

Understand
sequence and rate of
each aspect of
development from 0-
19 years

[Technology](#), [Development](#)



1. 1 Explain the sequence & rate of each aspect of development that would normally be expected in children & young people from birth -19 years

Development is what happens to every individual at every stage of his or her lives. Developing something means to learn different skills, physical aspects and involves gaining control of the body. For example, a baby will develop physically because it is still going to grow, which means the body will still be changing. Another example is if an older person is learning a new skill, like how to use a computer.

That person's computer skills are developing as he/she is learning a new skill and is gaining control over it physically and mentally. When you are developing, you are learning and growing into a better person than what you are now. You begin to understand more than what you already know. This means your body is changing and has to retain a lot more information every time you develop. Therefore, a developmental milestone is what the average child does at each stage of their development.

It is a basic functional skill or age specific task that most children develop at a certain age range. When the baby is new born, for the first few years of the baby's life, he or she visits a paediatrician for regular check-ups. The paediatrician checks how the baby is developing using milestones. Although there is a specific age for when the child is expected to meet each milestone, this is not always the case. Every child is unique and therefore each child develops and reaches its milestones at different ages.

The level of age that a child should reach each milestone is just an average estimate. There could be a number of different reasons as to why a child is

not reaching the milestones are the expected ages, some of these reasons could include: * Genetic factors - a child inheriting the parents genes, * Parent involvement - the amount of time the parents have for their children, to encourage their children's development, *Healthimplications, * Environmental factors - the quality of the child's home and area. Growth is different to development.

Growth is being able to grow into a bigger person. The growth process not only involves a child's height and weight, it also involves the growth of their teeth, when a child gains teeth, they then fall out and gain new teeth. For a teenager it involves starting puberty and for any person it involves the growth of hair and nails. All these different growth processes occur as the body matures. Although growth and development have different meanings, they are closely linked. They usually follow the same pattern, although sometimes this is not the case.

For example, if there is something wrong with the child or they have a disability, this could be because they are still growing but not developing. There are different factors that could influence a child's growth and some of these include: * Genetic factors - inheriting the parents genes * Environmental factors - e. g. living in cramped spaces could lead to poor growth. * Financial factors - e. g. the child's parents may not be able to afford new shoes for their child, therefore if the child continues to wear the same small shoes, their feet will not grow properly. * Emotional factors - e. . if the child is emotionally stressed and upset, they may not eat very well or lack sleep, preventing them to grow. * Intellectual factors - e. g. the child not

having the knowledge to know what is a healthy diet. Therefore, if the child eats a lot of junk food instead of fresh foods it could prevent a healthy growth.

* Physical factors - e. g. having a problem or condition, which affects a child's growth. Growth and development is very important, especially throughout a child's childhood. This is because at these early stages of their lives, they develop and learn the most.

It is important for a child to have the right foundation of growth and development in the early stages of their lives for them to increase their growth and development throughout the rest of their lives. Good development enables a child to increase their skills and knowledge, which will help them throughout their lives. For example, when they are looking for a job they will be equipped with a good development of knowledge and intellectual skills, which will result to a better job. Another example is if when a child attends school, they will be able to learn and develop quickly which will result to better grades.

Good growth on the other hand, enables a child to have a healthy weight, height and an overall healthy body. Good growth also helps a child's development. Physical growth and size Physical growth occurs from 0 to 18 years. This is from the time the baby is born to the time the baby matures. The child will grow according to the individual child and the different parts of its body; this also depends on the rate that the child will grow at throughout the years. The child may experience a ' growth spurt', which is when the body tends to grow at a much faster pace than the child's usual growth rate.

Parts of the body also grow quicker than other parts at different times. For example, usually a baby's head is larger than the rest of the body when born. As the baby grows, the head becomes smaller in proportion to the rest of the body parts. Health professionals monitor babies' growth using a chart called the 'Centile Chart'. Midwives and health visitors usually measure and weigh babies and children and then plot the measurements on the centile chart. A centile chart is used to measure babies and children's height and weight and compare it to the average height and weight.

This is to check if they are growing at a normal rate. If they are not, then it could be because of health implications, which is then assessed by the GP. A centile chart is quite similar to the developmental milestones, as they both measure babies and children according to the average measurements. The height and weight of a child is usually recorded on two separate centile charts. There is also a separate centile chart for both boys and girls. This is because boys are usually taller and weigh more than girls, so the average height and weight will be different for both genders.

The chart has three lines marked on it and they are known as the 98th centile, the 50th centile and the 2nd centile. For the 98th centile it would be labelled as '98' and this will show the children who are taller or heavier than the average child. The 50th centile would be labelled as '50' and this shows the average height and weight of the child. Therefore, the 2nd centile would be labelled as '2' and this shows the children who are shorter or lighter than the average child. Only 3% of children are expected to be above or below the 98th or 2nd centile. Physical Development

Physical development is when the child starts gaining control of their movements and learning skills, these are developed with age. Physical development is when the muscle strength increases in a child. They learn to sit up by themselves, and then they learn how to crawl and eventually how to walk. This is all to do with the physical development of a child's muscles. However, physical development also includes the maturity of the central nervous system. This means that children are more tolerant to pain as they grow older, due to the toleration levels of their central nervous system.

For example, if a child is dropped at 3 months old, the amount of pain inflicted on the child would be substantially high, where as if a child at 3 years was dropped the amount of pain inflicted would be noticeably lower due to the developmental progression of the nervous system. Physical development can be divided into three main categories, these are: * Fine motor skills * Gross motor skills * Sensory skills

Gross Motor Skills

Gross motor skills are the reflexes in a child's body. This consists of using the larger muscles in the legs, arms, torso and feet to control their body and larger movements.

When a baby is born their physical movements consist of unintentional movements known as reflexes. These reflexes help babies to survive, as they have no control over their bodies or their movements at first. Once the baby gains control over it's body and movements, these reflexes go. This type of reflex is known as 'primitive reflexes'. For example, anything placed in a baby's mouth will automatically be assumed as a breast or teat. Therefore,

the baby will automatically start sucking as they think they are getting fed. This is a primitive reflex, which disappears once the baby is 6 months old.

Fine Motor Skills Fine motor skills is another reflex movement but involves grasping. To enable smaller movements and manipulation, this reflex involves using smaller muscles of the fingers, thumbs, toes, wrists, lips and tongue. For example, a baby will first start to curl their hands when born, therefore, if an object was placed in their hands, they would try to hold onto the object by curling their hands. This reflex disappears after 3 months. A 'pincer' grip is when a baby can hold an object between their thumb and index finger. Pincer grasp is usually developed at the age of 1.

A child usually performs gross motor skills before they perform fine motor skills. This is because a baby finds it easier to develop their larger muscles before they develop their smaller muscles and movements. For example, a baby will learn to wave their legs and arms around first, before wiggling their fingers and toes. This is because gross motor skills involve controlling the body; the baby needs to know how to control the body before it can perform smaller movements and manipulations. Gross and fine motor skills are very similar however, as many activities depend on the co-ordination of both motor skills.

For example, being able to pick up a ball that is placed on the floor - the child needs to be able to pick up the ball with its fingers (pincer gripping - fine motor skills) and move the ball off the floor with its arms (gross motor skills). Although they work together most of the time, there is a difference to

what each skill performs. Gross motor skills are the larger muscle movements and fine motor skills are the smaller muscle movements. They are both reflexes but involve different parts of the body. For a baby to develop properly, he or she needs to develop both skills well, as one skill performed without the other would make it extremely hard for the baby to physically develop to its full potential. Sensory Development Sensory development consists of using our senses, which are sight, hearing, taste, touch and smell. Senses are the physical processes of our nervous system. For example, breastfed babies can sense the smell of their mothers' breast compared to other women's breast. This shows that the baby can use its smell sense to distinguish different smells.

Therefore, the baby is developing its sense of smell. This will develop as they grow older, for example, when the baby is 5 years old, their sense of smell would have fully developed to an adults level. Intellectual Development Intellectual development is the development of the mind. A child's mind is very active from birth. As children develop their mind to think, learn reason and explain, their intellectual development progresses. For example, at 3 months old a baby likes to explore different textures, like on a play gym or an activity mat.

By the time the child is 2 years old, they have developed different textures in their mind and are now able to match different textures. Children learn intellectually through different ways, some of them being: * Using their senses * Exploring * Imitating/role play * Curiosity * Experiments * Observing * Making mistakes * Playing There are some factors such as family history that

can affect intellectual development. This is because a baby's development can be affected by inheriting genes from its parents. The inheritance could be from a family's history of late developers.

Another factor that can affect a child's intellectual development could be encouragement from the parents to help learn and develop their child's mind. It could also be the environment that the child lives in; if the child's environment is cramped, this could mean that there is not a lot of space for the child to play and do certain activities that would develop his or her skills. This could also lead to financial factors, the parents of the child not having enough money to facilitate learning aids to help their child's development. Cognitive development

Cognitive simply means thinking. Cognitive development is similar to intellectual development as it is the development of the mind, however it is the development of the mind through thinking and learning skills. This enables a child to understand the environment around them. The keys to successful cognitive development are: * Concepts - Children need to learn different concepts. The child has to see and experience things to develop a range of concepts. An adult providing activities, equipment and support can also develop these concepts. Problem solving skills - A child learns how to solve problems through trial and error, identifying there is a problem that needs solving, working out a solution and predicting what might happen. This is also linked to the child's ability to reason. They begin to understand that their actions will produce results such as; pushing a button on a toy will produce a result by making a noise. * Creativity - this gives a child the ability

to use their imagination to express their ideas. This can be done through painting pictures, making collages, dancing and making music, etc.

Imagination - this is when a child sees things that do not exist or are not in front of them. Children imagine images in their head to play pretend games, make up stories or talk to an imaginary friend. This gives them comfort in knowing there is someone there with them. * Memory - a child storing and retrieving information, ideas and things that have happened to them, learn this mentally. They remember things that have happened to them in their brain for a short time or depending on the situation, this could be a long-term memory.

Sometimes a little release of information can trigger off what they stored as memory in their head. * Object permanence - this describes the awareness of an object to a child. For example, if an object were no longer visible to a baby, they would think that the object no longer exists. Object permanence tries to develop the child's mind to think that the object still exists although it is not visible to the eye. * Concentration - this is the ability of a child to spend time and pay attention to a task.

The child develops the ability to stay focused on a task for longer as they develop, whereas at first, they would get distracted and lose concentration a lot quicker. A theorist called Piaget believes that the stages of cognitive development have an effect on how a child's thinking is developed throughout their childhood. However, this theory was understood in the late 1980s and since then, children's stages of cognitive development have increasingly changed due to the child's age. Language development

Language is how a person speaks and communicates with others, also known as verbal communication.

Language development is how children express their needs and share information with others using language. A child's language is developed depending on how much the child practices speaking. From birth a baby cannot speak, however they use other forms of language to share information. For example, they learn how to cry when they are hungry, this is using language and the baby has developed this skill by knowing that when he or she cries, they will be fed. Speaking through the mouth does not only develop language, it also involves other physical movements. E. g. face expressions, sign language, writing, etc.

It can also involve non-verbal communication such as listening to voices, practising sounds and learning what different sounds mean. Language development can be divided into two stages: * Pre-linguistic * Linguistic The pre-linguistic stage occurs between birth and 12 months. At this stage, babies learn to understand what is being said to them and learn the rules of how to communicate. Although they cannot talk at this stage, they learn to communicate to gain attention by crying, smiling and using facial expressions; they may also point to what they want or nod their heads.

The linguistic stage is when babies' speech starts to develop. Now words can be used to label objects or to share information. The child first starts off with one-word speeches and then later on their language develops into complex sentences. Emotional Development Emotional development is how children

understand what people are feeling and what they are feeling about themselves through the things they do. Children feel a lot of emotions including fear, excitement, affection, pride, jealousy, sadness and contentment. A child develops emotionally starting from birth.

For example, when a baby is feeling lonely they will cry for attention and love. This is how babies express their emotions, through crying, laughing and facial expressions. When children grow older, they learn to control their emotions. This is another emotional development as they have learnt how to control their feelings, and their brain functions. This is learnt through the later stages of childhood. An example of this would be a child falling over and not wanting to concern others of his or her accident, therefore controlling his or her emotions.

This in affect will not only control the child's emotions, but the child has also developed that it will affect other people's emotions and is trying to control that too. Emotional development can affect intellectual and social development. They learn how different emotions can affect others around them. The children learn to understand that being happy is healthier than being sad, as there is a less risk of the child becoming stressed or depressed. Emotional development can also affect social development by the child understanding that their emotions affect the relationship they have with others.

For example, if they love their parents, the parents will care and love the child back. On the other hand, if a child was being rude and arrogant, other

children would not want to socialize with him or her, leaving the child feeling emotionally lonely and upset. Children also learn different emotions through social experience. Social Development Socialising is the process of interacting with others. They begin to socialise at first with their primary carer, e. g. parents, carers, etc. The social skills developed from a child are through the child socialising with its primary carers.

A baby's social development follows a pattern, which is: * Interaction with their main carer - this include making eye contact, smiling, showing facial expressions and babbling. * Knowing that they are part of a family - they recognise who their family are through familiar faces that they see all the time. They understand who strangers are by not recognising the faces. * Mixing with other people in a group and co-operating - they start to follow instructions, copying and imitating actions, playing with other children and sharing toys or objects with others.

Children are not born with social skills; they have to learn how to develop this through life experiences. Usually it is the primary carers that encourage socialisation between their child and others. They help them develop the skills of interacting with others. This is also helped by the physical, social, language and intellectual development, as they all play a big part on how children should socialise with others. These social skills are developed through time; depending on the age of the child, their actions will be different.