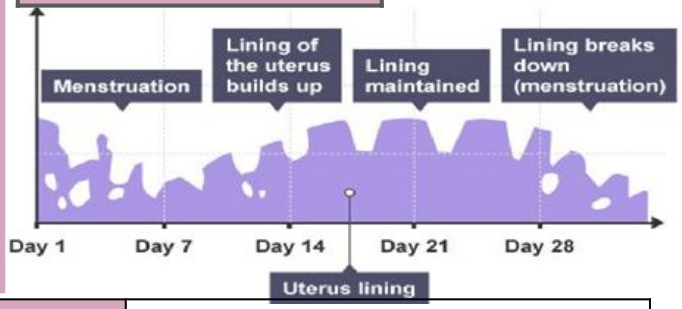
R057 - Year 10/11 TA1

Knowledge Organiser

5 Preconception health considerations for parents:
- Parental age
- Healthy weight
- Smoking/alcohol/recreational drugs
- Up to date immunisations.

Mother only:
- Folic acid

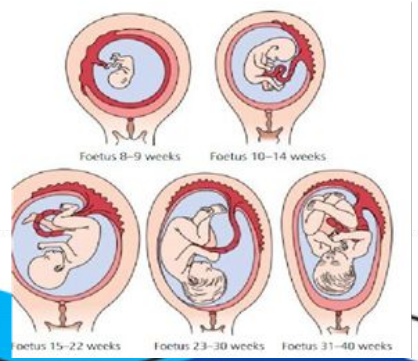
The menstrual cycle



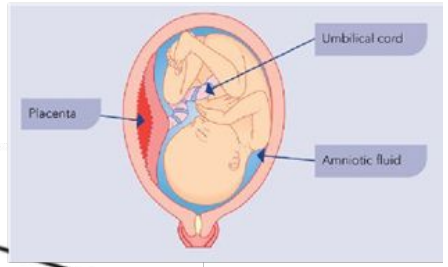
The female reproductive system includes a cycle of events called the **menstrual cycle**. It lasts about 28 days, but it can be slightly less or more than this.

Development of a baby

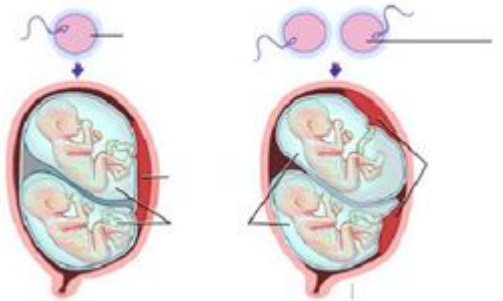
1. **Blastocyst - Fertilisation to implantation**
2. **Embryo - implantation to week 8**
3. **Foetus - Week 8 - birth**



Placenta	Produces hormones, provides nutrients and oxygen, filters waste, separates mother and babies blood
Amniotic Fluid	Protects, maintains temperature, helps muscles development, lubricates to prevent toe/finger webbing.
Umbilical cord	Transfers oxygen, nutrients (to baby) and waste (away from baby)



Twin Pregnancy Types



Identical	1 sperm, 1 egg. Egg splits. 1 placenta
Non - Identical	2 sperm, 2 egg. 2 placenta

Signs and symptoms of pregnancy

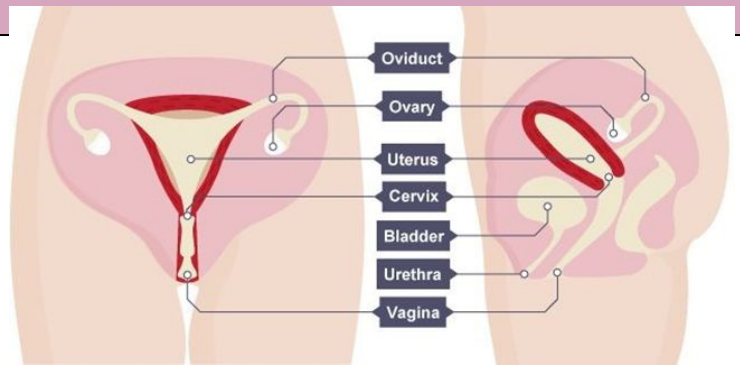
- **Missing Period**
- **Breast changes**
- **Passes urine more frequently**
- **Tiredness**
- **Nausea**

Key Words	Definitions
Ovulation	Mature egg cell (ovum) is released from the ovary
Fertilisation /conception	Sperm penetrates an egg and fuse into one cell.
Implantation	Fertilised egg burrows into lining of uterus
Barrier Method	Contraception methods which prevents live sperm from reaching an egg (ovum).
Hormonal Method	Contraception methods that prevent eggs from being released from the ovaries, thicken cervical mucus to prevent sperm entering the uterus and thins the lining of the uterus to prevent implantation.

R057 - Year 10/11 TA1

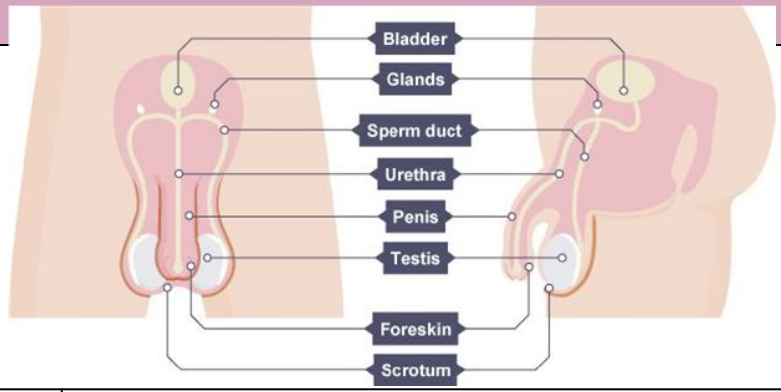
Knowledge Organiser

Female Reproductive System



Ovary : Stores eggs /produces the hormones/controls the menstrual cycle
Fallopian tube: Connects ovaries → uterus, lined with cilia that move egg down the tube to meet the sperm
Uterus: where the egg is implanted, where the embryo/foetus grows and develops. Lining is called the endometrium.
Cervix: Strong ring of muscle between the uterus and vagina, keeps the baby in place, dilates during labour to let the baby out.
Vagina: MUSCULAR TUBE Connecting the cervix to the outside the body. Where the penis enters during sex

Male Reproductive System



Scrotum & Testes	The scrotum is the bag of skin that contains 2 testes. Testes make millions of sperm. They also produce hormones including testosterone.
Sperm duct system	The sperm duct system consists of the epididymis, which contains/stores sperm, and the vas deferens.
Urethra	Tube inside penis that carries urine and semen (not both at same time).
Penis	Consists of the shaft and tip, which has a small opening. Through this opening sperm and urine leave the body (separately) via the urethra.
Vas deferens	This is a muscular tube which extends upwards from the testicles, transferring sperm that contain semen to the urethra.

Boldon School
INNOVATE: FOCUS: ACHIEVE

Knowledge Organiser

R057 - Year 10/11 TA1

	How it works	Pros	Cons
Contraceptive Implant 99% effective	Small plastic rod placed under the skin in upper arm. Releases progestogen lasts for 3 years.	Doesn't interrupt sex Option if you can't use oestrogen-based contraception, Safe to use while you're breastfeeding Fertility will return to normal as soon as it is removed May reduce heavy/painful periods	Temporary side effects; headaches, nausea, breast tenderness, mood swings Periods may be irregular / stop altogether May get acne or your acne might get worse Need a procedure by GP or nurse to have it fitted and removed Doesn't protect against sexually transmitted infections (STIs)
Contraceptive Patch	Hormones released through the skin into the bloodstream to prevent ovulation. Same hormones as the combined pill and works in the same way. Thickens the cervical mucus (prevents sperm entering uterus). Thins the lining of the womb (prevents fertilised egg implanting).	Easy to use, doesn't interrupt sex, don't have to take a pill every day, you only have to remember to change it weekly. Works if you're sick (vomit) or have diarrhoea because the hormones aren't absorbed by the stomach Can make your periods more regular, lighter and less painful Can help with premenstrual symptoms May reduce the risk of ovarian, womb and bowel cancer, fibroids, ovarian cysts and non-cancerous breast disease	it may be visible, it can cause skin irritation, itching and soreness doesn't protect against STIs, so may need to use condoms too Can get temporary side effects to start with such as; headaches, sickness (nausea), breast tenderness and mood changes. Bleeding between periods (breakthrough bleeding) and spotting (very light, irregular bleeding) is common in the first few cycles of using the patch some medicines can make the patch less effective you need to remember to change it every week
Emergency contraceptive pill	Taking it is thought to stop or delay the release of an egg (ovulation).	Can be taken up to 3 days after sexual intercourse.	But it can cause: headaches, tummy pain, changes to your next period – it can be earlier, later or more painful than usual, feeling or being sick
Contraceptive pills	Combined pill – contains oestrogen and progesterone (progestogen). Stops egg being released, Thickens the cervical mucus (prevents sperm entering uterus). Thins the lining of the womb (prevents fertilised egg implanting). Progestogen-only – Thickens the cervical mucus. Thins the lining of the womb	Does not interrupt sex Usually makes bleeds regular, lighter and less painful Reduces risk of cancer of the ovaries, womb and colon Can reduce symptoms of PMS (premenstrual syndrome) Can sometimes reduce acne May protect against pelvic inflammatory disease May reduce the risk of fibroids, ovarian cysts and non-cancerous breast disease	Temporary side effects at first; headaches, nausea, breast tenderness and mood swings. Can increase blood pressure Does not protect against STI's Has been linked to an increased risk of some serious health conditions, such as blood clots and breast cancer

Boldon School
INNOVATE: FOCUS: ACHIEVE

Knowledge Organiser

R057 - Year 10/11 TA1

	How it works	Pros	Cons
IUD/IUS	Prevents the sperm or egg from surviving in the womb or fallopian tubes. IUS - releases hormones IUD - releases copper which kills the sperm and egg.	Protects for 5 or 10 years, depending on the type. Works straight away. Does not interrupt sex. No hormonal side effects, (acne, headaches, breast tenderness). Safe to use if breastfeeding. Not affected by other medicines, fertility returns as soon as the IUD is removed No evidence it affects your weight or increase the risk of cervical cancer, cancer of the uterus or ovarian cancer.	Your periods may become heavier, longer or more painful, though this may improve after a few months. It does not protect against STIs, so you may need to use condoms as well. If you get an infection when you have an IUD fitted, it could lead to a pelvic infection if not treated. Most women who stop using an IUD do so because of vaginal bleeding and pain, although these side effects are uncommon.
Contraceptive Injection 99% effective	Contains progestogen which thickens the cervical mucus (prevents sperm entering uterus). Thins the lining of the womb (prevents fertilised egg implanting). Can prevent the release of an egg each month (ovulation)	Lasts for either 8 or 13 weeks Option if you can't use oestrogen-based contraception Don’t need to remember to take a pill every day, Does not interrupt sex Safe whilst breastfeeding, Not affected by other medicines May reduce heavy/painful periods, premenstrual symptoms	Periods may become irregular, heavier, shorter, lighter or stop altogether – this can carry on for months after you stop the injections Doesn't protect against sexually transmitted infections (STIs) Can take up to 1 year for periods return to normal/fertility returns May experience side effects like headaches, acne, hair loss, decreased sex drive and mood swings, weight increase
Male condom	“Barrier" method of contraception.designed to stop sperm from meeting an egg. Made of very thin latex (rubber), polyurethane or polyisoprene.	Used correctly, they are 98% effective Protect both partners from STIs Only used during sex, no advance preparation (other than obtaining them), suitable for unplanned sex. Usually no side effects. Easy to obtain	Can interrupt sex May split or tear if not used properly. Some people may be allergic to latex, plastic or spermicides, (you can get latex free condoms)
Female condom	Female condoms are made from soft, thin synthetic latex or latex. Worn inside the vagina to prevent semen getting to the womb.	Protect both partners from STIs, Used correctly, they are 95% effective. Only used during sex, no advance preparation (other than obtaining them), suitable for unplanned sex. Usually no side effects.	Can interrupt sex May split or tear if not used properly. They're not as widely available as male condoms and can be more expensive.

Boldon School
INNOVATE: FOCUS: ACHIEVE

Knowledge Organiser

R057 - Year 10/11 TA1

	How it works	Pros	Cons
Diaphragm/ cap	Barrier method of contraception. It fits inside your vagina and prevents sperm passing through the cervix (the entrance of your womb). You need to use it with a gel that kills sperm (spermicide).	Only need to use when you want to have sex but can put it in at a convenient time before having sex (use extra spermicide if you have it in for more than 3 hours) Usually no serious health risks or side effects Female in control of contraception	Only 92-96% effective depending on if using correctly Doesn't provide reliable protection against STIs Can take time to learn how to use it, putting it in can interrupt sex Can cause cystitis (bladder infection) latex and spermicide can cause irritation in some women and their sexual partners
Natural family Planning Methods: ●Temperature ●Cervical mucus ●Calendar	A woman monitors and records different fertility signals during her menstrual cycle to work out when she is ovulating and likely to get pregnant. By avoiding unprotected sex during this time she will avoid getting pregnant During ovulation: Temperature rises slightly Cervical Mucus thins Tracking dates on calendar	Can be 99% effective if used correctly Acceptable to all faiths and cultures. Most women can use NFP, as long as they're properly trained by a fertility awareness teacher. Can be used either to avoid pregnancy or to become pregnant. No side effects, Doesn't involve chemicals Can help recognise abnormal vaginal secretions, so can be aware of possible infection. It involves partner, which can help increase closeness/ trust.	Does not protect against STIs such as chlamydia or HIV. Need to use barrier contraception or avoid sex (abstain), during ovulation. Abstaining could lead to 16 days of not having sex, depending on your cycle. Much less effective than other methods if not followed accurately, Can take several menstrual cycles to become confident in identifying fertile time. Need to keep a daily record of fertility signs. Not suitable for every woman. Stress, illness, travel, lifestyle and hormonal treatments can disrupt fertility signs and cycle. If emergency contraceptive pill is used, need to wait for 2 complete cycles before relying on natural family planning again.

Boldon School
INNOVATE: FOCUS: ACHIEVE

Knowledge Organiser

R057 - Year 10/11 TA2

Key Words	Definitions
Antenatal	ante= before/ natal = birth. So, before birth. (Can relate to care given before birth)
Antenatal clinic	Place where professionals (midwife/obstetrician) check the health of you and your baby. First appointment - should happened before 10 wks, (often 8-12 weeks).
Antenatal class	Prepares both parents for labour (what to expect during the birth) and parenthood, Promotes healthy lifestyle and diet. Provide advice on feeding and caring for the baby.
Breast feeding	Act of feeding the baby directly from the breast. Encouraged for at least first 2 weeks - protects baby from infections/diseases (antibodies in milk) and has other health benefits.

Routine tests/checks

- Baby's heartbeat,
- Blood pressure,
- Blood tests,
- Examination of the uterus,
- Urine test,
- Mothers weight check

Role of the 3 health care professionals

Midwife;- provides full antenatal care, including parenting classes, clinical examinations and screening. Delivers baby. Performs routine tests/checks

Obstetrician Specialist doctors that look after complicated pregnancies / during birth. (health problems/multiple births) Carry out caesarean section, ventouse, or forceps deliveries

GP Normally the first person they see and first to answer initial questions/makes necessary referrals/discuss medical issues/ concerns around pregnancy. Books mother into 'maternity system' Treat non pregnancy related illnesses during and after the pregnancy Emergency concerns about the pregnancy and postnatal medical care.

Screening tests - look for possible issues/conditions and Diagnostic tests - diagnose conditions

Ultrasound Dating scan	10-14 wks Development of pregnancy, how many babies, is baby growing in correct place (uterus), where placenta is, estimated due date (EDD), can detect some health conditions
Ultrasound Anomaly scan	18-21 wks Checks for major physical abnormalities, sonographer checks for 11 major conditions, looks at bones, heart, brain, spinal cord, face, kidneys and abdomen
Nuchal fold translucency scan	11-14wks Checks the fluid under the back of the neck. Can give a risk factor level for Down's syndrome but cannot say definitively. Further tests required
Triple test blood test	10-14 wks Assesses chance of mother having a baby with either Down's syndrome, Edwards syndrome or Patau syndrome (all chromosomal conditions)
Non-invasive prenatal testing (NIPT) blood test	From 10 wks Assesses chance of mother having a baby with either Down's syndrome, Edwards syndrome or Patau syndrome by examining fragments of baby's DNA. Considered more reliable that Triple test but often has to be paid for privately
Chorionic Villus Sampling -CVS	11-14 wks Tests for GENETIC disorders eg cystic fibrosis, sickle cell disease, thalassaemia or muscular dystrophy, or CHROMOSOMAL conditions Down's/ Edwards'/Patau's syndromes. Cells from placentas tested, risk of miscarriage
Amniocentesis	15-18 wks Tests for GENETIC disorders eg cystic fibrosis, sickle cell disease, thalassaemia or muscular dystrophy, or CHROMOSOMAL conditions Down's/ Edwards'/Patau's syndromes. Amniotic fluid tested, risk of miscarriage

Support a birth partner can give support during pregnancy/birth. physical support: shopping/cleaning /Massages/timing contractions/food & drinks Emotional support: positive encouragement/give professional birth plan/arrangements at home (childcare)

Boldon School
INNOVATE: FOCUS: ACHIEVE

R057 - Year 10/11 TA2

Knowledge Organiser

Boldon School
INNOVATE: FOCUS: ACHIEVE

Knowledge Organiser

Boldon School
INNOVATE: FOCUS: ACHIEVE

Knowledge Organiser

Boldon School
INNOVATE: FOCUS: ACHIEVE

Knowledge Organiser

Boldon School
INNOVATE: FOCUS: ACHIEVE

Knowledge Organiser

Boldon School
INNOVATE: FOCUS: ACHIEVE

Knowledge Organiser

Boldon School
INNOVATE: FOCUS: ACHIEVE

Knowledge Organiser

Boldon School
INNOVATE: FOCUS: ACHIEVE

Knowledge Organiser

Boldon School
INNOVATE: FOCUS: ACHIEVE

Knowledge Organiser