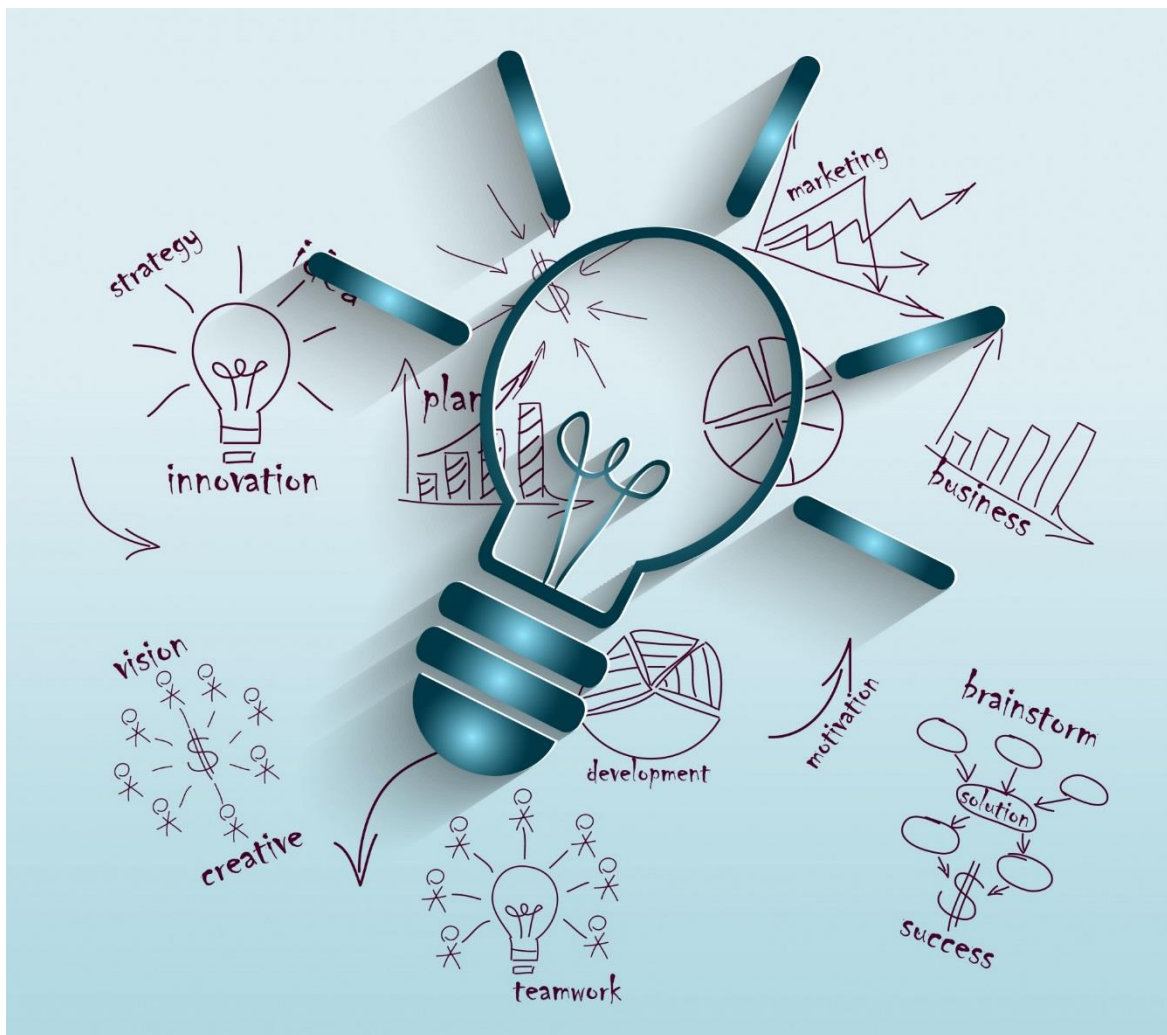


Knowledge book



Health and Social Care – Cambridge Technicals

Unit 13 – Sexual health, reproduction and early development stages

The table below shows all the topics you will cover.

Learning outcomes	What you must know
1. Understand sexual health and contraception	<p>Sexual consent</p> <ul style="list-style-type: none"> ✓ Sexual Offences Act 2003 ✓ Statutory definition of consent ✓ Legal age of consent ✓ Sex and relationship education at school <p>Sexual health</p> <ul style="list-style-type: none"> ✓ Sexually transmitted infections (STI's) <ul style="list-style-type: none"> • Chlamydia • Bacterial vaginosis • Genital herpes • Gonorrhoea • Hepatitis • Pubic lice • Syphilis • HIV/AIDS ✓ Personal safety – alcohol, nights out, transport, social media, ‘stranger danger’ ✓ Grooming – Child Exploitation and Online Protection centre (CEOP), vulnerable groups e.g. looked after children, learning disabilities ✓ Medical checks – smear tests, self-examination (male and female), tests for STI's e.g. GUM clinic <p>Methods of contraception</p> <ul style="list-style-type: none"> ✓ Combined pill ✓ Female condoms ✓ Male condoms ✓ Contraceptive implant ✓ Contraceptive injection ✓ Contraceptive patch

	<ul style="list-style-type: none"> ✓ Diaphragms/caps ✓ Intrauterine device (IUD) ✓ Intrauterine system (IUS) ✓ Natural family planning ✓ Progestogen-only pill (mini pill) ✓ Vaginal ring ✓ Emergency contraception ✓ Female sterilisation ✓ Male sterilisation
<p>2. Understand the importance of pre-natal health and the process of conception</p>	<p>Factors that can affect conception</p> <ul style="list-style-type: none"> ✓ Smoking ✓ Alcohol ✓ Exercise ✓ Diet ✓ Prescribed and non-prescribed drugs ✓ Medical conditions – polycystic ovary syndrome, anorexia, amenorrhoea <p>Process of conception</p> <ul style="list-style-type: none"> ✓ Ovulation ✓ Intercourse ✓ Fertilisation ✓ In Vitro Fertilisation (IVF)
<p>3. Know the factors which could affect health in pregnancy and the success of the birth</p>	<p>Conditions in utero</p> <ul style="list-style-type: none"> ✓ Disabilities – spina bifida, Down’s syndrome, foetal alcohol syndrome (FAS) <p>Factors which may affect the health of the foetus</p> <ul style="list-style-type: none"> ✓ Complications in pregnancy – lack of oxygen to foetus ✓ Alcohol consumption by mother ✓ Genetic condition ✓ Smoking/secondary smoking ✓ Use of prescribed and non-prescribed drugs during pregnancy

	<ul style="list-style-type: none"> ✓ Importance of vitamin B12 (folic acid) ✓ Diet – unpasteurised cheese, raw eggs, shellfish ✓ Excessive exercise ✓ Lack of exercise ✓ Stress ✓ Access to antenatal care ✓ Birth injury
<p>4. Understand the stages of pregnancy and birth and the post-natal care of the mother</p>	<p>Gestation</p> <ul style="list-style-type: none"> ✓ Trimesters <p>The birth process</p> <ul style="list-style-type: none"> ✓ The stages of birth ✓ Pain relief ✓ Methods of delivery including assisted delivery ✓ Premature birth ✓ Birth difficulties and complications – high blood pressure, umbilical cord, position of baby ✓ Miscarriage and stillbirth <p>Post-natal care of the mother</p> <ul style="list-style-type: none"> ✓ Statutory support – health visitor, GP, midwife ✓ Informal support – partner, family, friends ✓ Other organisations – National Childbirth Trust (NCT), local mother and baby groups <p>Types of support – information on diet, contraception and post-natal exercise, support for post-natal depression, develop a new social network, post-operation medical support (following a Caesarean Section)</p>

5. Understand the care and development of the baby in the first year of life

Developmental stages

- ✓ Reference to normative data – ‘red book’
- ✓ Physical growth and appearance
- ✓ Physical movement and skills
- ✓ Cognitive function
- ✓ Emotional development
- ✓ Speech and communication

Care and nutrition of new-born to one year old – breastfeeding and bottle feeding, weaning, quality of nutrition, adequate/suitable clothing, standard of hygiene, types and changing of nappies, love, security and bonding, theories of attachment, equipment (cot, pram), health care (immunisations)

Health and social care and Early Years services – monitoring and surveillance programmes, role of the health visitor, Early Years’ Service, Family Nurse Partnership, Children’s Centres, Nurseries

Key terms

Consent	Permission for something to happen or agreement to do something
Defendant	Someone accused of an offence
SRE	Sex and relationship education
HIV/AIDS	A virus which attacks the immune system, and weakens the ability to fight infections and disease
GUM clinic	A clinic specialising in genitourinary medicine
HSV	Herpes simplex virus
Ectopic pregnancy	Where the foetus develops outside the womb, usually in a fallopian tube
Premature labour	When labour starts before the 37 th week of pregnancy
Septicaemia	A potentially life-threatening illness caused by an infection
Stillbirth	A baby that is not born alive after 24 weeks. It can be linked to placenta complications
Contraception	A method of deliberately preventing pregnancy
Fallopian tube	There are two, one each side of the uterus. They connect the ovaries to the uterus
Preconception health	Consideration of health, fitness and lifestyle before trying to conceive a baby, to improve chances of becoming pregnant and to give the baby a good start
Conception	Occurs when the egg is fertilised by the sperm
Neural tube defect	A condition that develops when the baby's spinal cord and spinal column do not form properly in the womb
Ovaries	Produce female hormones and produce 'ovum' also known as eggs

Embryo	The fertilised egg divides to form a ball of cells called the embryo
Foetus	From eight weeks after fertilisation until birth the embryo is called a foetus
In utero	Something that occurs in the womb, before birth
Placenta	Provides the foetus with oxygen and nourishment from the mother via the umbilical cord
ADHD	Attention deficit hyperactivity disorder, symptoms include a short attention span, constant fidgeting and impulsive behaviour
Umbilical cord	This connects the baby to the placenta
Amniotic sac	A 'bag' of liquid (mainly water) in the uterus, this is filled with amniotic fluid and provides a protective cushion for the foetus
Breech position	When the baby is 'bottom down' rather than head down in the uterus before birth
Postnatal	Refers to the period after a woman has given birth, the first few weeks. 'Post' means after and 'natal' means birth
Postnatal depression	A mental condition that some mothers develop after giving birth. It is a serious mental disorder that requires help and support
Reflexes	Inborn and involuntary movements, not voluntary movements

Examples of sexually transmitted infections

STI	Symptoms and how health wellbeing is affected	Diagnosis and treatment
Chlamydia	<ul style="list-style-type: none"> ▪ Symptoms are not usually noticeable so most people do not know they are infected ▪ If symptoms occur, such as pain urinating or bleeding during sex, it is usually 1–3 weeks after unprotected sex with an infected person ▪ Left untreated in women can cause pelvic inflammatory disease (PID) which can lead to infertility. Men’s testicles can become painful and swollen; if not treated fertility could be affected 	<ul style="list-style-type: none"> ▪ A sample of cells is sent to a laboratory for analysis. Men usually provide a urine sample, while women provide a swab from their vagina or a urine sample ▪ Treated by antibiotics ▪ Sex should be avoided until the treatment is completed

<p style="text-align: center;">Bacterial vaginosis (BV)</p>	<ul style="list-style-type: none"> ▪ The balance of bacteria inside the vagina becomes disrupted. There is an unusual grey, watery vaginal discharge which may have a strong smell ▪ Scented or antiseptic bath liquids, vaginal deodorant and strong detergent may contribute to developing BV by upsetting the natural bacterial balance in the vagina ▪ It is not serious for most women except in pregnancy, when it may slightly increase the risk of premature birth or miscarriage 	<ul style="list-style-type: none"> ▪ Any abnormal discharge should be checked by a GP or GUM clinic. A description of the discharge may be enough for diagnosis, or a test may be carried out on vaginal cells ▪ Treated by antibiotics, either tablets or a gel applied to the vagina for seven days ▪ Side effects of treatment include nausea and vomiting. Alcohol should be avoided
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<p style="text-align: center;">Genital herpes</p>	<ul style="list-style-type: none"> ▪ Caused by the herpes simplex virus (HSV) which is highly contagious and spreads through skin-to-skin contact during sex ▪ Symptoms include blisters and sores around the genitals, vaginal discharge in women, pain when passing urine and general aches, pains and flu-like symptoms ▪ After the first infection the virus remains dormant in the body and can be reactivated, causing further outbreaks ▪ If herpes develops up to week 26 of pregnancy, there is an increased risk of miscarriage. After 26 weeks it could be passed on to the baby. A Caesarean section delivery prevents this 	<ul style="list-style-type: none"> ▪ A sample of fluid is taken from a blister and tested for HSV ▪ For a first infection antiviral tablets are taken five times a day until there are no new sores or blisters ▪ The tablets can cause side effects such as sickness and headaches ▪ After more than six re-current outbreaks in a year a long-term treatment plan involves taking antiviral tablets twice every day for 6-12 months
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Gonorrhoea

- A bacterial infection, easily passed through unprotected sex
 - The infection can also be passed from a pregnant woman to her baby, and if untreated can cause blindness in a new-born baby
 - Symptoms include a thick green or yellow discharge from the vagina or penis, pain when urinating and bleeding between periods
 - Without treatment it can cause pelvic inflammatory disease (PID), which can lead to long-term pelvic pain, ectopic pregnancy and infertility
 - It can cause miscarriage and premature labour. Men can experience a painful infection in the testicles and prostate gland which can lead to infertility
 - In rare cases, if left untreated, gonorrhoea can spread through the bloodstream to cause septicaemia, which is life threatening
- Tests include a vaginal swab, or urine test for men
 - Treatment involves an antibiotic injection in the buttocks or thigh, followed by an antibiotic tablet
 - A further test is taken a week later to check if the infection has cleared

Hepatitis

- Hepatitis B and C are infectious viruses, carried in the bloodstream and bodily fluids of an infected person
 - They can be transmitted through unprotected sex. Mothers with hepatitis B can pass it on to their babies during pregnancy or when giving birth. All pregnant women in the UK are offered a blood test to check if they are infected
 - Symptoms are flu-like with loss of appetite, sickness and diarrhoea, jaundice and abdominal pain. It can be an acute infection that clears up in a few months or develop into a long term chronic condition. A third of people with chronic hepatitis go on to develop liver disease, which can be very serious
- If the infection is diagnosed in the early stages (acute hepatitis), blood tests will establish whether the body has produced antibodies to fight the virus. This may be repeated over many months as it takes time for antibodies to be produced
 - A liver function test may also be carried out to check for damage
 - The chronic disease can be treated with a combination of medicines that stop the virus multiplying to prevent cirrhosis and end-stage liver disease

<p style="text-align: center;">Pubic lice</p>	<ul style="list-style-type: none"> ▪ Tiny parasitic insects that live on coarse human body hair such as pubic hair. They are most commonly spread through sexual contact ▪ Symptoms include intense itching, inflammation and irritation caused by scratching. Black powder can be seen in underwear. Blue spots on the skin how where the lice are living (caused by lice bites) and small spots of blood also caused by lice bites 	<ul style="list-style-type: none"> ▪ Can be treated at home with insecticide cream, lotion or shampoo. It will usually be applied once and then repeated after 3–7 days to kill any lice that have hatched since the first treatment ▪ Everyone the person has had close body contact with will need to be treated at the same time. Clothing, bedding and towels will require washing at 50°C or higher
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Syphilis

- A bacterial infection usually caught by having sex with an infected person. Pregnant women can pass the condition on to their unborn baby
- If untreated, syphilis can cause serious health problems for the mother and her baby, miscarriage or stillbirth. All pregnant women are offered a blood test to check for the infection. There are three stages of symptoms, as follows:
 1. Primary – a painless, infectious sore on the genitals. This will disappear within 2–6 weeks. If it is not treated syphilis will move into the secondary stage
 2. Secondary – skin rash often on palms of hands and soles of feet, and sore throat, fever and swollen lymph glands. These symptoms may disappear in a few weeks or come and go over a period of months

- At a GUM clinic there will be a physical examination of the genitals. A blood test is taken and if sores are present a sample of the fluid will be taken
- Treatment of primary syphilis is a single dose of penicillin injected into the buttock
- Later stages require three injections at weekly intervals. Treatment of tertiary syphilis requires a longer course of antibiotics and may need intravenous treatment
- The earlier syphilis is diagnosed and treatment the less chance of serious, potentially

	<p>3. Tertiary – years after the initial infection it may affect the brain, nerves, heart and eyes, causing strokes, dementia, paralysis, heart disease, blindness and deafness</p>	<p>fatal, complications</p>
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HIV/AIDS

- Most people infected with HIV experience a short, flu-like illness 2–6 weeks after infection, then will often not experience any symptoms for up to 10 years. However, the virus is active and causes progressive damage to the immune system
- Once the immune system becomes severely damaged, symptoms can include weight loss, chronic diarrhoea, night sweats, skin problems, recurrent infections and serious life-threatening illnesses. Earlier diagnosis and treatment of HIV can prevent these problems
- The most common form of HIV test is a blood test
- If it is positive regular blood tests will monitor the progress of the HIV infection before starting treatment. If the number of cells important for fighting infection falls, whether or not there are any symptoms, treatment will start.
- The treatment aims to reduce the level of HIV in the blood, allow the immune system to repair itself and prevent any HIV-related illnesses
- There is no cure, but treatments enable most people with the virus to live a long and healthy life, though there are side effects

		<ul style="list-style-type: none"> ▪ AIDS is the final stage of HIV infection, when the body can no longer fight life-threatening infections.
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Methods of contraception

Contraceptive pill
<ul style="list-style-type: none"> ▪ Combined pill – contains oestrogen and progestogen (female hormones) which prevent ovulation. Also makes it difficult for sperm to reach an egg or for an egg to implant in the womb lining. Has to be taken every day for 21 days, at the same time each day. There is then a seven-day break when a period-like bleed occurs ▪ Progesterone-only-pill (POP) –contains progesterone only. Works by thickening the mucus in the cervix, stopping the sperm reaching an egg. It can also stop ovulation. It is taken every day, at the same time, with no break between packs

**99%
effective**

Male condom
<ul style="list-style-type: none"> ▪ Worn on the penis to prevent semen entering the vagina ▪ Needs to be put on when the penis is erect and before it is in contact with the vagina ▪ Single use

**98%
effective**

Female condom

- Made from soft plastic, it is worn inside the vagina to prevent semen getting inside the uterus
- Needs to be placed inside the vagina before there is any contact with the penis. Must be removed immediately after sex
- Single use

**99%
effective**

Contraceptive implant

- A 4cm flexible tube, which is inserted under the skin of the upper arm by a trained professional such as a doctor. It lasts for 3 years
- By releasing progesterone into the body it stops ovulation each month
- Thickens the mucus in the cervix, stopping the sperm reaching the egg, and thins the womb lining so an egg cannot implant
- When it is removed fertility returns immediately

**99%
effective**

Contraceptive injection

- Lasts for 8, 12 or 13 weeks depending on the type
- Releases progesterone into the bloodstream, preventing ovulation
- Thickens the mucus in the cervix, stopping sperm reaching the egg, and thins the womb lining so an egg cannot implant
- It can take up to one year for fertility to return after the injection wears off

**99%
effective**

Contraceptive patch

- A sticky patch, measuring 5x5cm. it delivers hormones into the body through the skin, similar to a nicotine patch
- Like the implant and injection, it prevents ovulation each month
- Thickens the mucus in the cervix, stopping the sperm reaching the egg, and thins the womb lining so an egg cannot implant
- When it is removed fertility returns immediately

**99%
effective**

Diaphragm/cap

- A circular dome made of thin, soft silicone which is inserted into the vagina to cover the cervix, preventing sperm from entering the womb
- A woman needs to be fitted for the correct size by a doctor or nurse
- Used with spermicide, which kills sperm
- Must be left in place for six hours after sex
- Can be washed and reused

**92-96%
effective**

Intrauterine device (IUD)

- A small T-shaped plastic and copper device inserted into the womb
- Needs to be fitted by a specially trained doctor or nurse. It lasts 5–10 years depending on the type
- Stops the sperm and egg from surviving in the womb or fallopian tubes. It may also prevent a fertilised egg from implanting

**99%
effective**

Intrauterine system (IUS)

- A small T-shaped plastic device inserted into the womb
- Needs to be fitted by a specially trained doctor or nurse. It works for 3 to 5 years, depending on the type
- Thickens the mucus in the cervix, stopping the sperm reaching the egg, and thins the womb lining so an egg cannot implant
- It may also prevent ovulation

**99%
effective**

Natural family planning

- Involves plotting the times of the month when a woman is fertile
- A woman has to keep a daily record of fertility signals, such as temperature and the fluids coming out of the cervix
- It takes 3–6 menstrual cycles to learn the method

**98%
effective**

Physical movement and skills – new-born to 1 year

Age	Fine motor skills	Gross motor skills
Newborn	Reflexes: swallowing and sucking, grasp, rooting, startle, walking, falling	
1 month	<ul style="list-style-type: none"> ▪ Opens hand and will grasp an adult's finger. ▪ Facial expressions – showing an interest and excitement 	<ul style="list-style-type: none"> ▪ Can turn from side to back ▪ May move head towards a bright light ▪ Makes jerky, uncontrolled leg and arm movements
3 months	<ul style="list-style-type: none"> ▪ Will move head to follow adult movements ▪ Will watch hands and play with their fingers ▪ Can hold a rattle briefly without dropping it 	<ul style="list-style-type: none"> ▪ Can lift head and chest when in the prone position (lying on their front) ▪ Can sit with straight back when held ▪ Kicks vigorously with legs
6 months	<ul style="list-style-type: none"> ▪ Will reach and grab when a small toy is offered ▪ Uses the whole hand (palmer grasp) to pass a toy from one hand to the other ▪ Explores objects by 	<ul style="list-style-type: none"> ▪ When held sitting or standing can do so with a straight back ▪ Lying back, can lift legs into vertical position, grasping feet with hands ▪ Can change the angle of body to

	<p>putting them in mouth</p>	<p>reach out for an object; can roll over</p>
<p>9 months</p>	<ul style="list-style-type: none"> ▪ Can grasp objects using finger and thumb in a pincer grasp ▪ Continues to explore objects by putting them in mouth ▪ Can release a toy from grasp by dropping it – cannot yet put it down ▪ Imitates adult gestures 	<ul style="list-style-type: none"> ▪ Can sit up unsupported, with a straight back, for a short while ▪ Can pull themselves into a standing position. Can stand by holding on to furniture ▪ May take some steps when being held ▪ Moves along the floor – bottom shuffling or crawling
<p>12 months</p>	<ul style="list-style-type: none"> ▪ Can point at interesting objects with index finger ▪ Can throw and drop toys deliberately ▪ Builds with a few bricks ▪ Can release a small object into another person's hand ▪ May crawl up stairs or onto low items of furniture 	<ul style="list-style-type: none"> ▪ Is now mobile, can probably walk alone with feet wide apart or with one hand held ▪ Can rise to a sitting position from lying down

Cognitive function

Age	Cognitive development
Newborn	<ul style="list-style-type: none"> ▪ Begins to develop concepts through the senses and growing understanding. Aware of physical sensations such as hunger and discomfort ▪ Imitation of adults, for example facial expressions
1 month	<ul style="list-style-type: none"> ▪ Recognises primary (main) carers ▪ Repeats enjoyable movements ▪ Turns to look at the face of someone speaking
3 months	<ul style="list-style-type: none"> ▪ Shows an increasing interest in playthings and their surroundings ▪ Recognises familiar situations ▪ Shows an understanding of cause and effect by shaking a rattle to hear its noise
6 months	<ul style="list-style-type: none"> ▪ Shows understanding of words such as 'bye-bye', 'mama', 'dada' ▪ Raises arms to be picked up – demonstrating understanding of cause and effect, up and down
9 months	<ul style="list-style-type: none"> ▪ Looks for fallen/dropped toys ▪ Looks at small objects and reaches for them ▪ Explores objects by touching, banging, shaking ▪ Looks for a hidden object – knows it still exists though can't be seen
12 months	<ul style="list-style-type: none"> ▪ When asked 'Where is the ball?' they will point to the ball ▪ Uses trial and error to learn about objects

	<ul style="list-style-type: none"> ▪ Begins to treat or use objects in an appropriate way, such as cuddle a soft toy and use a hairbrush ▪ Enjoys looking at picture books
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Emotional development

Age	Emotional development
Newborn	<ul style="list-style-type: none"> ▪ Expresses pleasure when being cuddled, fed or bathed
1 month	<ul style="list-style-type: none"> ▪ Smiles at carer ▪ Can be described by a carer as developing a particular temperament or personality, such as lively and excitable or calm and placid
3 months	<ul style="list-style-type: none"> ▪ Loves to receive attention and cuddles; smiles at familiar people ▪ Stares intently at carer's face when feeding and shows enjoyment when being bathed
6 months	<ul style="list-style-type: none"> ▪ Gets upset when main carer leaves ▪ Cries and laughs when others do
9 months	<ul style="list-style-type: none"> ▪ Prefers to be with a familiar adult and expresses fear of strangers by crying ▪ Enjoys songs and rhymes with actions ▪ Enjoys games such as 'peek-a-boo'
12 months	<ul style="list-style-type: none"> ▪ May have comfort objects such as a blanket or soft toy ▪ Shows affection for family members, likes to be with people they know ▪ Waves goodbye

Speech and communication

Age	Speech and communication
Newborn	<ul style="list-style-type: none"> ▪ Cries to indicate need ▪ Hiccups, sneezes and burps ▪ Imitates adults, for example facial expressions such as sticking their tongue out ▪ Makes eye-to-eye contact
1 month	<ul style="list-style-type: none"> ▪ Starts to make non-crying noises such as gurgling and cooing ▪ Crying and other noises become more aggressive ▪ Looks attentively at the carers face when being fed
3 months	<ul style="list-style-type: none"> ▪ Beginnings of conversation, will exchange 'coos' with another person ▪ Crying loudly to express a need ▪ Smiles in response to being spoken to
6 months	<ul style="list-style-type: none"> ▪ Imitates sounds and enjoys babbling ▪ Makes a wide variety of different sounds - laughs, squeals, screams
9 months	<ul style="list-style-type: none"> ▪ May say 'mum-mum', 'dad-dad' - repeats sounds, practising them ▪ Copies sounds made by adults, for example animal noises, train noises ▪ Follows simple instructions
12 months	<ul style="list-style-type: none"> ▪ Imitates simple words ▪ Language starts to become conversation ▪ Babbling becomes more speech like and speaks two to six recognisable words