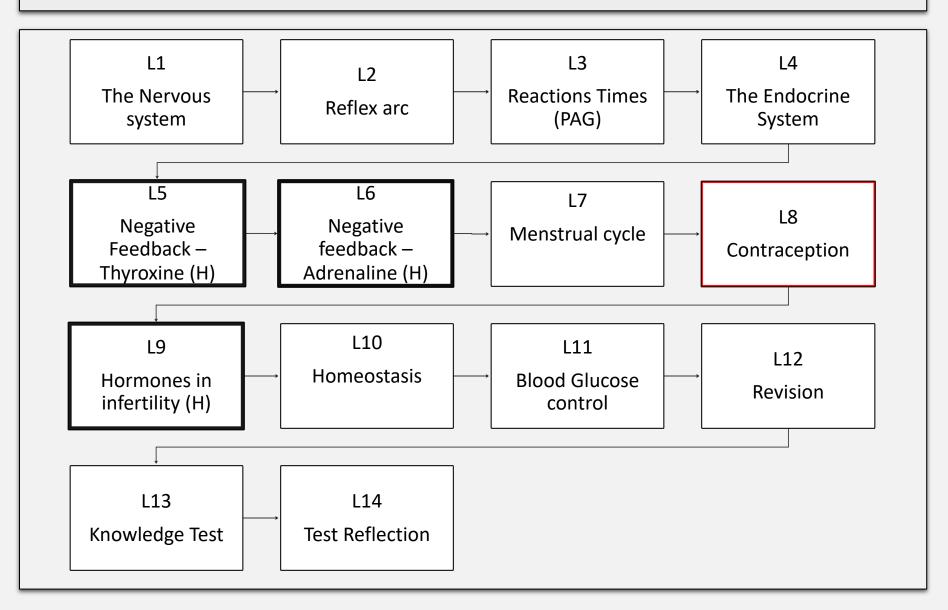
LO: TBAT evaluate the advantages and disadvantages of different methods of contraception.

SD: State the hormones needed in the menstrual cycle. HD: Describe the role that these hormones play in the menstrual cycle.

Starter Purple pen improvements

Hormone	Function		
FSH	<ul> <li>Stimulates follicular growth in ovaries</li> <li>Stimulates estrogen secretion (from developing follicles)</li> </ul>		
LH	<ul><li>Surge causes ovulation</li><li>Results in the formation of a corpus luteum</li></ul>		
Estrogen	<ul> <li>Thickens uterine lining (endometrium)</li> <li>Inhibits FSH</li> <li>Stimulates LH release pre-ovulation</li> </ul>		
Progesterone	<ul><li>Thickens uterine lining (endometrium)</li><li>Inhibits FSH and LH</li></ul>		

#### Homeostasis and Response - Overview



## Learning outcomes (activity 1)

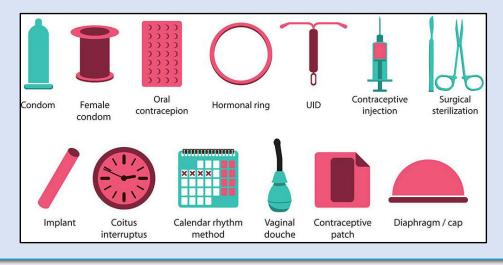
Students should be able to evaluate the different hormonal and non-hormonal methods of contraception.

3/4	<ul> <li>TK examples of different types of contraception.</li> </ul>
5	<ul> <li>TK the differences between hormonal and non- hormonal methods of contraception.</li> </ul>
	•
6	<ul> <li>TU how hormonal contraceptives prevent pregnancies.</li> </ul>
	prognancies.
7+	<ul> <li>TBAT evaluate the advantages and disadvantages of different methods of contraception.</li> </ul>

Key words: hormonal, condom, injection, skin path, implant, barrier method, diaphragms, intrauterine device, spermicides, sterilisation

Students should be able to evaluate the different hormonal and non-hormonal methods of contraception.

Contraception is any technique used to prevent conception and pregnancy.



Students should be able to evaluate the different hormonal and non-hormonal methods of contraception.

Contraception can be categorised into two types:

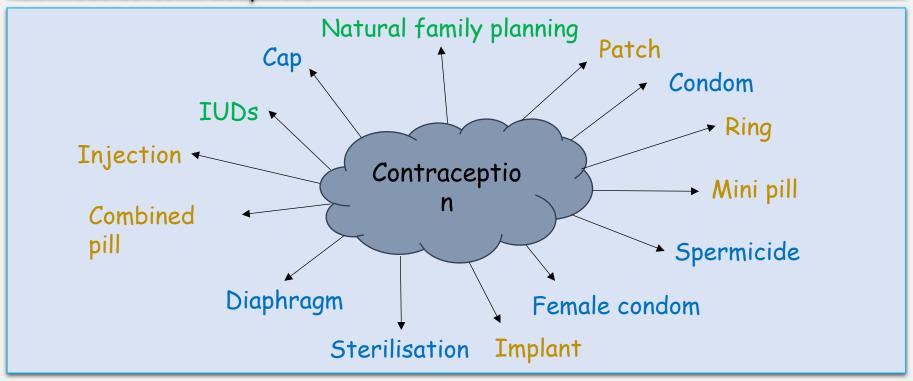
Hormonal	Non-hormonal
This use hormones to disrupt the normal female reproductive system.	These are barrier methods that prevent the sperm from meeting with the egg. They could also be physical devices that release chemical compounds that kill sperm cells or prevent the implantation of the fertilised egg.

Students should be able to evaluate the different hormonal and non-hormonal methods of contraception.

You and the person next to you have 60 seconds to come up with as many methods of contraception as possible.



Students should be able to evaluate the different hormonal and non-hormonal methods of contraception.



#### Oral contraceptives

Students should be able to evaluate the different hormonal and non-hormonal methods of contraception.

The synthetic oestrogen stops your body from producing two hormones that are involved in the menstrual cycle: FSH and LH. This prevents your ovaries from producing an egg because it stops your eggs from ripening and ovulating.

The synthetic progesterone thickens the mucus at the entrance of your womb so that sperm can't get through to fertilise your eggs.

The synthetic progesterone also thins the lining of the uterus, making it difficult for a fertilised egg to implant itself.

## Activity 1 - Oral contraceptives

Students should be able to evaluate the different hormonal and non-hormonal methods of contraception.

Explain how taking the combined progesterone and oestrogen pill prevents pregnancy.

## Activity 1 - Oral contraceptives

Students should be able to evaluate the different hormonal and non- hormonal methods of contraception.

Oestrogen stops your body from producing Follicle Stimulating Hormone (FSH) (1)

This prevents eggs from maturing (1)

The progesterone thickens the mucus at the entrance of the womb (1)

The progesterone thins the lining of the uterus, making it difficult for a fertilised egg to implant itself (1)

## Activity 2 - Contraception Circus

Students should be able to evaluate the different hormonal and non-hormonal methods of contraception.

Use the information around the room to complete as much of the table as you can.

Method	How it works	Advantages and disadvantages

# Plenary

Students should be able to evaluate the different hormonal and non-hormonal methods of contraception.

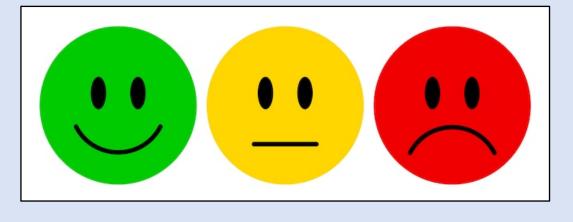
Using the information gathered in today's lesson, create a quiz for a young adult's magazine: Which contraception is right for me?

Questions that could get you started: consider practicality (will you remember to take a pill everyday?), safety (do you have a new partner who has not been tested for an STD?) and other extenuating circumstances (latex allergy?).

# Tracking sheet

Students should be able to evaluate the different hormonal and non-hormonal methods of contraception.

Now, complete your tracking sheet for this lesson.



#### 4.5.3.4 Contraception

Content	Key opportunities for skills development
Students should be able to evaluate the different hormonal and non- hormonal methods of contraception.	WS 1.3 Show why issues around contraception cannot be answered by science alone.
Fertility can be controlled by a variety of hormonal and non-hormonal methods of contraception.	
<ul> <li>These include:</li> <li>oral contraceptives that contain hormones to inhibit FSH production so that no eggs mature</li> <li>injection, implant or skin patch of slow release progesterone to inhibit the maturation and release of eggs for a number of months or years</li> <li>barrier methods such as condoms and diaphragms which prevent the sperm reaching an egg</li> <li>intrauterine devices which prevent the implantation of an embryo or release a hormone</li> <li>spermicidal agents which kill or disable sperm</li> <li>abstaining from intercourse when an egg may be in the oviduct</li> <li>surgical methods of male and female sterilisation.</li> </ul>	WS 1.4 Explain everyday and technological applications of science; evaluate associated personal, social, economic and environmental implications; and make decisions based on the evaluation of evidence and arguments.