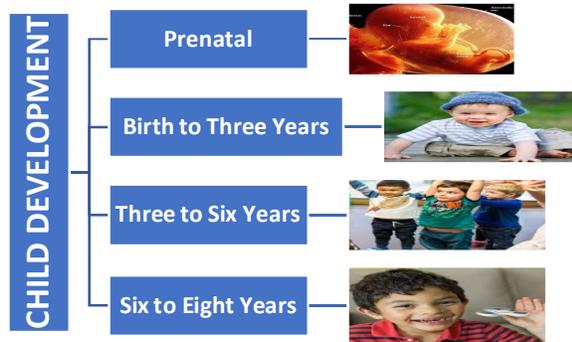


**Lesson No 8**      **Stages of Child Development:**  
 ✚ **Prenatal**  
 ✚ **Birth to Three Years**

**SUMMARY**

From the moment we are born until the moment we die; we continue to develop. Child development is the scientific study of the patterns of growth, change, and stability that occur from conception through adolescence to old age. Hence, Developmental psychologists often break down development according to various phases of life. Each of these periods of development represents a time when different milestones are achieved in that particular time. As Early childhood refers to the early years of life starting from birth to eight year. In this reference stages of child development is classified as -



In this lesson, you learnt about the growth and development of children from prenatal period to three years of age.

**Build Your Understanding**

- ✚ The average period of human pregnancy is 37 weeks to 41 weeks.
- ✚ Babies born before 36 weeks of gestation – **PRETERM BABIES**
- ✚ Babies born after 41 weeks of gestation - **POSTTERM BABIES.**

**DEVELOPMENT OF CHILDREN DURING PRENATAL STAGE**

**FACTORS AFFECTING PRENATAL GROWTH AND DEVELOPMENT**

	<p><b>Stage 1: The Germinal Stage</b></p> <ul style="list-style-type: none"> <li>• The two-week period after conception</li> <li>• Key feature of the germinal stage is the formation of the placenta</li> <li>• The placenta has two important functions                             <ul style="list-style-type: none"> <li>• Nourishes the developing embryo</li> <li>• Removes waste materials from the embryo</li> </ul> </li> </ul>
	<p><b>Stage 2: The Embryonic Stage</b></p> <ul style="list-style-type: none"> <li>• From the end of the germinal stage to two months after conception</li> <li>• Major organs form</li> <li>• The embryo is only about an inch long</li> </ul>
	<p><b>Stage 3: The Foetal Stage</b></p> <ul style="list-style-type: none"> <li>• Last Stage</li> <li>• From two months after conception until birth</li> <li>• Organ systems develop further and start to function</li> </ul>

The teratogens and other factors that affect prenatal growth are

➔

- Drugs**
- Antibiotics and Non-prescribed Illegal Drugs**
- Alcohol and Smoking**
- Environmental Hazards**
- Exposure to Chemicals, Radiations, Extreme Heat and Humidity**

## CHARACTERISTICS OF THE NEWBORN



### Umbilical Cord

- ✦ Bluish-white in colour
- ✦ After birth, the umbilical cord is normally
- ✦ Becomes the belly-button after it heals.

### Skin

- ✦ At birth, a new-born's skin is often greyish to dusky blue in colour.
- ✦ Within a minute or two, the skin's colour reaches its normal tone.

### Hair

- ✦ Have fine, soft body hair called lanugo.
- ✦ Lanugo disappears within a few weeks of birth.

### Head

- ✦ Very large in proportion to the body

### Weight

- ✦ Approximately 2.5 -3.5 kg

### Height

- ✦ Approximately 2 cm (3/4") gained each month
- ✦ Or just over 5 cm (2") in the first three months.

### Sleeping Patterns

- ✦ Short stretches of sleep
- ✦ Mainly for feeding and keeping babies dry and warm

### Reflexes

- ✦ Automatic response to a particular form of stimulation such as **Rooting, Stepping, Swimming, Moro, Babinski, Startle, Eye Blink, Sucking, Palmar Grasp**

## GROWTH AND DEVELOPMENT DURING INFANCY

### Build Your Understanding

- ✦ Infancy has been defined as a period between birth and one year.
- ✦ Infants start to develop skills and competencies

## MILESTONES IN PHYSICAL DEVELOPMENT



<b>BASED ON AGE RANGES</b>				
<b>Skills</b>	<b>Birth to Three Months</b>	<b>4 Months to 6 Months</b>	<b>7 Months to 10 Months</b>	<b>10 Months to 12 Months</b>
<b>Motor skills</b>	<ul style="list-style-type: none"> <li>• Infant tries to lift the head and turn it</li> <li>• Stretching and kicking</li> <li>• Grasping</li> </ul>	<ul style="list-style-type: none"> <li>• Arms and legs wiggle and kick more purposefully</li> <li>• Rocks on their stomach</li> <li>• Better head</li> <li>• Control</li> <li>• Sitting without support</li> </ul>	<ul style="list-style-type: none"> <li>• Can roll over in both directions</li> <li>• Can sit on their own</li> <li>• Crawl across the room</li> <li>• Start making efforts to stand</li> </ul>	<ul style="list-style-type: none"> <li>• Can sit without help</li> <li>• Pull themselves to stand</li> <li>• Creeping, crawling and cruising along the furniture</li> </ul>
<b>Eye-hand coordination</b>	<ul style="list-style-type: none"> <li>• No eye-hand coordination</li> </ul>	<ul style="list-style-type: none"> <li>• Starts eye-hand coordination</li> <li>• Transfers objects from one hand to the other</li> </ul>	<ul style="list-style-type: none"> <li>• Transfer objects from one hand to another or directly to their mouth</li> <li>• Handle a spoon and soft finger foods</li> </ul>	<ul style="list-style-type: none"> <li>• Good Coordination</li> </ul>
<b>Hearing</b>	<ul style="list-style-type: none"> <li>• Respond to the sound of the mother or other familiar voices</li> </ul>	<ul style="list-style-type: none"> <li>• Respond to sounds of others around them</li> </ul>	-	-
<b>Vision</b>	<ul style="list-style-type: none"> <li>• Focus on the mother's face</li> <li>• Begin to observe complex designs, various colours, sizes and shapes.</li> </ul>	<ul style="list-style-type: none"> <li>• Distinguishes between strange and familiar faces</li> <li>• Turn the head toward bright colours, toys, actions</li> </ul>	-	-
<b>Communication</b>	<ul style="list-style-type: none"> <li>• By crying</li> </ul>	<ul style="list-style-type: none"> <li>• Babble, gurgle and laugh.</li> <li>• Begin to pick up the components of speech</li> </ul>	<ul style="list-style-type: none"> <li>• Through sounds, gestures, and facial expressions</li> <li>• Distinguish Emotions by tone of voice</li> </ul>	<ul style="list-style-type: none"> <li>• Respond to simple verbal requests</li> <li>• Understand words</li> <li>• Become skilled at various gestures</li> </ul>

## **GROWTH AND DEVELOPMENT DURING TODDLERHOOD**

### **Build Your Understanding**

- ✚ Toddlerhood - between one and three years of age
- ✚ Period of rapid growth and development in different domains

### **Physical-Motor Development**

#### **Physical Development**

- ✚ gain weight
- ✚ gain height
- ✚ Body proportions change rapidly

#### **Motor Development**

- ✚ growing control and independence on their bodies in everyday tasks

#### **Gross Motor Skills**

- ✚ Walk on their own
- ✚ Walk backwards
- ✚ Can pick up toys while

#### **Fine Motor Skills**

- ✚ Scribble and paint
- ✚ May use one hand more than the other

- standing
- ✚ Push and pull objects
- ✚ Climb on and off furniture
- ✚ May begin to run
- ✚ Grasp, hold and throw a ball
- ✚ Turnover and pour out contents from containers
- ✚ Feed themselves

## **Socio-Emotional Development**

### **Emotional Development**

- ✚ Shows a range of emotions including fear, happiness and joy and complex emotions such as jealousy, affection and shame
- ✚ Recognize others' emotions

### **Social Development**

- ✚ Recognize themselves in the mirror
- ✚ Can identify family members
- ✚ Enjoy playing with other people
- ✚ Develop a sense of attachment and security

### **Cognitive Development**

- ✚ Attention is bound by what is concretely present in their environment
- ✚ Cannot think in abstract terms
- ✚ Name familiar people and objects
- ✚ Understand and respond properly to words and commands
- ✚ Distinguish between “you” and “me”
- ✚ Uses pronouns “me” and “mine”
- ✚ Engaged in parallel play where they play near other children but they do not play together

### **Language Development, Communication and Emergent Literacy**

- ✚ First year can say two or three recognizable words
- ✚ By three-year start using two or three Sentences
- ✚ Learns to communicate well with words

## **EVALUATE YOURSELF**

- Q1.** Describe the stages of development during prenatal period. Also explain factors affecting prenatal growth and development.
- Q2.** Prepare a chart to compare growth and development of all domains during infancy and toddlerhood.

## **PRACTICE YOUR KNOWLEDGE**

In your neighborhood, observe a one year old child and compare its growth with regular pace of child's growth. Is s/he growing with regular pace?

- a. If yes, make a report based on observation.
- b. If no, make a report based on observation and advice the parents of the child to deal with the identified issue/s