

Human Development

Part 3 : Weeks 21-40

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God's knitting project of human life is not done yet! Baby does lots of growing in the second half of pregnancy. Not only will he develop in many ways we can't see from the outside, but he will also start to be very visible in his mother's womb as he gains weight! He will go from three-fourths of a pound at 21 weeks to between six and nine pounds by the time he's born!

Our Creator masterfully designed a baby's development to build on itself. The most essential things grow first, and as time goes on, they develop further and become more complex. This gives babies who are born early the best chance at being able to live. With the help of God's gifts of medicine and science, babies born as early as 21 weeks have been able to survive!

Stages of Pregnancy



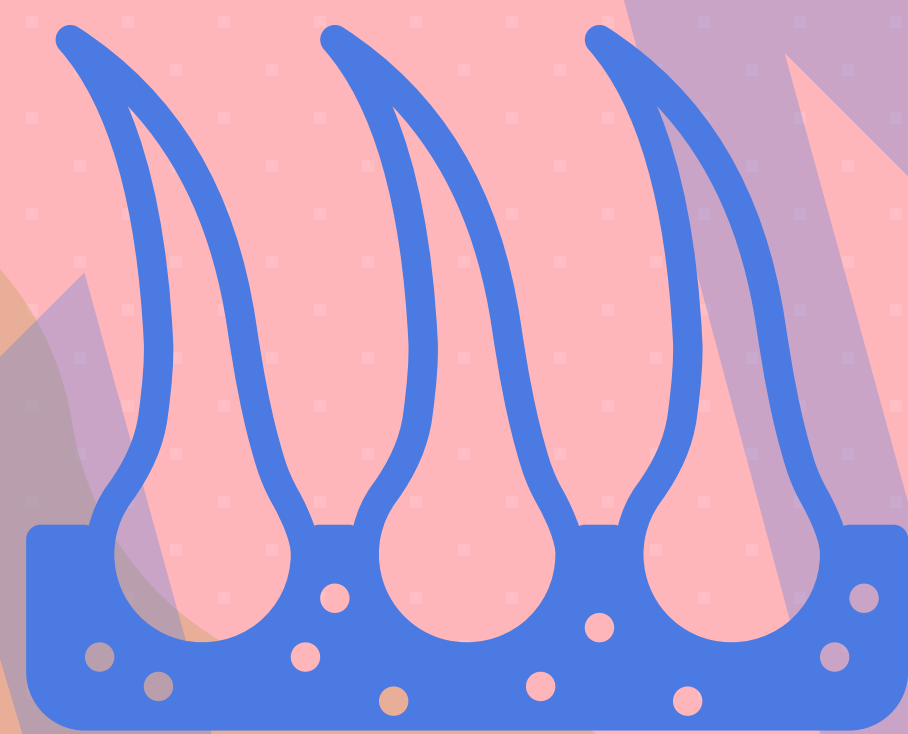
The placenta still provides the majority of baby's nourishment, but he now takes in small amounts of amniotic fluid, too.

Baby is now covered in lanugo, a fine hair that helps keep the vernix caseosa on the skin.



Baby's bone marrow continues to help develop the red blood cells that are being produced by the liver.

**Week
21**

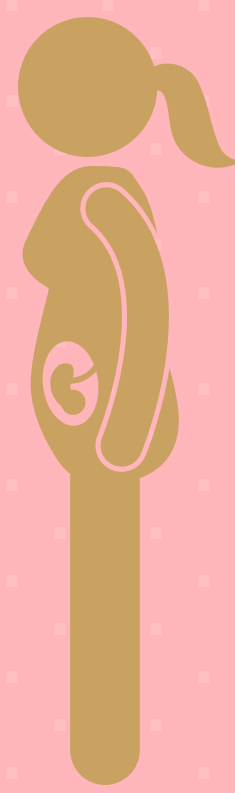


Baby's fingerprints and toeprints are fully formed and visible.



Though it's best for baby to stay in his mother, with intensive care and support, baby can even survive outside the womb at this stage!

Stages of Pregnancy



Week
22

Baby can taste what Mom eats and responds to different flavors.



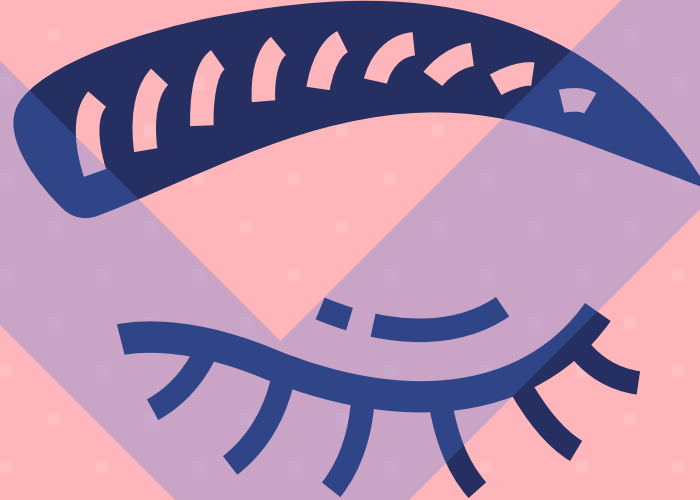
Baby's eyebrows and hair are visible.



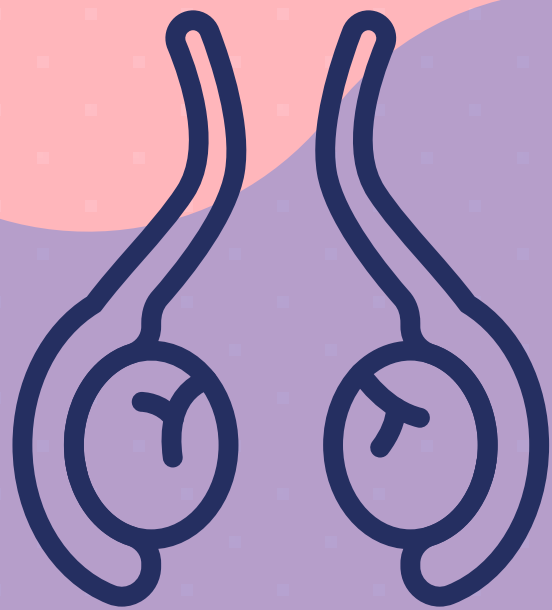
For male babies, the testes have started to descend from the abdomen into the scrotum.



Brown fat is forming, which produces heat for baby, and it will continue to do so even after he's been born.



His ears begin to process sounds.



Baby is getting better at grasping things. He will grab his ears, nose, and umbilical cord and continues to determine which hand will be his favorite.

Stages of Pregnancy

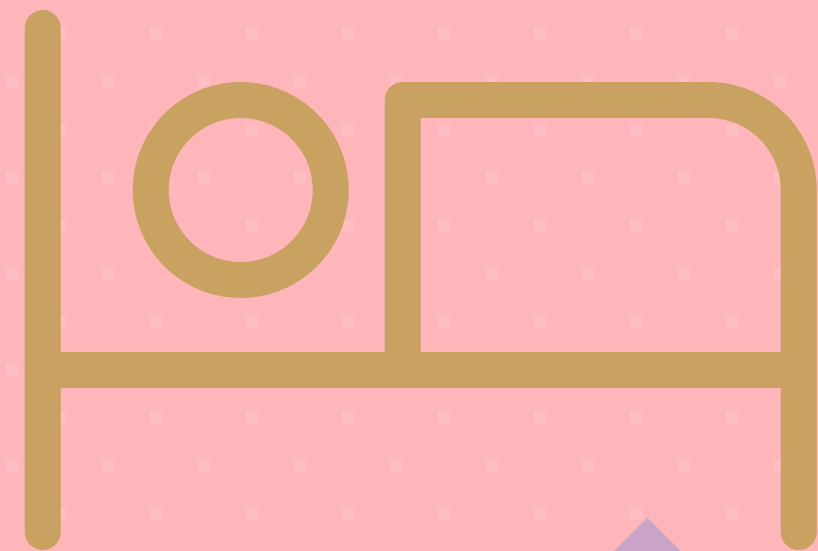


Baby's movements may be seen from the outside of Mom's belly as he continues to develop his muscles.

Baby's skin is wrinkled and has a pinkish-red color because of the visible blood in the capillaries.

He can smile and wrinkle his nose. When he hiccups, it looks like he's jumping in the womb.

**Weeks
23 & 24**



Baby begins to have rapid eye movement (REM) while sleeping. He has started dreaming!



Baby's hair, eyelashes, and eyebrows are white as the pigment hasn't developed yet. It will develop shortly before baby is born.

Stages of Pregnancy



Week
25

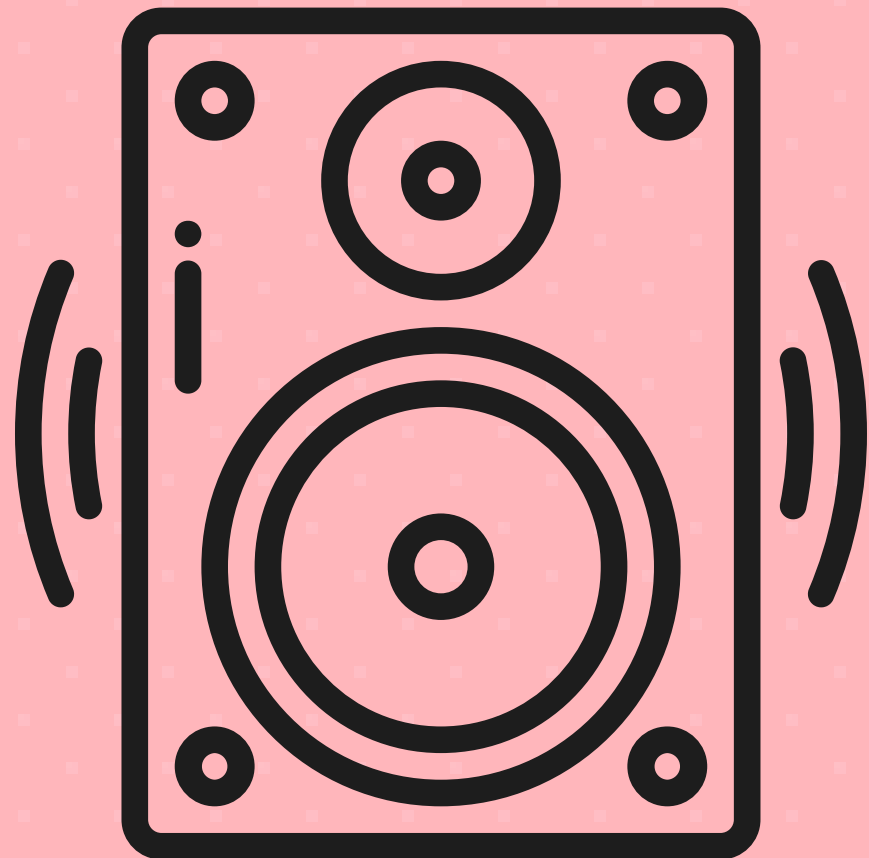
Baby can recognize and respond to sounds like Mom's voice; he turns away from or toward stimuli such as light or pain.



Baby's startle reflexes are developing; he reacts to loud sounds and may move away from ultrasounds.



Most of baby's sleep is spent in the rapid eye movement (REM) cycle.



Stages of Pregnancy



Week
26



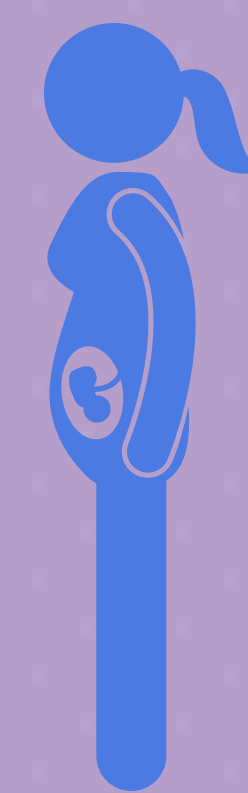
Baby breathes amniotic fluid in and out of his lungs to strengthen the muscles he will soon need to use to breathe air once outside his mother's womb!



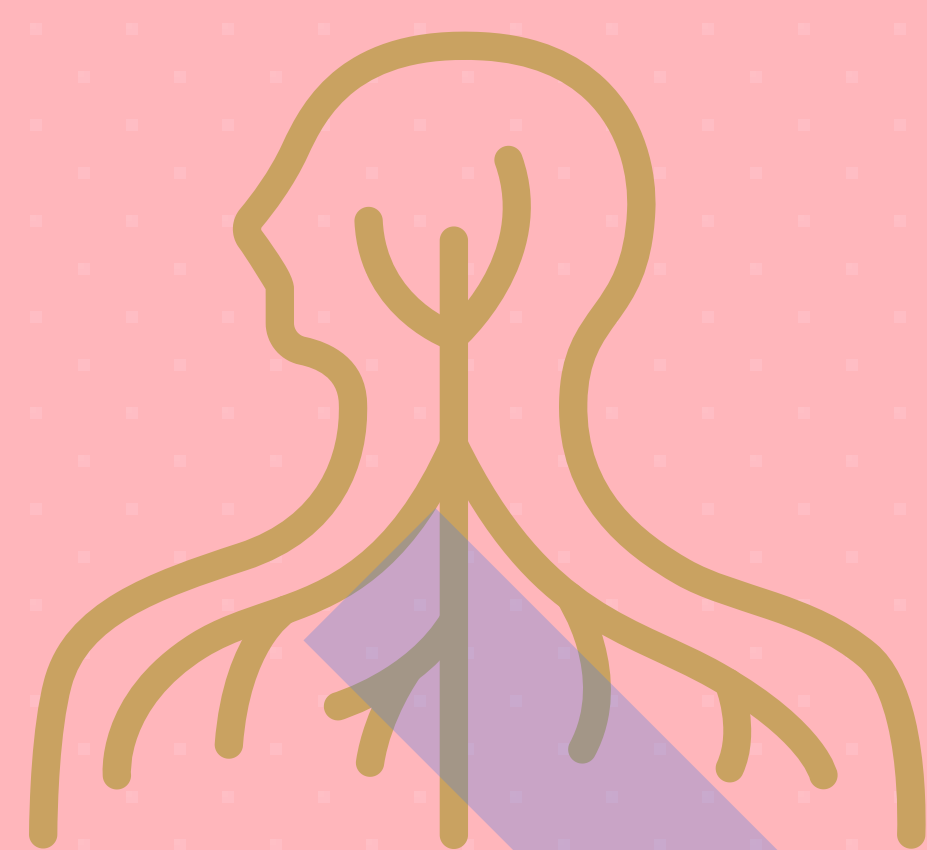
Baby's lungs are also beginning to produce surfactant, which allows the air sacs to inflate and deflate properly. This will be important for baby's breathing once he's born.

Baby is producing tears to keep his eyes moist. However, he won't produce tears when crying until a few weeks after birth!

Stages of Pregnancy

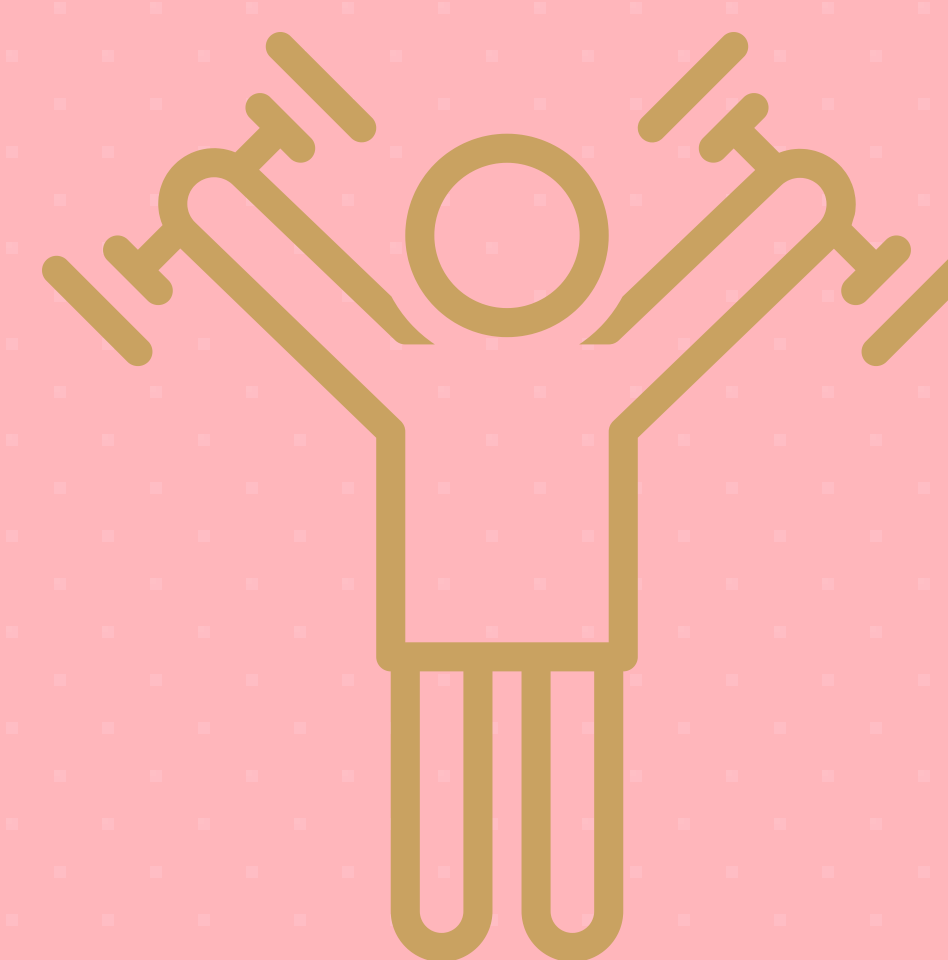


**Week
27**



Baby's nervous system continues to develop and mature.

He is gaining and storing fat, as well as developing muscle tone from all the moving he's been doing throughout pregnancy.



The end of this week marks the end of the second trimester!



Week 28

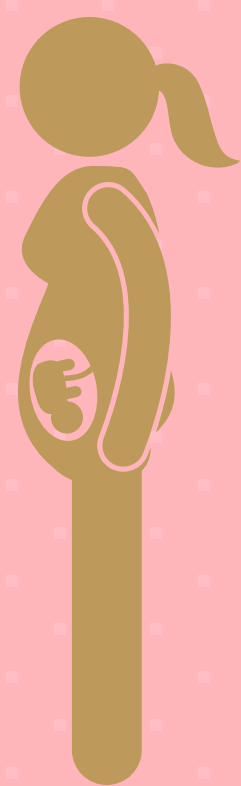
Baby's central nervous system can now direct rhythmic breathing, maintain a heart rate, and control his own body temperature. His heart beats twice as fast as his mother's, and his body temperature is an entire degree higher than hers!

Baby continues to make faces in the womb. Sticking his tongue out is a popular one.



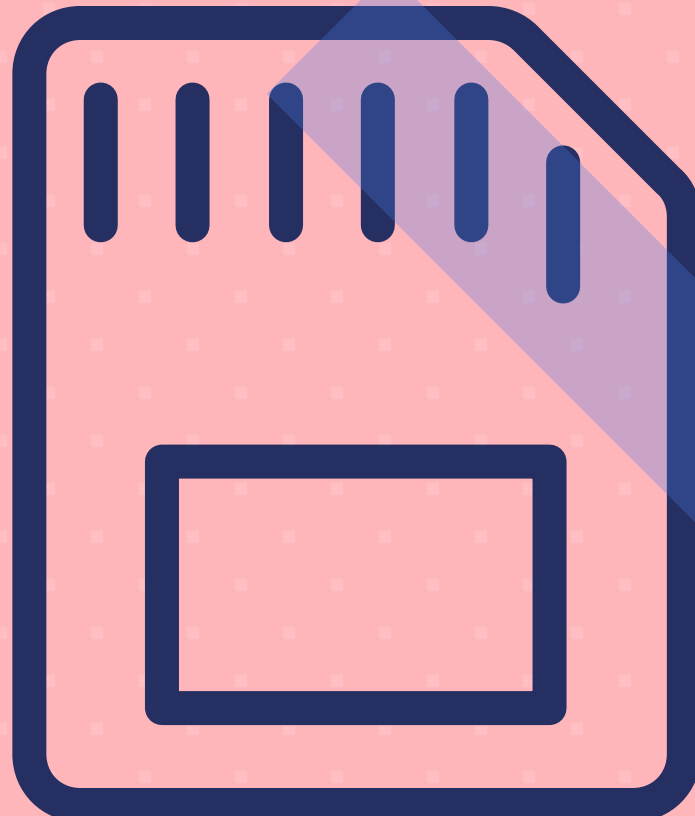
He can also hear the difference between high and low pitches as he encounters sounds.

Stages of Pregnancy



Week
29

Baby is kicking, stretching, and grasping, getting ready to move and groove outside the womb.



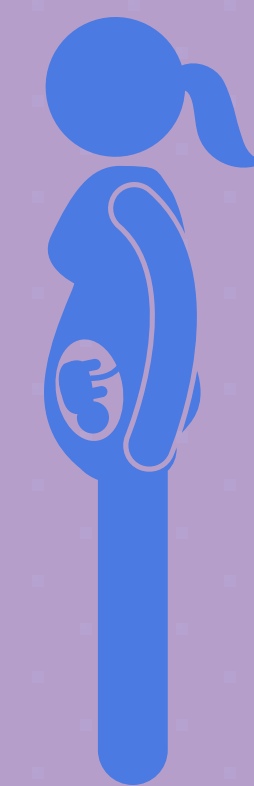
Baby may smile, especially while he is sleeping.



His brain is developing rapidly and can make its own memories.



Stages of Pregnancy



**Week
30**



Baby can see and hear, which will help him to learn about the world around him once he's been born.



Baby's head may be full of hair this week!

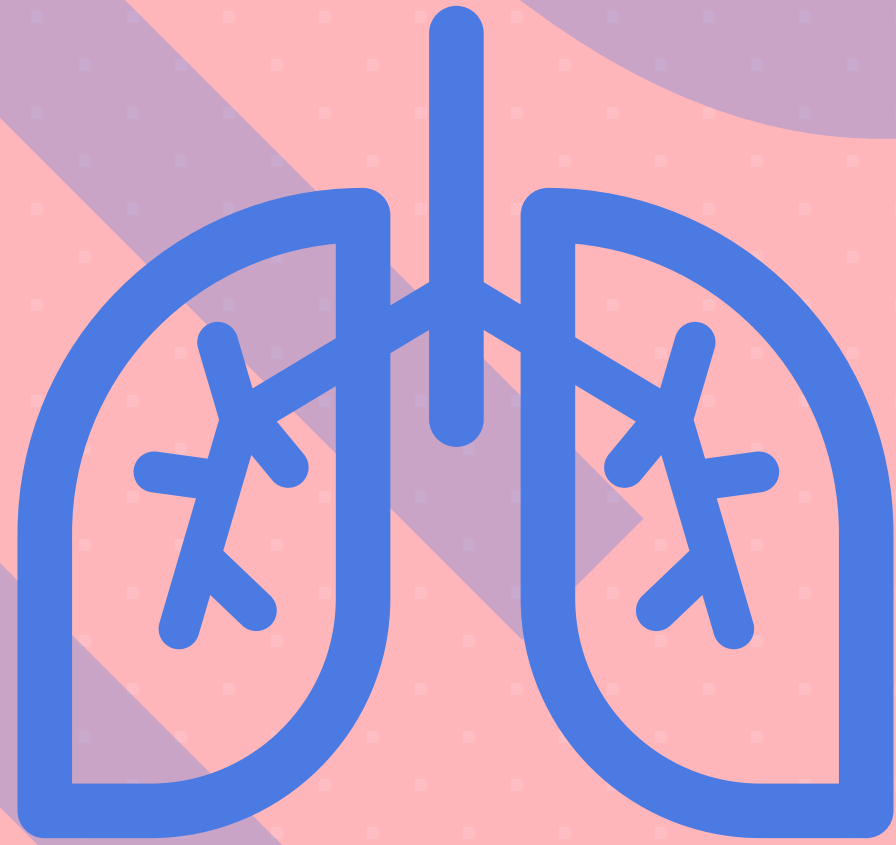


Baby's brain is wrinkling, forming convolutions, so that the brain can hold more brain cells.

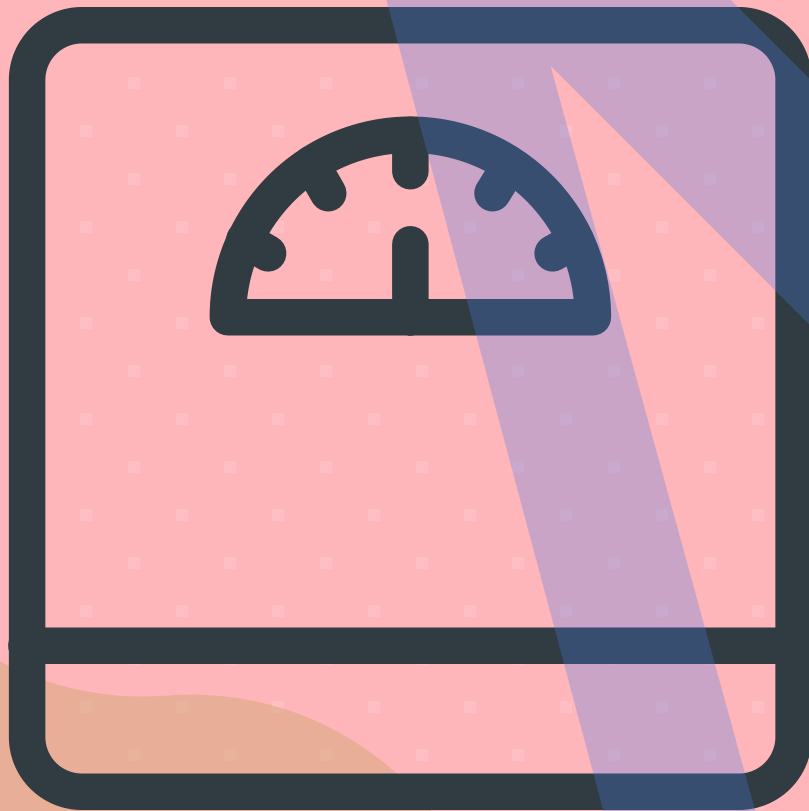


Baby can process information and notice signals from all five senses.

Baby has finished all of his major development and now starts to rapidly gain weight for life after birth.

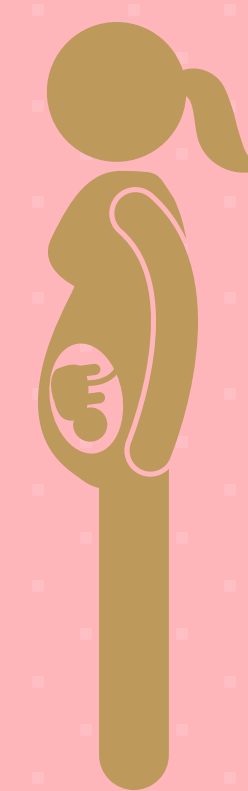


Week 31



While most internal systems are developed, baby's lungs may still be immature. He will need the next nine weeks for them to continue to develop so he's ready to breathe on his own.

Stages of Pregnancy



The lanugo that baby grew to keep the vernix in place begins to fall off this week in preparation for birth.



Baby's skin is no longer see through and takes on a pink tone.

Week
32

Baby's rolling and tumbling slows to squirming and wiggling as space is more limited. Between now and 38 weeks, he will settle into his position for birth—most likely head down!



Stages of Pregnancy



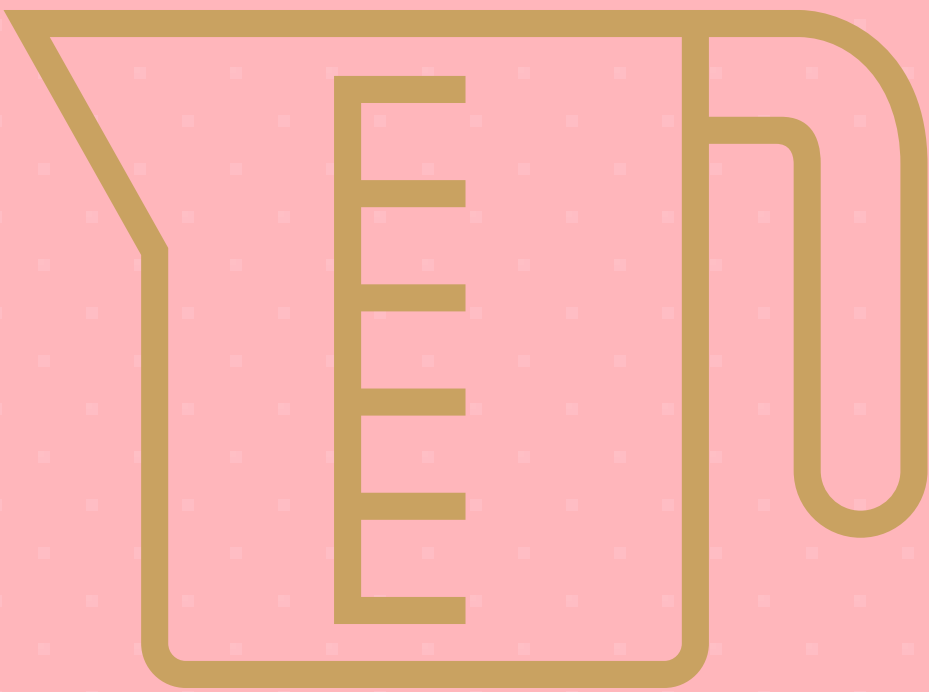
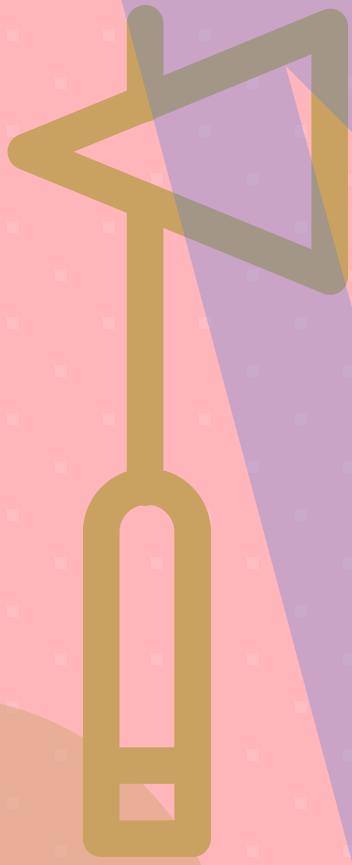
Baby has coordinated reflexes and can blink, close his eyes, turn his head, grasp firmly, and consistently respond to sounds, light, and touch.

Baby is swallowing up to a pint of amniotic fluid each day, which helps prepare his gastrointestinal system for birth.



Week 33

The plates of bone in baby's head are still pliable, making it easier for him to be born when the time comes.





**Week
34**



His lungs are close to being fully developed; the next few weeks will make them fully prepared.



The vernix covering baby's skin begins to thicken this week in preparation for birth.

Baby's fingernails have grown as long as his fingertips!



Baby is starting to develop a sleep schedule, closing his eyes when he sleeps and opening them when he's awake.



Stages of Pregnancy



Baby's skin has smoothed out, and his limbs have a chubby appearance.

Baby keeps adding fat, so he's able to stay warm once he's been born.



Weeks
35 &
36

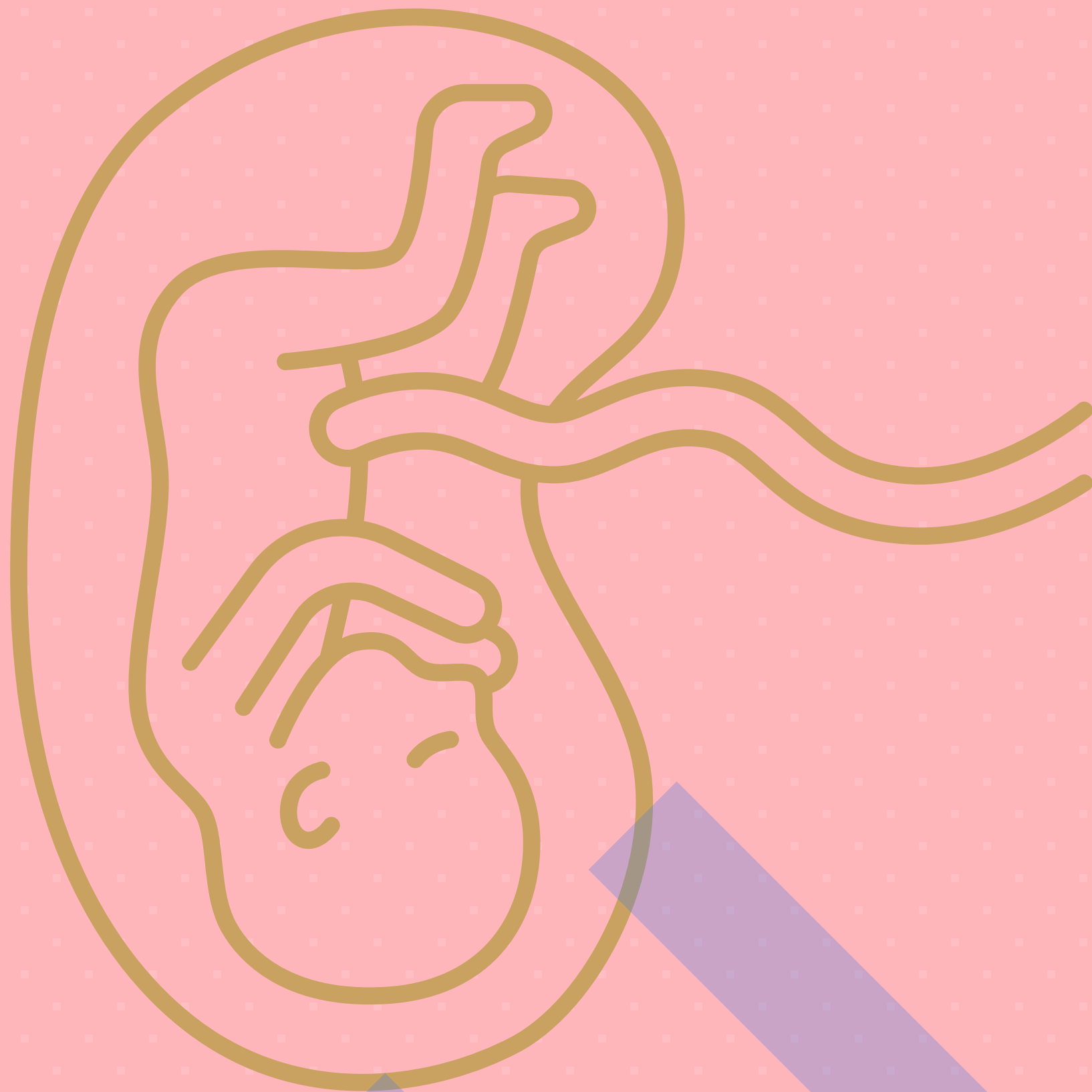


Baby takes up most of the room in the amniotic sac at this point, making punching and kicking much harder for baby, though he still stretches and wiggles.

Baby's hearing has sharpened, and he will be able to recognize Mom and Dad's voices, as well as favorite songs, after birth.

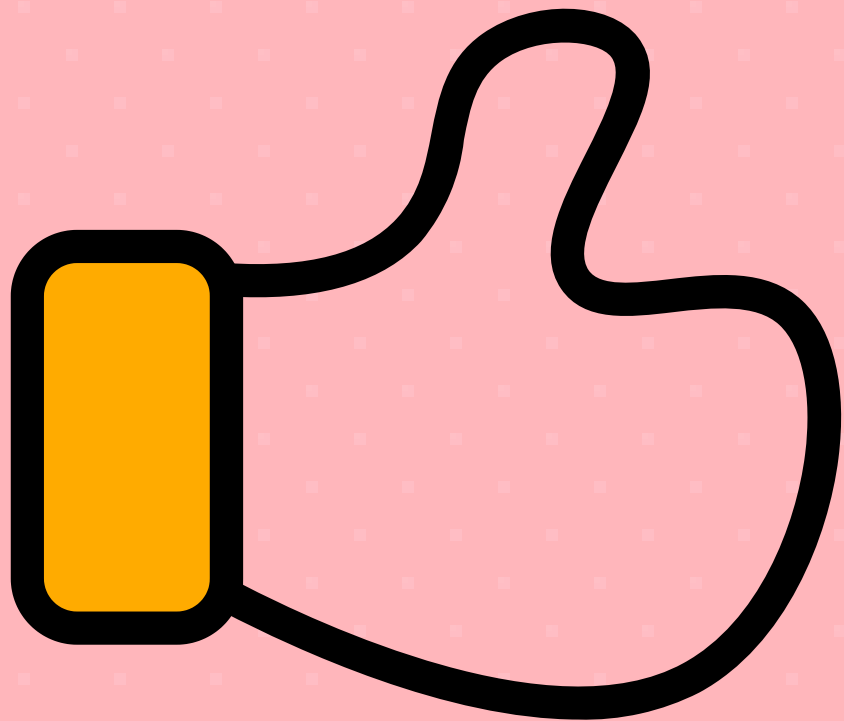


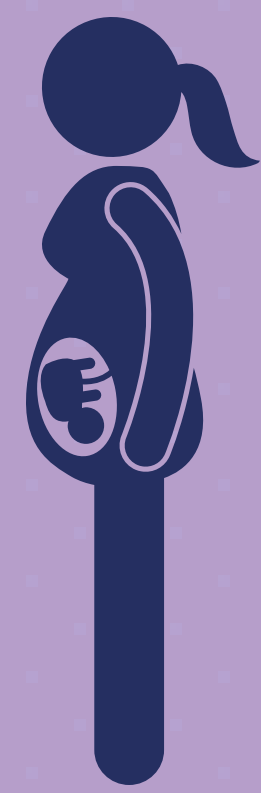
Week
37



Baby is probably doing a lot of thumb-sucking this week, preparing to eat after birth.

Baby is likely turned head down by now. He's in position to be born.





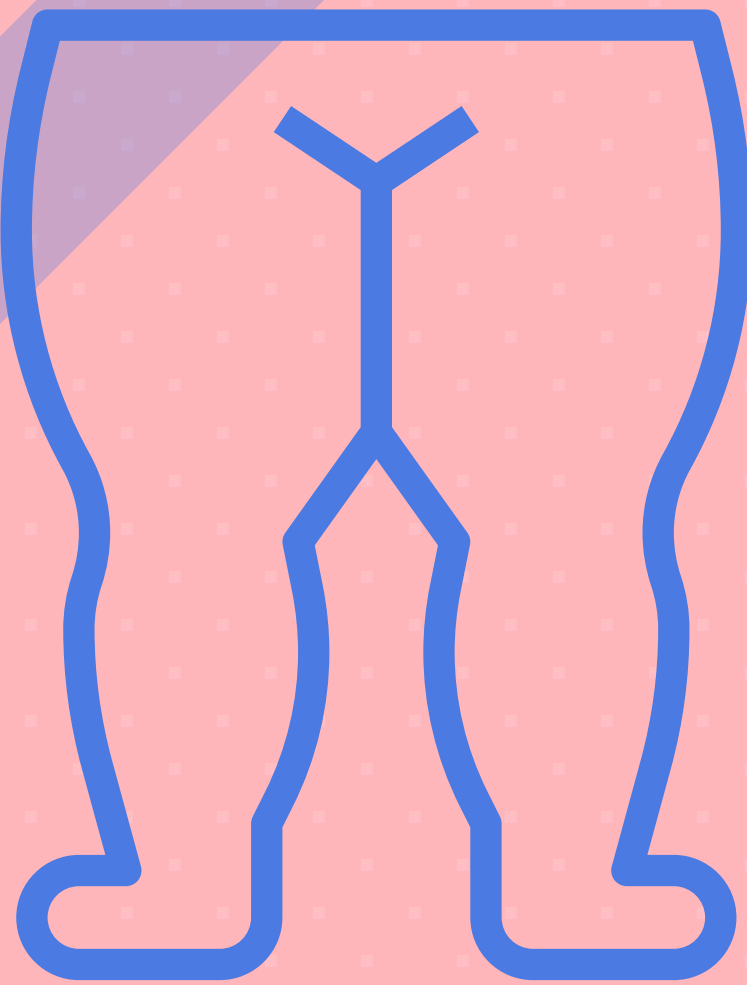
**Week
38**

Baby's eyes have pigment—blue, gray, or brown—but may change color or shade once exposed to light. Baby's eye color will be their true color when he's around one year old.

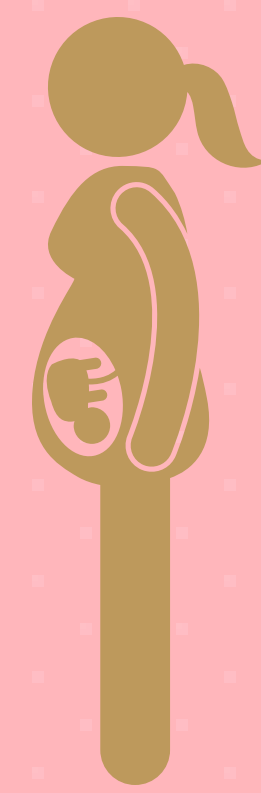
Baby's skin has smoothed out, and his limbs have a chubby appearance.



Baby's toenails have grown as long as the tips of his toes!



Most of the lanugo has been shed by this time, leaving only a little bit of vernix on baby's skin prior to birth.



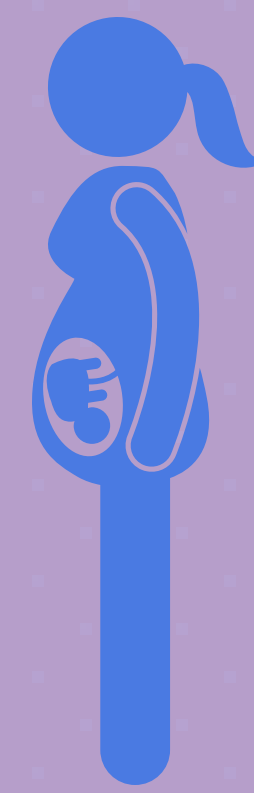
Baby continues to gain fat and is likely at his birth weight, somewhere between six and nine pounds on average.



Week
39

Baby's brain is undergoing rapid growth. It is 30% larger than it was four weeks ago!

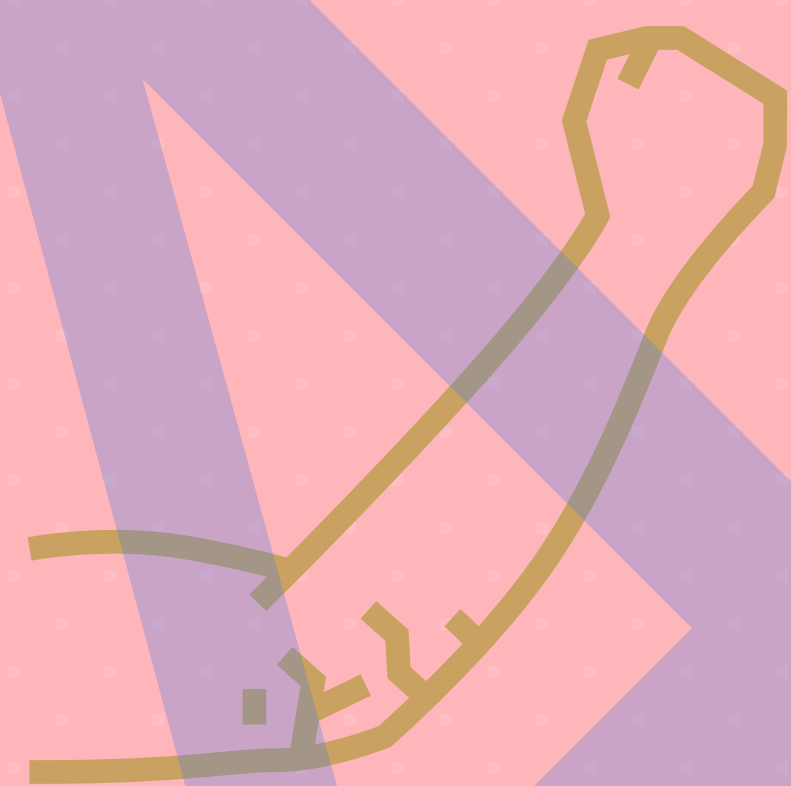
Stages of Pregnancy



Since baby has shed his lanugo and is losing the coating of vernix, he may have some dry spots on his skin once he is born.

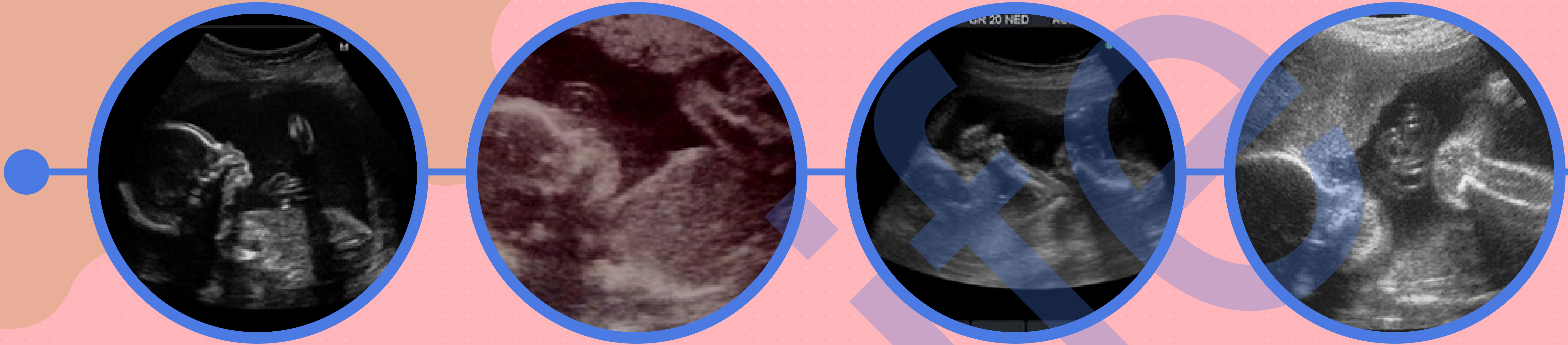
**Week
40**

Baby is ready to be born at any point between weeks 37 and 40! He indicates when it's time to arrive. His body sends out chemicals that instruct mom's body to deliver him!



Ultrasounds & Digital Renderings

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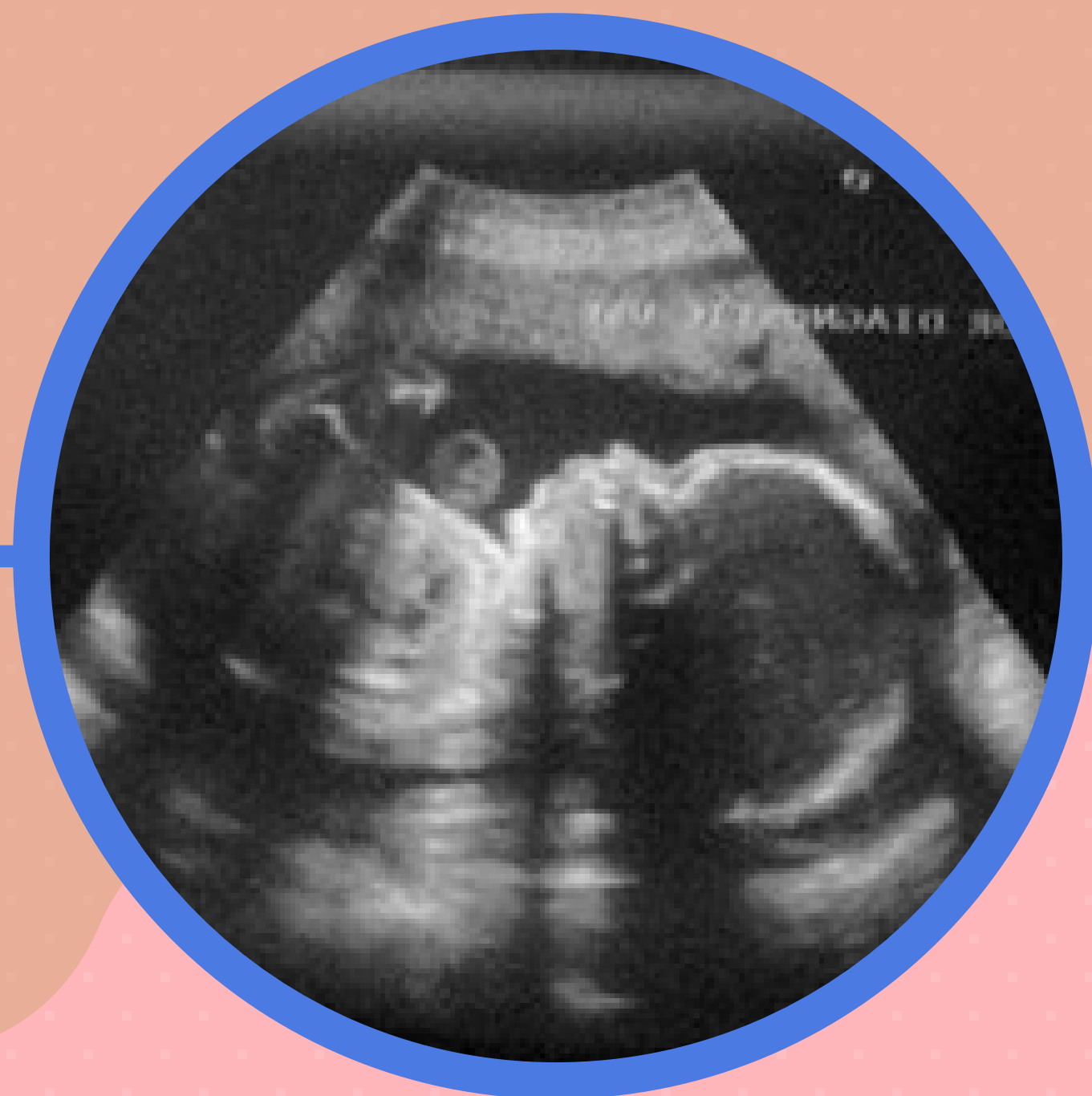
Week 21

Week 22

Week 23

Week 24





Week 25



Week 26



Week 27



Week 28





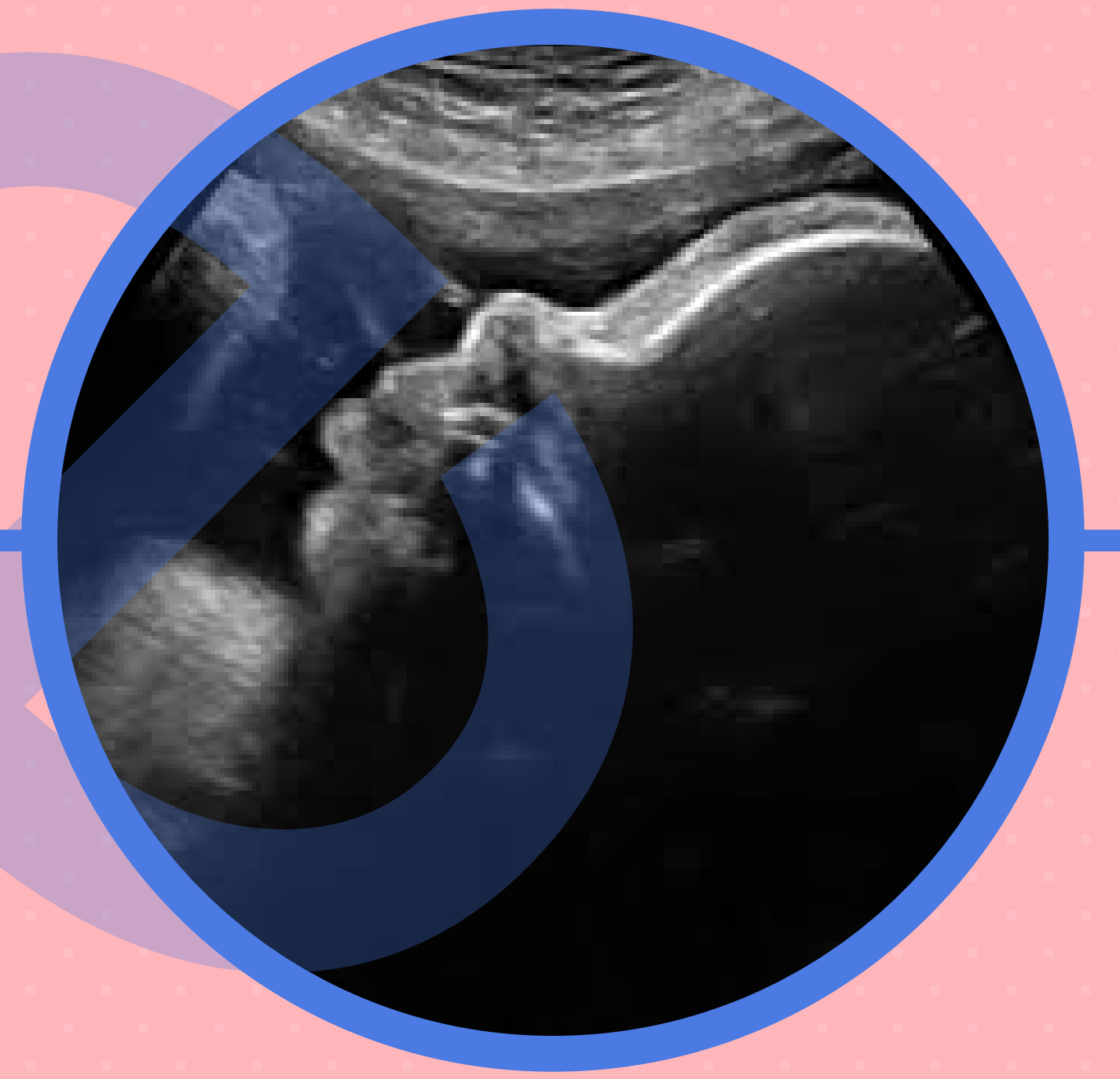
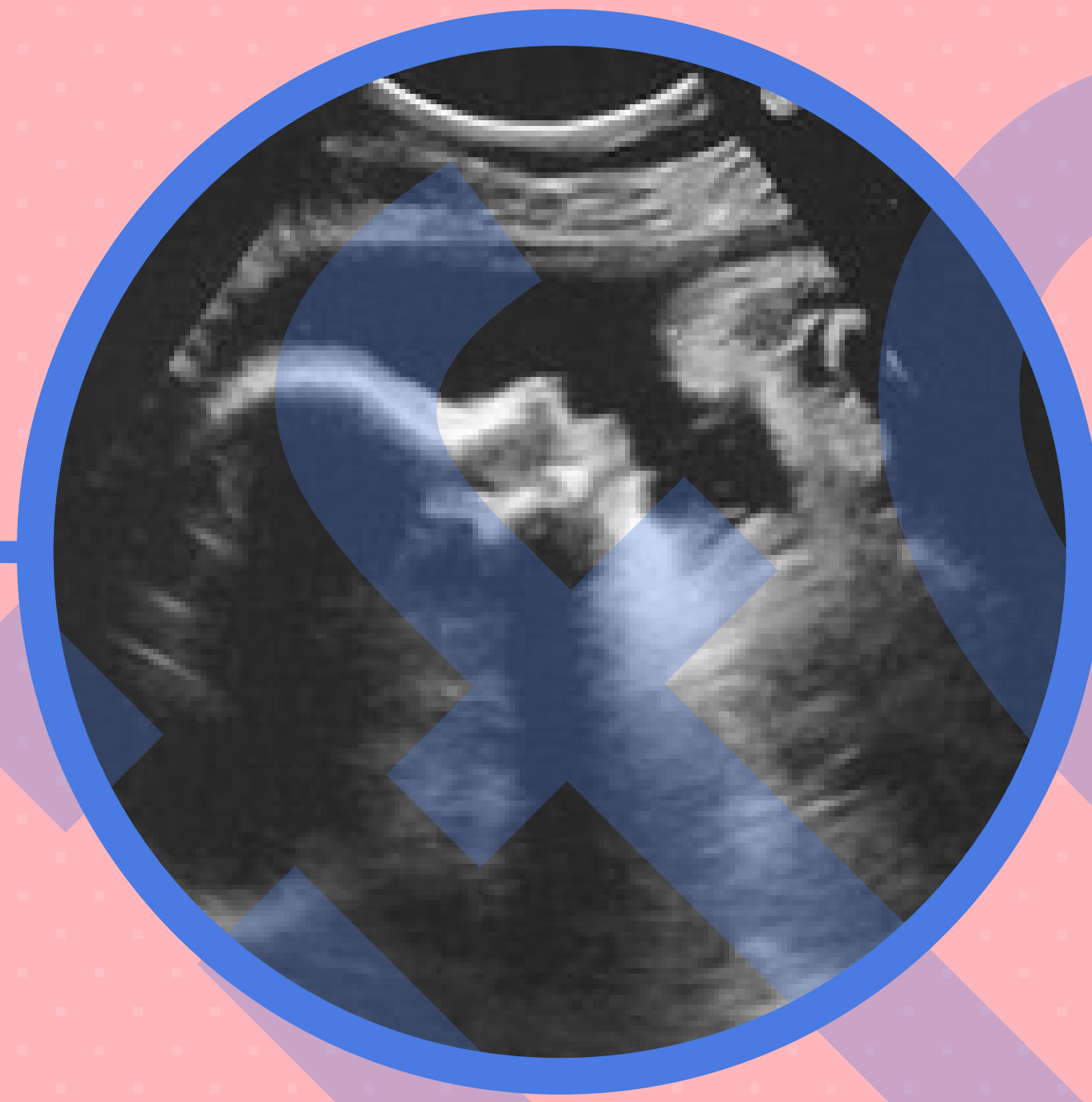
Week 29

Week 30

Week 31

Week 32





Week 33

Week 34

Week 35

Week 36





Week 37

Week 38

Week 39

Week 40



Baby has gone through many changes in 40 weeks. Starting as a single-celled zygote with his own unique and unrepeatable genetic make-up, baby has grown and is now a fetus with hair, vocal chords, and fingerprints. It's clear that God's design for life is not only good but miraculous.

God's ordered design for us gives us life, and His creative work gives us value. As we grow throughout life, God not only directs that growth, but also provides for us vocations, relationships, and roles that He places us in to serve others and uphold their lives.

Sources

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