

# Prenatal Development Timeline

- |   |  |  |   |
|---|--|--|---|
| <span style="color: blue;">■</span> Nervous           | <span style="color: red;">■</span> Cardiovascular      | <span style="color: maroon;">■</span> Muscular         | <span style="color: teal;">■</span> Early Events      |
| <span style="color: yellow;">■</span> Special Senses  | <span style="color: orange;">■</span> Respiratory      | <span style="color: grey;">■</span> Skeletal           | <span style="color: gold;">■</span> Growth Parameters |
| <span style="color: magenta;">■</span> Blood & Immune | <span style="color: purple;">■</span> Gastrointestinal | <span style="color: cyan;">■</span> Endocrine          | <span style="color: white;">■</span> General          |
| <span style="color: pink;">■</span> Skin/Integument   | <span style="color: green;">■</span> Renal/Urinary     | <span style="color: lightgreen;">■</span> Reproductive | <span style="color: limegreen;">■</span> Movement     |

## Unit 1: The First Week

<b>Day 0</b>	— <span style="color: white;">■</span> Embryonic period begins
<b>Day 1</b>	— <span style="color: teal;">■</span> Fertilization resulting in zygote formation
<b>Day 1 - Day 1</b>	— <span style="color: teal;">■</span> Fertilization - development begins with a single-cell embryo!!!
<b>Day 2</b>	— <span style="color: cyan;">■</span> Early pregnancy factor (EPF)
	— <span style="color: teal;">■</span> Activation of the genome
	— <span style="color: teal;">■</span> Zygote divides into two blastomeres (perhaps 30 hours or so after fertilization)
	— <span style="color: teal;">■</span> Zygote divides into two blastomeres (perhaps 30 hours or so after fertilization)
<b>Day 3</b>	— <span style="color: teal;">■</span> Embryo is spherically shaped with 12 to 16 cells
<b>Day 4</b>	— <span style="color: teal;">■</span> Embryonic disc
	— <span style="color: teal;">■</span> Free floating blastocyst
	— <span style="color: teal;">■</span> Inner cell mass
	— <span style="color: teal;">■</span> See where the back and chest will be
<b>Day 5</b>	— <span style="color: teal;">■</span> Hatching blastocyst
<b>Day 6</b>	— <span style="color: teal;">■</span> Embryo attaches to wall of uterus
<b>1 week</b>	— <span style="color: teal;">■</span> Chorion
	— <span style="color: teal;">■</span> Hypoblast & epiblast
	— <span style="color: teal;">■</span> Placenta begins to form

## Unit 2: 1 to 2 Weeks

<b>1 week, 1 day</b>	— <span style="color: cyan;">■</span> Positive pregnancy test
	— <span style="color: teal;">■</span> Amnioblasts present; amnion and amniotic cavity formation begins
<b>1 week, 2 days</b>	— <span style="color: teal;">■</span> Cells in womb engorged with nutrients
<b>1 week, 4 days</b>	— <span style="color: teal;">■</span> Longitudinal axis
<b>1 week, 5 days</b>	— <span style="color: teal;">■</span> Implantation complete
	— <span style="color: teal;">■</span> Yolk sac
<b>1 week, 6 days</b>	— <span style="color: red;">■</span> Primordial blood vessels
	— <span style="color: teal;">■</span> Amnion with single cell layer
	— <span style="color: teal;">■</span> Chorionic villi
<b>2 weeks</b>	— <span style="color: teal;">■</span> Yolk sac
	— <span style="color: teal;">■</span> Yolk sac
































## Unit 3: 2 to 3 Weeks

<b>2 weeks, 1 day</b>	— <span style="color: teal;">■</span> 3 germ layers
	— <span style="color: teal;">■</span> Rostral-caudal orientation
<b>2 weeks, 2 days</b>	— <span style="color: magenta;">■</span> Erythroblasts in yolk sac
	— <span style="color: magenta;">■</span> Three types of blood-forming cells in yolk sac













	Amnion with two cell layers
	Secondary villi
<b>2 weeks, 4 days</b>	Foregut, midgut, and hindgut
	Brain is first organ to appear
	Connecting stalk
<b>2 weeks, 5 days</b>	Neural plate induced by notochordal process
<b>2 weeks, 6 days</b>	Numerous blood islands in umbilical vesicle
	Foregut
	Stomodeum forming
	Beginnings of the heart can be seen
	Blood vessels emerge simultaneously in umbilical vesicle, embryo proper, amnion, and connecting stalk
	Dorsal aortae (paired)
	Paired tubular heart
	Forebrain, midbrain, and hindbrain
	Neural groove deepens substantially
	Three main divisions of brain
	Neural crest: Rostral and facial
<b>3 weeks</b>	Blood and blood vessels


















**Unit 4: 3 to 4 Weeks**

<b>3 weeks, 1 day</b>	Midgut emerging
	Respiratory outgrowth
	Atria (right and left) far apart
	Circulatory system function begins
	Endocardial tubes fuse forming tubular heart
	Heart begins beating
	Pericardium
	Primary head vein
	Sinus venosus
	Tubular heart begins folding
	Umbilical arteries
	Umbilical veins (right and left)
	Neural tube
	Body cavities
	Hyoid arch
<b>3 weeks, 3 days</b>	Thyroid complete
	Cystic primordium
	Liver
	Membrane between future mouth and throat may begin to rupture
	Neuropore (near brain) closes
	Notochord
<b>3 weeks, 5 days</b>	First part of pancreas
	Pharyngeal arch 3
	Lung bud

























	 Descending aorta
	 Internal carotid arteries
	 Unidirectional circulation
	 Brain involves 40% of neural tube
	 Lowermost spinal cord formation begins
	 Neural tube closes (lower back)
	 Somites: Pairs 21 through 29
	 Upper limb primordium at level of somites 8 to 10
	 Progressively C-shaped embryo
<b>4 weeks</b>	 Skin is so thin, you can see through it!
	 Esophagus primordia
	 Intestines growing in length
	 Pancreas: Ventral pancreas
	 Pharynx
	 Small & large intestines
	 Bronchial buds
	 Lungs begin filling chest cavity
	 Trachea
	 Circulatory system "well established"
	 Functioning two-chamber heart
	 Heart chambers bulging with fluid
	 Heart now functions as two parallel pumps
	 Heart rate (about) 113 beats/min
	 Most cranial nerve ganglia
	 Cerebellum
	 Fourth ventricle
	 Amnion surrounds embryo
	 Limb buds - the first sign of arms and legs
	 Lower limb buds
	 Umbilical cord emerging
	 Upper and lower limb buds

**Unit 5: 4 to 5 Weeks**

<b>4 weeks, 3 days</b>	 Early eyes
<b>4 weeks, 3 days - 5 weeks</b>	 Germ cells migrate to gonads
<b>4 weeks, 4 days</b>	 Lungs: Right and left primary (or main stem) bronchi
	 Sinu-atrial (SA) node
	 Eyes located on sides of head
	 Lens pits
	 Brain enlarges 50% since Carnegie Stage 13
	 Brain: Cerebral hemispheres appear and begin rapid growth
	 Brain: Lateral ventricles
<b>4 weeks, 5 days</b>	 Caecum
	 Blood vessels penetrate diencephalon
	 Coronary arteries (terminal end)

	 Nose: Nasal pits
	 Optic chiasm
	 Brain with five main sections
	 First nerve fibers
	 Hypothalamus
	 Most cranial nerves seen
	 Synapses among motor neurons in spinal cord
	 Third ventricle
<b>5 weeks</b>	 ACTH [adrenocorticotropin hormone]
	 Growth hormone
	 Pituitary gland
	 Limb buds form hand plates
	 Permanent kidneys
	 Bronchial tree branching accelerates
	 Lobar pattern mimics adult pattern
	 Pacemaker cells
	 Head is one third of entire embryo

**Unit 6: 5 to 6 Weeks**

<b>5 weeks, 1 day</b>	 Wrist joints are forming
<b>5 weeks, 2 days</b>	 Thyroid detaches from pharynx
	 Atrioventricular (AV) node
	 Circle of Willis almost complete
	 Cochlear nerve present
	 Musculocutaneous, radial, ulna, and median nerves enter upper limb bud
	 All cranial nerves identifiable
<b>5½ weeks</b>	 Initial tooth formation
<b>5½ weeks - 6 weeks</b>	 Subtle movement begins
<b>5 weeks, 4 days</b>	 Cartilage formation
<b>5 weeks, 5 days</b>	 Nerve cells differentiating
<b>5 weeks, 5 days - 7 weeks, 1 day</b>	 Melanocytes in epidermis
<b>5 weeks, 6 days</b>	 Cartilage in occipital sclerotomes (1-4)
	 Primordial vermiform appendix
	 All spinal nerves present
	 Dura begins forming in basal area
	 Frontal and temporal poles of cerebral hemispheres
	 Somites: Pairs 38 and 39
	 Synapses in spinal cord between interneurons and primary afferent neurons
<b>6 weeks</b>	 Face withdraws from light touch around mouth
	 Blood forming in liver
	 Nipples along side of trunk
	 Adrenal glands
	 Glucagon in pancreas

	<input type="checkbox"/> Handplates develop subtle flattening
	<input type="checkbox"/> Joints
	<input type="checkbox"/> Tooth buds (primary teeth)
	<input checked="" type="checkbox"/> Diaphragm is largely formed
	<input checked="" type="checkbox"/> Intestines fill base of umbilical cord
	<input checked="" type="checkbox"/> External ears
	<input checked="" type="checkbox"/> Synapses form in spinal cord
	<input type="checkbox"/> Crown-heel length 1.6 cm

**Unit 7: 6 to 7 Weeks**

<b>6 weeks, 2 days</b>	<input type="checkbox"/> Elbow regions sometimes identifiable
	<input type="checkbox"/> Hands polygon-shaped
	<input type="checkbox"/> Toe rays sometimes present
	<input checked="" type="checkbox"/> Submandibular gland primordia
	<input checked="" type="checkbox"/> Inferior vena cava
	<input checked="" type="checkbox"/> Origin of left coronary artery
	<input checked="" type="checkbox"/> Optic fibers
	<input checked="" type="checkbox"/> Eyelid folds sometimes present
	<input checked="" type="checkbox"/> Brainwave activity has begun
	<input checked="" type="checkbox"/> Cerebrospinal fluid production begins
<b>6½ weeks</b>	<input checked="" type="checkbox"/> The hands begin to move
	<input type="checkbox"/> Volar pads on palms
	<input type="checkbox"/> Bones first form in the collar bones and lower jaw
<b>6 weeks, 5 days</b>	<input type="checkbox"/> Beginnings of occipital and sphenoid bones
	<input type="checkbox"/> Cartilaginous styloid process
	<input type="checkbox"/> Humerus, radius, and ulna
	<input checked="" type="checkbox"/> Deltoid muscle
	<input checked="" type="checkbox"/> Anal membrane
	<input checked="" type="checkbox"/> Lung, left: Oblique fissure defines upper and lower lobes
	<input checked="" type="checkbox"/> Circulus arteriosus (Circle of Willis) complete
	<input checked="" type="checkbox"/> Origin of right coronary artery
	<input checked="" type="checkbox"/> Tricuspid and mitral valves
	<input checked="" type="checkbox"/> Primitive nasal cavity
	<input checked="" type="checkbox"/> Eyelids: Upper and lower lids present and growing
	<input checked="" type="checkbox"/> Occipital pole of cerebral hemispheres
<b>6 weeks, 6 days</b>	<input type="checkbox"/> Feet polygon-shaped
	<input checked="" type="checkbox"/> Cloacal membrane ruptures
<b>7 weeks</b>	<input checked="" type="checkbox"/> Head rotates
	<input checked="" type="checkbox"/> Leg movements
	<input checked="" type="checkbox"/> B lymphocytes in liver
	<input checked="" type="checkbox"/> Ovaries
	<input checked="" type="checkbox"/> Testes begin to differentiate
	<input checked="" type="checkbox"/> Insulin in pancreas
	<input type="checkbox"/> Foot plates notched
	<input checked="" type="checkbox"/> Hiccups

	<ul style="list-style-type: none"> <li><span style="color: magenta;">■</span> Tendons attach muscle to bone</li> <li><span style="color: red;">■</span> The heart has four chambers and is nearly complete.</li> <li><span style="color: red;">■</span> The heart rate peaks at 165 to 170 beats per minute.</li> <li><span style="color: gray;">□</span> Crown-heel length 2.2 cm</li> </ul>
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**Unit 8: 7 to 8 Weeks**

<b>7 weeks, 1 day</b>	<ul style="list-style-type: none"> <li><span style="color: gray;">□</span> Upper limbs with slightly flexed elbows</li> <li><span style="color: blue;">■</span> Sacrocaudal spinal cord formation (secondary neurulation) complete</li> </ul>
<b>7 weeks, 1 day - 8 weeks</b>	<ul style="list-style-type: none"> <li><span style="color: purple;">■</span> Stomach: Folds in stomach wall</li> </ul>
<b>7 weeks, 2 days</b>	<ul style="list-style-type: none"> <li><span style="color: red;">■</span> Arteries and veins of heart complete</li> </ul>
<b>7 weeks, 3 days</b>	<ul style="list-style-type: none"> <li><span style="color: gray;">□</span> Wrists slightly flexed</li> <li><span style="color: yellow;">■</span> Eyelids growing rapidly</li> <li><span style="color: blue;">■</span> Cerebral hemispheres cover more than half of diencephalon</li> </ul>
<b>7½ weeks</b>	<ul style="list-style-type: none"> <li><span style="color: green;">■</span> Hands begin to touch face</li> <li><span style="color: green;">■</span> The hands touch each other as do the feet!</li> <li><span style="color: pink;">□</span> Fingertips thicken</li> <li><span style="color: pink;">□</span> Plantar pads toes</li> <li><span style="color: gray;">□</span> The knee joints have arrived</li> <li><span style="color: red;">■</span> EKG pattern similar to adult</li> </ul>
<b>7 weeks, 4 days</b>	<ul style="list-style-type: none"> <li><span style="color: gray;">□</span> The fingers are free</li> </ul>
<b>7 weeks, 5 days</b>	<ul style="list-style-type: none"> <li><span style="color: gray;">□</span> Bone-forming cells called osteoblasts emerge</li> <li><span style="color: gray;">□</span> Hands can reach one another and fingers can overlap</li> <li><span style="color: blue;">■</span> Brain: Internal capsule with connections to epithalamus, dorsal thalamus, and mesencephalon</li> <li><span style="color: blue;">■</span> Cerebral hemispheres cover 75% of diencephalon</li> <li><span style="color: blue;">■</span> Cortical plate expanding rapidly</li> </ul>
<b>7 weeks, 6 days</b>	<ul style="list-style-type: none"> <li><span style="color: gray;">□</span> The toes are free</li> </ul>
<b>8 weeks</b>	<ul style="list-style-type: none"> <li><span style="color: green;">■</span> Complex response to touch</li> <li><span style="color: green;">■</span> More frequent hand-to-face contact</li> <li><span style="color: green;">■</span> Mouth opens &amp; closes</li> <li><span style="color: green;">■</span> Squinting</li> <li><span style="color: green;">■</span> The embryo floats and rolls over in the womb</li> <li><span style="color: pink;">□</span> Hairs first appear in eyebrows &amp; around mouth</li> <li><span style="color: pink;">□</span> Skin multi-layered, loses transparency</li> <li><span style="color: cyan;">□</span> Male embryos are making testosterone already!</li> <li><span style="color: gray;">□</span> The embryo's joints are similar to adult joints</li> <li><span style="color: magenta;">■</span> Diaphragm complete</li> <li><span style="color: magenta;">■</span> Esophagus: Longitudinal muscles</li> <li><span style="color: olive;">■</span> Urethra</li> <li><span style="color: olive;">■</span> Urine production and release</li> <li><span style="color: purple;">■</span> Peristalsis in large intestine</li> <li><span style="color: orange;">■</span> Occasional breathing motions begin</li> <li><span style="color: red;">■</span> Blood supply to the brain closely resembles adult pattern</li> </ul>

	<input type="checkbox"/> Cranial nerve distribution mimics adult pattern
	<input type="checkbox"/> Retina: Four of the ten adult layers present
	<input type="checkbox"/> Tympanic membrane
	<input type="checkbox"/> "The hindbrain "presents striking resemblance to that of the newborn."
	<input type="checkbox"/> Brain represents 43% of embryo
	<input type="checkbox"/> Grey and white matter
	<input type="checkbox"/> Right- and left-handedness emerges
	<input type="checkbox"/> Crown-heel length 4.3 cm
	<input type="checkbox"/> Embryo contains approximately 1 billion (10 <sup>9</sup> ) cells
	<input type="checkbox"/> Embryonic Period Ends
	<input type="checkbox"/> The embryo has more than 4,000 parts (adults have about 4,500)

**Unit 9: 8 to 9 Weeks**

<b>8½ weeks</b>	<input type="checkbox"/> Eyelids completely fused
	<input type="checkbox"/> Neurons synapse in cerebral cortex (marginal zone)
<b>9 weeks</b>	<input type="checkbox"/> Bends hip & knee if sole of foot touched
	<input type="checkbox"/> Drinking fluid is becoming routine
	<input type="checkbox"/> Sucking the thumb
	<input type="checkbox"/> The young fetus now sighs, stretches, moves the head, opens the mouth, and moves the tongue
	<input type="checkbox"/> Tongue movement
	<input type="checkbox"/> Female fetuses have early reproductive cells in their ovaries
	<input type="checkbox"/> Thyroid gland weighs 2 grams
	<input type="checkbox"/> Small intestine peristalsis
	<input type="checkbox"/> Face, hands, and feet sense light touch

**Unit 10: 9 to 10 Weeks**

<b>9 weeks - 10 weeks</b>	<input type="checkbox"/> Early vocal cords
	<input type="checkbox"/> My weight will rise more than 75% this week
<b>9½ weeks</b>	<input type="checkbox"/> I yawn when I want
<b>9 weeks, 4 days</b>	<input type="checkbox"/> Yawns
<b>10 weeks</b>	<input type="checkbox"/> Eyes roll downward reflexively
	<input type="checkbox"/> Palatine tonsils
	<input type="checkbox"/> Fingernails and toenails begin to grow!
	<input type="checkbox"/> Three-layered epidermis
	<input type="checkbox"/> Tiny unique fingerprints have arrived!
	<input type="checkbox"/> Now, all the bones are getting harder
	<input type="checkbox"/> Tooth buds (secondary teeth)
	<input type="checkbox"/> Glomeruli formation begins
	<input type="checkbox"/> Physiologic herniation ends
	<input type="checkbox"/> Corpus callosum begins
	<input type="checkbox"/> Crown-heel length 7.5 cm

**Unit 11: 10 to 11 Weeks**

<b>10 weeks - 12 weeks</b>	<input type="checkbox"/> Langerhans cells enter epidermis
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<b>10½ weeks</b>	—	□ Volar and plantar pads regress
<b>11 weeks</b>	—	■ The face now makes complex expressions
		■ Immunological competence
		□ Intermediate layer
		□ Nose & lips completely formed
		■ Now you can tell if your baby is a girl or a boy!
		■ Thyroid gland weighs 12 grams
		■ Intestines absorb water & glucose
		■ Auditory cells: inner & outer hair cells
		□ Crown-heel length

**Unit 12: 11 to 12 Weeks**

<b>11 weeks - 12 weeks</b>	—	□ Weight increases by 60% this week
<b>12 weeks</b>	—	■ Hands touch the mouth up to 50 times per hour
		■ T lymphocytes leave thymus
		■ Many different hormones are present in pituitary gland
		■ Thyroid gland produces hormone
		□ Palate fuses
		□ Upper limbs reach final proportion
		■ Bladder resembles smooth muscle
		■ Bile production begins in liver
		■ Bowel movements
		■ There are taste buds all over the mouth
		■ Corpus callosum
		□ Crown-heel length 12 cm
		□ Head circumference 10 cm

**Unit 13: 3 to 4 Months**

<b>13 weeks</b>	—	□ Teeth are growing
		■ Cilia lining airways
		■ Most of body sensitive to touch
		□ Crown-heel length 15 cm
<b>14 weeks</b>	—	■ Girls move their jaws more than the boys do
		■ Light touch to mouth evokes turn toward stimulus
		■ 4-lobed cerebral cortex
		■ Cerebellum resembles adult structure
		□ Crown-heel length 17 cm
		□ Fat deposits in cheeks
<b>15 weeks</b>	—	■ Stem cells arrive in bone marrow
		□ Body fat emerges throughout the body
		■ Glucagon in fetal bloodstream
		■ Digestive enzymes
		□ Crown-heel length 19.5 cm
<b>16 weeks</b>	—	■ Quickening
		□ Fat deposits upper & lower limbs
		□ Tooth enamel



	<ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: orange; margin-right: 5px;"></span> Bronchial tree nearly complete</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: yellow; margin-right: 5px;"></span> Hormonal stress response to invasive procedures</li> <li><span style="display: inline-block; width: 15px; height: 10px; border: 1px solid black; margin-right: 5px;"></span> Crown-heel length 21 cm</li> </ul>
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**Unit 14: 4 to 5 Months**

<b>17 weeks</b>	<ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: yellow; margin-right: 5px;"></span> Retina has discrete layers</li> </ul>
<b>18 weeks</b>	<ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: pink; margin-right: 5px;"></span> Cream-like substance protects skin</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: pink; margin-right: 5px;"></span> Sweat glands</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: cyan; margin-right: 5px;"></span> Insulin secretion</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: orange; margin-right: 5px;"></span> Speaking motion of larynx</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: blue; margin-right: 5px;"></span> Corpus callosum complete</li> </ul>
<b>19 weeks</b>	<ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: pink; margin-right: 5px;"></span> Melanin production</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: lightgreen; margin-right: 5px;"></span> Number of oogonia peak (at about 7 million) within fetal ovaries</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: blue; margin-right: 5px;"></span> Daily cycles in biological rhythms</li> </ul>
<b>20 weeks</b>	<ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: pink; margin-right: 5px;"></span> All skin layers and structures</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: orange; margin-right: 5px;"></span> Surfactant production (low levels)</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: yellow; margin-right: 5px;"></span> Hearing and responding to sound begins</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: yellow; margin-right: 5px;"></span> Hearing and responding to sound begins</li> <li><span style="display: inline-block; width: 15px; height: 10px; border: 1px solid black; margin-right: 5px;"></span> Crown-heel length 28 cm</li> <li><span style="display: inline-block; width: 15px; height: 10px; border: 1px solid black; margin-right: 5px;"></span> Head circumference 20 cm</li> </ul>

**Unit 15: 5 to 6 Months**

<b>20 weeks - 24 weeks</b>	<ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: yellow; margin-right: 5px;"></span> Eyelids separate, eyes open and close</li> </ul>
<b>21 weeks</b>	<ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: pink; margin-right: 5px;"></span> Stratum corneum</li> </ul>
<b>21 weeks - 22 weeks</b>	<ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 10px; border: 1px solid black; margin-right: 5px;"></span> If born prematurely from this point on, survival is possible</li> </ul>
<b>22 weeks</b>	<ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: yellow; margin-right: 5px;"></span> Cornea structure</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: blue; margin-right: 5px;"></span> Behavioral states</li> </ul>
<b>23 weeks</b>	<ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 10px; border: 1px solid black; margin-right: 5px;"></span> Brain weight 100 grams</li> </ul>
<b>24 weeks</b>	<ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: yellow; margin-right: 5px;"></span> Blink-startle response; females before males</li> <li><span style="display: inline-block; width: 15px; height: 10px; border: 1px solid black; margin-right: 5px;"></span> Crown-heel length 34.5 cm</li> </ul>

**Unit 16: 6 to 7 Months**

<b>25 weeks</b>	<ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: purple; margin-right: 5px;"></span> Intestinal lining contains all adult cell types</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: yellow; margin-right: 5px;"></span> Rods &amp; cones</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: yellow; margin-right: 5px;"></span> The ability to taste</li> </ul>
<b>26 weeks</b>	<ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: pink; margin-right: 5px;"></span> Additional fat deposits decrease wrinkles</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: pink; margin-right: 5px;"></span> Tear production</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: yellow; margin-right: 5px;"></span> The ability to smell has arrived</li> </ul>
<b>26 weeks - 38 weeks</b>	<ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: blue; margin-right: 5px;"></span> Brain weight increases 400% to 500%</li> </ul>
<b>27 weeks</b>	<ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: yellow; margin-right: 5px;"></span> Pupils react to light</li> </ul>
<b>28 weeks</b>	<ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: yellow; margin-right: 5px;"></span> Distinguishes sounds of different frequencies</li> <li><span style="display: inline-block; width: 15px; height: 10px; border: 1px solid black; margin-right: 5px;"></span> Crown-heel length 39.5 cm</li> </ul>

**Unit 17: 7 to 8 Months**

<b>30 weeks</b>	<ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: orange; margin-right: 5px;"></span> Breathing motions are common even though there is no air in the womb</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: blue; margin-right: 5px;"></span> 6-layered cerebral cortex</li> </ul>
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	<input type="checkbox"/> Head circumference 30 cm
<b>32 weeks</b>	<input checked="" type="checkbox"/> Esophagus: Lower esophagus muscles functional
	<input checked="" type="checkbox"/> Glomeruli formation complete
	<input checked="" type="checkbox"/> Alveoli
	<input checked="" type="checkbox"/> Memory - music preferences
	<input type="checkbox"/> Crown-heel length 45 cm

**Unit 18: 8 to 9 Months**

<b>32 weeks - 36 weeks</b>	<input checked="" type="checkbox"/> Prenatal food affects newborn taste preferences
<b>34 weeks</b>	<input type="checkbox"/> Rapid weight gain
<b>35 weeks</b>	<input checked="" type="checkbox"/> Firm grip
	<input type="checkbox"/> Amniotic fluid volume peaks
<b>36 weeks</b>	<input checked="" type="checkbox"/> Surfactant production accelerates
	<input type="checkbox"/> Brain weight 300 grams
	<input type="checkbox"/> Crown-heel length 48.5 cm

**Unit 19: 9 Months to Birth**

<b>37 weeks</b>	<input checked="" type="checkbox"/> Fetus drinks an estimated 15 oz (or 450cc) of amniotic fluid/day
<b>38 weeks</b>	<input checked="" type="checkbox"/> Air breathing begins
	<input checked="" type="checkbox"/> By term, the typical umbilical cord measures 20 to 24 inches (50 to 60 cm)
	<input checked="" type="checkbox"/> Heart beats 54 million times before birth
	<input checked="" type="checkbox"/> Major circulatory changes
	<input checked="" type="checkbox"/> Spinal cord ends at third lumbar vertebrae
	<input type="checkbox"/> Brain weight 350 grams
	<input type="checkbox"/> Crown-heel length 50 cm
	<input type="checkbox"/> Fetus initiates labor
	<input type="checkbox"/> Head circumference 35 cm
	<input type="checkbox"/> Time to be born!