

Lesson Number	Title of the Lesson	Skills	Activity
18	Growth and Development (0-5 years)	Creative thinking Decision Making	Identify two children in the age group of 0-5 months. Observe and note down their milestones of motor and social development. Compare for individual differences.
		Problem solving Critical Thinking	

Summary:

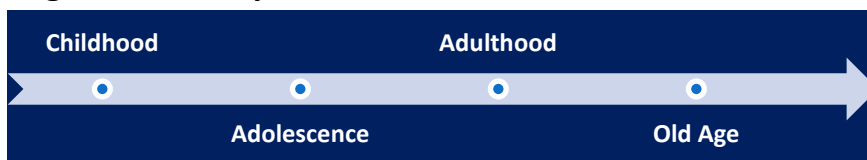
Human beings develop from a zygote to an adult. It is a fascinating developmental process. Its knowledge is important to know self as well as for guiding the growth of children. The lifespan has different stages with each stage having its unique characteristics. The development follows a fixed pattern with individual variations. There are two factors which affect growth and development. They are Heredity and Environment. Each stage of development has certain Milestones which are indicators of growth and development. Young children often demonstrate behavior which are inappropriate. These behavior patterns can be dealt with patience and understanding. Efforts have to be made to help the child overcome these and become more socially and emotionally stable. Handedness in children should also be dealt with a lot of caution. Forceful enforcement can affect the brain and speech development. Hence very gentle handling is required in this case. The child should be allowed to choose his preference of hand.

Principal Points

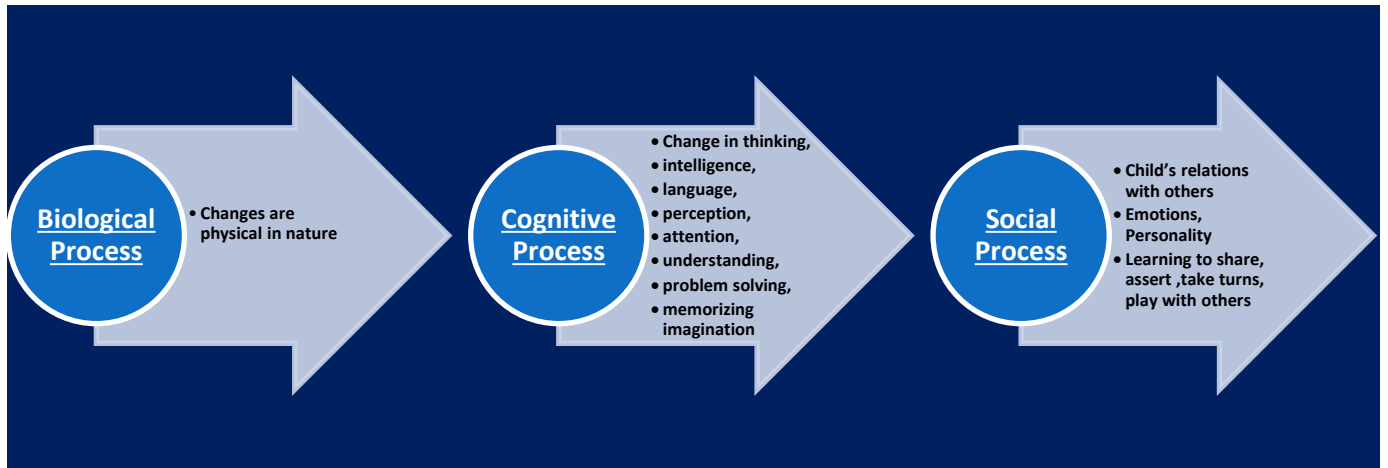
1. Stages of Life Span



2. Stages of Development after Birth



3. Patterns of Development



4. Difference between Growth and Development

Growth	Development
<ul style="list-style-type: none"> • Quantitative changes in the body 	<ul style="list-style-type: none"> • Qualitative changes in the body
<ul style="list-style-type: none"> • E.g. height & weight 	<ul style="list-style-type: none"> • Eg. Acquisition of language

5. Principles of Development

- It follows an orderly pattern
- Each one passes through all the stages
- Individual differences seen
- Each part of the body develops at a different rate
- Development is Cephalocaudal i.e. proceeds from head to toe
- Development is Proximodistal i.e. proceeds from center to extremities
- Development is the result of interaction between maturation and learning

Build your understanding

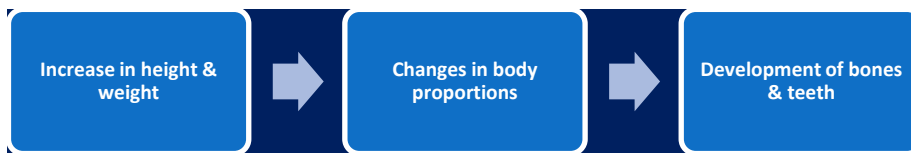
1. Factors affecting Growth and Development

Heridity	Environment	Nutrition
<ul style="list-style-type: none"> • Features & characteristics passed from parents to the child • Cannot be changed beyond a limit 	<ul style="list-style-type: none"> • Environment of the fetus is the womb • Poor nutrition of mother during pregnancy, emotional stress, smoking, drug addiction, disease, strong medicines have adverse and lasting effect 	<ul style="list-style-type: none"> • Malnourishment of the child retards growth

Intelligence	Stimulation	Emotional climate at home
<ul style="list-style-type: none"> • Higher intelligence-faster growth Lower Intelligence-Retardation 	<ul style="list-style-type: none"> • Opportunities for exploration & interaction have a positive influence on development 	<ul style="list-style-type: none"> • Discord/fights at home, lack of love & attention, physical, mental abuse affect the development adversely

Health	Sex	Socio economic status
<ul style="list-style-type: none"> • Frequent illness, disorders, disability, disturbed endocrine functioning affect the development adversely 	<ul style="list-style-type: none"> • Certain skills are learnt/ developed faster in girls for e.g. language • Boys learn to jump, catch, throw faster 	<ul style="list-style-type: none"> • Decides the kind of nutrition stimulation facilities opportunities

2. Dimensions of Physical Development



3. Milestones of Physical Development

6 Weeks	<ul style="list-style-type: none"> • Smiles at mother • Eyes steady, can stare • Follow movement with eyes
3 Months	<ul style="list-style-type: none"> • Turns head towards sound • Head still bobs
6 Months	<ul style="list-style-type: none"> • Head steady • Back straight • Sits with support • Stretches arms • Eruption of central incisors
7 Months	<ul style="list-style-type: none"> • Eruption of upper incisors
8 Months	<ul style="list-style-type: none"> • Eruption of upper canines
9-10 Months	<ul style="list-style-type: none"> • Eruption of lower canines
3 Years	<ul style="list-style-type: none"> • Set of 20 milk teeth complete

Important Facts:

- Bones soft at birth, made of cartilage tissue
- Ossification begins after birth and is a continuous process
- Bones covered with fat and muscles, chances of fracture low
- Control of trunk and back muscles first then arms and legs then fingers

4. Milestones of Motor Development

0-2 Months	<ul style="list-style-type: none"> • kicks aimlessly • stretches arms and legs
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	<ul style="list-style-type: none"> • fist usually closed
2-4 Months	<ul style="list-style-type: none"> • follows with the eyes • stares at bright objects • lifts chest when placed on abdomen • holds head • rolls from back to side • begins to grasp
4—6 Months	<ul style="list-style-type: none"> • holds head steady • holds toys • raises hand • lifts head and shoulder • rolls over • Sits up when propped
6-8 Months	<ul style="list-style-type: none"> • can hold head • sits erect without support • bangs toys and spoon • pats floor • can pick up objects • can hold toys in each hand simultaneously • use thumb to grip
8-10 Months	<ul style="list-style-type: none"> • begins to crawl • can pull up self with support • stand with support • can hold small objects between thumb and finger • bite and chew
10-12 Months	<ul style="list-style-type: none"> • stands with slight support • walk with support • can push light objects • picks up small and big object
1-2 Years	<ul style="list-style-type: none"> • walks without support • drinks from a cup /glass • can handle spoon • plays with push and pull toys • climbs stairs up and down • scribbles • eats independently though spilling is there
2-3 Years	<ul style="list-style-type: none"> • plays independently • eats independently • bowel and bladder control • can brush teeth with help • can take out and put back toys • follows simple instructions
3-5 Years	<ul style="list-style-type: none"> • can button and unbutton • attend to personal needs • ready for school

5. Milestones of Emotional Development

Birth	<ul style="list-style-type: none"> • Neither social nor unsocial
3 Months	<ul style="list-style-type: none"> • responds to friendly gestures or actions • smiles
5-6 Months	<ul style="list-style-type: none"> • can distinguish between familiar persons and strangers
12Months	<ul style="list-style-type: none"> • cooperate in simple tasks • shy of strangers
2Years	<ul style="list-style-type: none"> • loves the company of age mates • throws temper tantrums • sibling rivalry • wants attention • fear of separation • loves to copy
3 years	<ul style="list-style-type: none"> • displays affection towards familiar persons • starts cooperative play • indulges in imaginary games • has imaginary friends
4-5 Years	<ul style="list-style-type: none"> • loves the company of friends • becomes competitive • learns to assert

6. Milestones in Language Development

Birth	<ul style="list-style-type: none"> • cries for all needs
1-2 Months	<ul style="list-style-type: none"> • crying becomes peculiar, hunger, discomfort, attention, pain can be distinguished
3 Months	<ul style="list-style-type: none"> • cooing, gurgling
6-7 Months	<ul style="list-style-type: none"> • babbling
9 Months	<ul style="list-style-type: none"> • speaks words, one word conveys a whole sentence (telegraphic speech)
12 Months	<ul style="list-style-type: none"> • can combine two words
2 Years	<ul style="list-style-type: none"> • 2-3 word sentences
5 Years	<ul style="list-style-type: none"> • vocabulary of about 8000 words

What is Important to Know

Features of Cognitive Development

- Object permanence (develops by 8 months of age)
- Egocentric behavior (can be seen from 2-7 years)
- Illogical thinking
- Believes life in nonliving (animism)
- Fantasy and make-believe play
- Confused by surface appearances
- Low attention span
- Limited memory

- Confused about casual relationships
- Acquires basic concept of colour, shape, size, number, days
- Curiosity high

Did you know

1.Special Areas of Child Care

Feeding	Rest & Sleep	Bathing	Clothing	Immunization
Colostrum Essential	0-2 months – 20 to 22 hours	Regular bathing to keep clean	Comfortable	At the time of birth
Breast feeding advisable	2-6 months- 16 to 18 hours	Temperature of water- 85 F	Soft & light weight	Regular immunization according to schedule
Supplements from 3-4 months	6 to 12 months- 12 hours in the night, morning and afternoon nap	Massaging before bathing	Absorbent	Booster doses essential
Solid food-1 year	1-2 years- 12 hours night, afternoon nap	–	Brightly colored	–
Weaning should be gradual	2-5 years- 8 to 10 hours, afternoon nap	–	Easy to wash & quick to dry	–
–	–	–	Fast colors	–
–	–	–	Avoid frills & trimmings and not too expensive	–

2. Causes of Behavioral Problems in Children

- Self-expression not allowed
- Unrealistic expectations of parents/teachers
- Attention seeking
- Disturbed family environment
- Crisis: Sibling arrival, separation from loved ones, death of a familiar person
- Illness or disability

Extend your Horizon

Common Behavior Problems in Children

a. Aggression

Reasons	Angry
	Feeling troubled
Remedy	Do not punish
	Divert attention
	Provide outlets for expression
	Separate other children gently

Make feel loved

b. Throwing/ Breaking/ Destroying things

Reasons	Helplessness Jealousy Boredom Attention seeking
Remedy	Keep precious/ breakable things out of reach Provide unhindered place to play Divert attention Involve in interesting activities

c. Thumb sucking

Reasons	Hunger Tired Dissatisfied Boredom Needs love/comfort/attention
Remedy	Do not be harsh/punish Provide sucking satisfaction Offer love and assurance Involve in interesting activities using hands

d. Bedwetting

Reasons	Not toilet trained Fear Insecurity Anxiety
Remedy	Do not threaten or punish Encourage regular toilet habits Reassure Show love and care Motivate for toilet training

e. Lying

Reasons	Fear of punishment Attention seeking Uncontrolled imagination
Remedy	Do not preach or show displeasure Understand the reason Give the needed attention Provide opportunities to express imagination in a positive way Practice truthfulness and teach by example

f. Refuses to eat

Reasons	Not hungry
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	Unwell
	Dislikes particular food
	Is force fed
Remedy	Do not force or punish
	Do not give rewards for eating
	Do not threaten
	Be calm
	Introduce new foods
	Bring variety in meals

Handedness

Right Handedness	Left Handedness
Centre to control handedness on left side of brain	Centre to control handedness on right side of brain
Speech control on right side of brain	Speech control on left side of brain

Evaluate yourself

- What should be the essential qualities of diapers /nappies?
- What are the causes of bedwetting? Give two ways in which it can be controlled

Maximize your marks:

- Attempt all the exercises given in the lesson
- Why should handedness not be forced?