is a much bigger difference between perfect-use and typical-use failure rates for the pill and the condom than there would be for a contraceptive implant.

.....

.....

.....

.....

[2 marks]

0 6

There are two main types of contraceptive pill: the combined pill and the progesterone-only pill.

0 6 . 1

Name the **two** hormones contained in the combined pill.

[1 mark]

0 6 . 2

The progesterone in the progesterone-only pill makes the mucus at the entrance to the uterus (the cervix) thicker.

Suggest how this helps to prevent pregnancy.

[2 marks]

0 6 . 3

Suggest **one** reason why a doctor might recommend the progesterone-only pill, rather than the combined pill, to a particular patient.

[1 mark]

END OF QUESTIONS

Original practice questions written to match the specification. Not produced by, affiliated with or endorsed by AQA.

Mark scheme

GCSE Biology · Worksheet: Contraception · 27 marks

Question 1 (5 marks)

01.1 [1 mark]

Correct: Diaphragm

01.2 [2 marks]

Correct: Contraceptive skin patch; Oral contraceptive pill

01.3 [1 mark]

Answer: They kill or disable sperm

- kill / disable sperm (1)
-

01.4 [1 mark]

Answer: Sterilisation (e.g. cutting or tying the sperm ducts or the oviducts)

- (male or female) sterilisation / vasectomy / cutting or tying the oviducts or sperm ducts (1)
-
-

Question 2 (4 marks)

02.1 [1 mark]

Correct: Oral contraceptive pill

02.2 [1 mark]

Answer: A contraceptive implant

- an implant / an injection / a skin patch (1)

Notes: Allow an intrauterine device (IUD) that releases a hormone.

02.3 [1 mark]

Answer: The sperm ducts

- sperm ducts / vas(a) deferens (1)
-

02.4 [1 mark]

Answer: It physically stops sperm reaching an egg

- it physically stops sperm reaching an egg / entering the uterus (1)
-

Question 3 (4 marks)

03.1 [1 mark]

Correct: Spermicide

03.2 [1 mark]

Correct: Condom

03.3 [1 mark]

Answer: FSH

- FSH / follicle stimulating hormone (1)
-

03.4 [1 mark]

Answer: Religious or personal beliefs / no hormones or side effects / no cost

- religious / personal beliefs / no hormones / no side effects / free / nothing needs to be fitted (1)
-

Question 4 (6 marks)

04.1 [2 marks]

Answer: It is difficult to know exactly when ovulation happens because cycles vary, and sperm can survive in the woman's body for several days

- it is difficult to know exactly when ovulation happens / cycle length varies (1)
 - sperm can survive (in the woman's reproductive system) for several days (1)
-

04.2 [2 marks]

Answer: Advantage: almost 100% effective / permanent so nothing to remember.

Disadvantage: very difficult or impossible to reverse / needs surgery

- advantage: (very) effective / permanent / no need to remember anything / no hormones (1)
 - disadvantage: difficult or impossible to reverse / risks of surgery / no protection against STIs (1)
-

04.3 [2 marks]

Answer: The diaphragm stops sperm reaching the egg, and any sperm that get past it are killed or disabled by the spermicide

- the diaphragm prevents sperm reaching the egg / entering the uterus (1)
 - the spermicide kills / disables any sperm that get past (the diaphragm) (1)
-

Question 5 (4 marks)

05.1 [2 marks]

Answer: 23.3 times

- $7 \div 0.3$ (1)
- 23.3 (times) (1)

Notes: Correct answer with no working scores 2 marks. An answer not given to 3 significant figures scores 1 mark.

05.2 [2 marks]

Answer: The pill and condom depend on the user doing something correctly every day or every time, so there is more opportunity for user error; an implant works automatically for years once fitted, so there is little difference between perfect and typical use

- the pill and condom depend on the user remembering / doing something correctly every day or every time, giving more chances for user error (1)
- an implant works automatically for years once it is fitted, without the user needing to do anything, so typical use is almost as effective as perfect use (1)

Question 6 (4 marks)

06.1 [1 mark]

Answer: Oestrogen and progesterone

- oestrogen and progesterone (both needed) (1)

06.2 [2 marks]

Answer: Sperm cannot swim through the thick mucus into the uterus, so they cannot reach an egg

- sperm cannot swim / pass through the thick mucus into the uterus (1)
- so sperm cannot reach (and fertilise) an egg (1)

06.3 [1 mark]

Answer: Some patients cannot safely take oestrogen for medical reasons, so the progesterone-only pill provides a hormonal option for them

- the patient cannot take oestrogen for a medical reason (e.g. a risk of blood clots or high blood pressure) / oestrogen causes side effects for them / they are breastfeeding (1)