ANATOMY STORY

Main activity procedure

Using the Magnel board (unsupplied) OR male and female anatomy cards to tell the below story about anatomy, conception and pregnancy.

Female anatomy

Start with the internal female anatomy. Begin at the ovaries and work your way to the outside of the vagina and then explain the external anatomy.

Explain: We are going to start with the inside of the female. This diagram shows the internal view of all the women's parts in the body. We are going to start here (point to ovaries) and work our way out. These two round shapes are the ovaries. Our ovaries are where all our eggs are that we need to make a baby. It's estimated that when we are born we have around 2 million eggs in our ovaries. When I say eggs, do you think I mean eggs like chicken eggs? No! They are very small—so small we need a special microscope to see them.

Here we have the fallopian tubes (point). You don't need to remember what they are called but these tubes are like the meeting place for the sperm (the male baby-making part) and the egg. We will come back to that in more detail. Do you know spaghetti? Do you know how spaghetti has a tiny hole in it? Well, in real life, the fallopian tube is only as small as that hole in the spaghetti. The diagram is just bigger so that you can see it! Next, we have the uterus, or womb, or baby bag (or insert other local lay/slang words) (point). This is where the baby grows. The uterus is about the same size as your fist. This part here is the opening to the womb/uterus. Its name is the cervix.

And down here is the vagina (point). That's right... the vagina is actually on the inside of the woman's body, not on the outside. The vagina is where period blood comes out ... it's the birth canal, where the baby comes out, and it's also where the penis goes in. The penis never goes into the uterus/womb.

So if the inside is called the "vagina" what the outside called? (Show external diagram.) The whole outside area's correct name is actually the vulva. We have the vagina or vagina opening here, so again, this is where period blood comes out, the baby comes out and where the penis goes in.

Unlike men, whose urine/wee and sex fluids come out of one hole in their penis, women actually have another hole where the wee comes out. This is very small and sits above the vaginal opening.

Above that we have the clitoris (point) which is purely for female sexual pleasure. It does not serve any other purpose. We then have the labia minor, or smaller inner lips, and labia majora, the outer larger lips. Both the smaller and larger labia cover and protect the rest of the vulva e.g. the urethra and vaginal opening.

So now we know the names and the basic function of the female parts. Let's have a quick look at how our period works and how babies are made.

Menstrual cycle

When we start going through puberty our body produces hormones. Hormones are like messengers that travel around the body and tell your body that it's time to start changing. You see lots of things happening on the outside of the body—like pimples, or hair growing, but these hormones also tell things to happen INSIDE your body too.

For women, the messengers tell the ovaries to start making the eggs "mature" or ready. At the same time the hormones tell the lining in the uterus to thicken up and get ready for the fertilised egg to implant. Around once a month, the most mature egg is released from the ovary and it travels down the fallopian tube to wait for the sperm.

Let's say this month this lady (point to the diagram) doesn't have sex, or maybe has sex with a condom. So there are no sperm and the egg doesn't get fertilised. The egg dissolves (lasting only 24 hours) as it is not

needed anymore and the uterus says, "all well, no baby so no need for this lining", and the lining in the uterus falls or sheds away. The lining being shed is what comes out as period blood/menstrual fluid.

So, when women have their period, the blood is often not a bright red blood like when you cut yourself. It's often different colours, like deep red or a brown colour and sometimes there are bits of tissue and blood clots in it. All of this is normal.

Okay, so now let's look at what is different if our lady here (point) DID have sex and was trying to have a baby (so wasn't using condoms or contraception). To do that, let's look at the man's sex parts ... (point).

Male anatomy

We will start here at the testes—or balls (point)! This is where sperm is produced/made. Unlike women, men are not born with all the sperm they need. When a young man's hormones kick in during puberty, they tell the testes to start making sperm. Have you ever heard people talk about a boy's "balls dropping" during puberty? This is because the testes actually do drop away from the body when boys hit puberty—this is because sperm can only be made at a certain temperature. When it's cold, the balls shrink up closer to the body to keep warm. When it's hot they hang away from the body to keep cool! The sperm develops here and when it's ready, it moves in to this bit here called the "Epididymis". This is where the sperm grows its tail!

Let's say our fella here is feeling sexy/having sex/feeling horny. The sperm travel up here and mixes with semen from the seminal vesical and the prostate gland. The semen is like the food for the sperm giving it all its energy for its journey to find the egg.

Before this happens though, the Cowper's gland here (point), also produces a fluid which is more commonly known as "pre cum". This is usually a clear looking fluid. Its job is to travel along the urethra, this tube here (point), and clean it out. This is really important because the urine/wee and the sperm have to travel through the same tube BUT acid kills sperm and our wee is acidic!

So pre-cum has the important job of cleaning out this tube making it ready and safe for the sperm. There is an important valve (like a tap) here (point to where the bladder opens into the urethra or draw the valve on your diagram) which stops the man from being able to wee and cum at the same time.

So, we now have our sperm, mixed with semen and the urethra is all clean and ready for the sperm to travel along. There are millions of sperm in a single ejaculation (meaning each time a man "cums"). If our fella and our lady here, are having sex, the sperm will now travel out of the penis here, and into the woman's vagina.

Conception

Using the women's anatomy chart now explain conception. Explain: The sperm now has the task of finding the egg. The sperm travels up through the cervix, into the womb and up in to the fallopian tubes looking for the egg. If the woman is fertile (meaning if the egg has recently been released or is going to be released), then the sperm can live up to 5 DAYS travelling around inside the woman, searching for the egg. Ask the group, does anyone remember how long the egg hangs around waiting for the sperm? The correct answer is up to 24 hours. The fastest, strongest sperm reach the egg first. Once that sperm meets and enters the woman's egg, the egg goes hard, stopping any other sperm from also entering. So, it's only ever one sperm and one egg. Once that happens the egg starts dividing and dividing and dividing as it travels down in to the uterus to implant (show image of implantation).

You might wonder then, how are twins made? There are two different types of twins—identical and non-identical. For identical twins, we have just the one sperm and the one egg like the original story... . But when those cells start dividing, the egg splits into two, and continues to divide and divide developing into two babies and implanting in to the uterus. For non-identical twins, there need to be two eggs released that month, hanging around in the fallopian tubes; maybe two on this side (point), or one from each side ... and then those eggs have different sperm enter into them—one sperm per egg.

Those two eggs then start dividing and dividing and implant into the uterus separately.

Okay, back to our original lady, with one fertilised egg. The egg has now implanted into the uterus.

Pregnancy

Show image of baby growing, at 4–6 weeks.

So now we have a baby developing. It's only very small (6-weeks, 2–5mms). (Point out the placenta and the umbilical cord.) The nutrients from food eaten by the mother flows to the baby through the umbilical cord.

What the mum is eating and drinking is important as it supports the baby growing. Not smoking or drinking alcohol, or taking other drugs, is really important during pregnancy—these substances travel to the baby through the umbilical cord and affect the baby's growth and development. Babies can be born too early and have long term health problems and serious defects such as Foetal Alcohol Syndrome Disorder (FASD).

This is also why it's important that a woman finds out she is pregnant as soon as possible and gets check-ups and advice called "antenatal care" from the health service.

The clinic will check for infections and other health problems that she may not know about which can make the baby very sick or even die if not treated. Early antenatal care is important for a healthy pregnancy and a healthy baby.

Point out the amniotic sac. The amniotic sac is filled with clear, pale straw-coloured fluid, which the unborn baby floats and moves in. The amniotic fluid helps to cushion the baby from bumps and injury, as well as providing them with fluids that they can breathe and swallow. It also helps the baby's muscles and bones to develop and maintains a constant temperature for the baby.

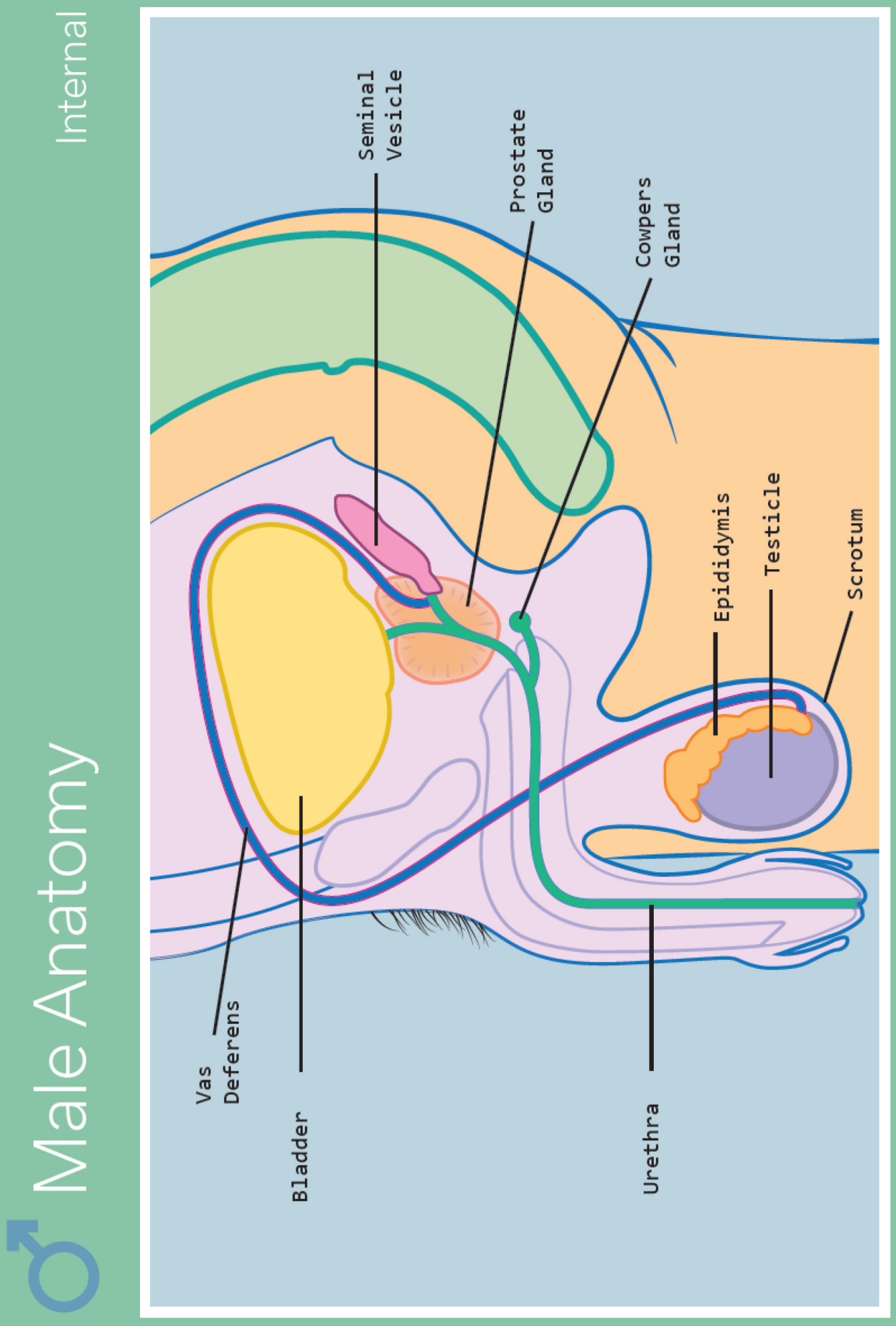
As you show images of the baby developing, just briefly touch on the key developments over the three trimesters.

1st trimester	weeks 1–12	Baby's organs and major limbs forming and developing. The heart starts beating and your baby is fully formed with all its fingers and toes.
2nd trimester	weeks 13–28	Organs, limbs and bones continue developing and maturing and your baby can now hear sounds. During the second trimester the chance of miscarriage drops to 3%.
3rd trimester	weeks 29–40	Baby is putting on fat, lungs have finish developing, organs getting ready to function on their own. The lungs are ready to breathe by around 37 weeks.

Closing

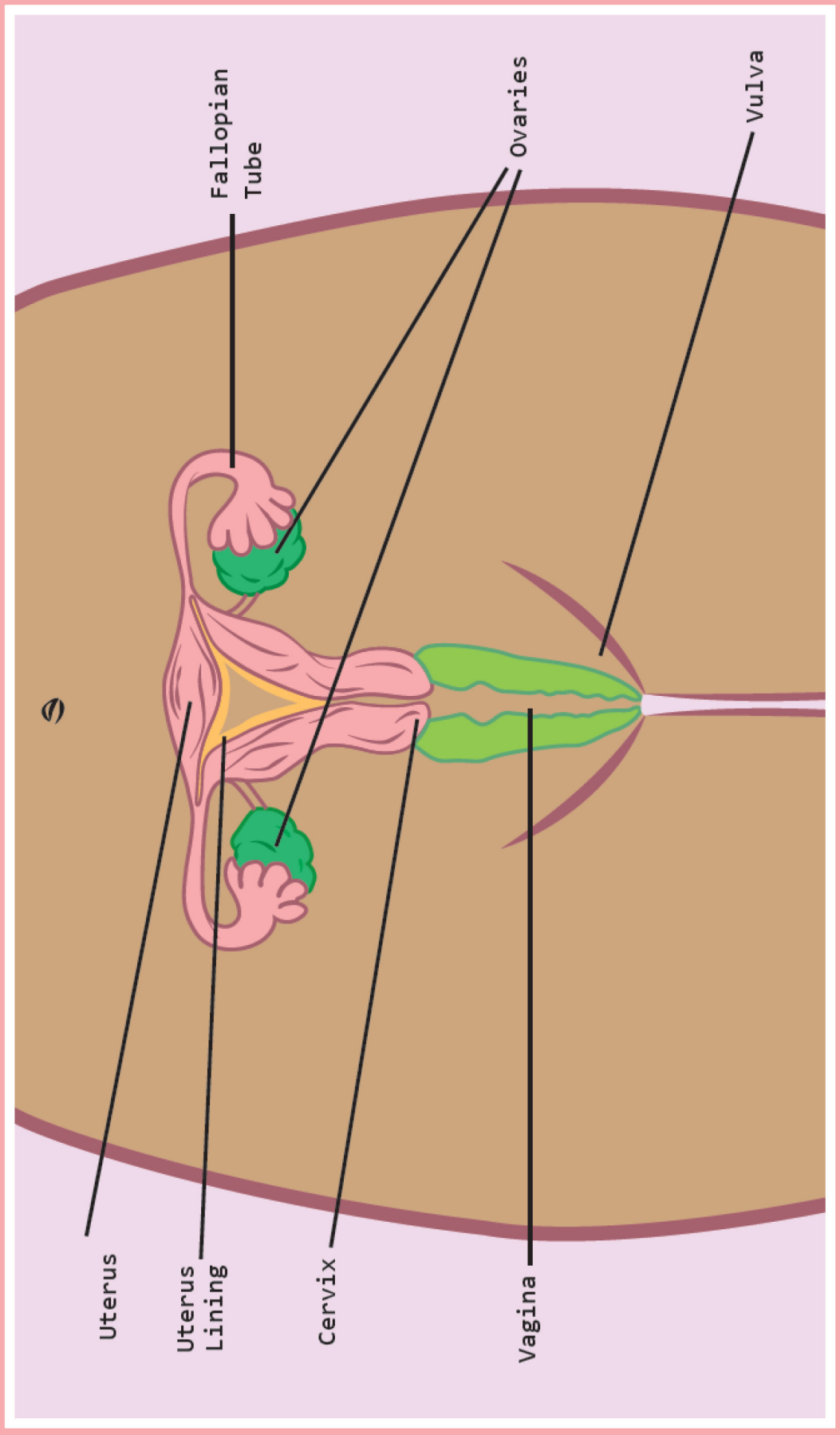
Give the group a final chance to ask further questions before you close. this basic understanding of how the male and female reproductive systems work will make understanding some of our other topics much easier. This information will also make answering questions about STIs or contraception easier. You can print and laminate the following anatomy cards.

Anatomy cards



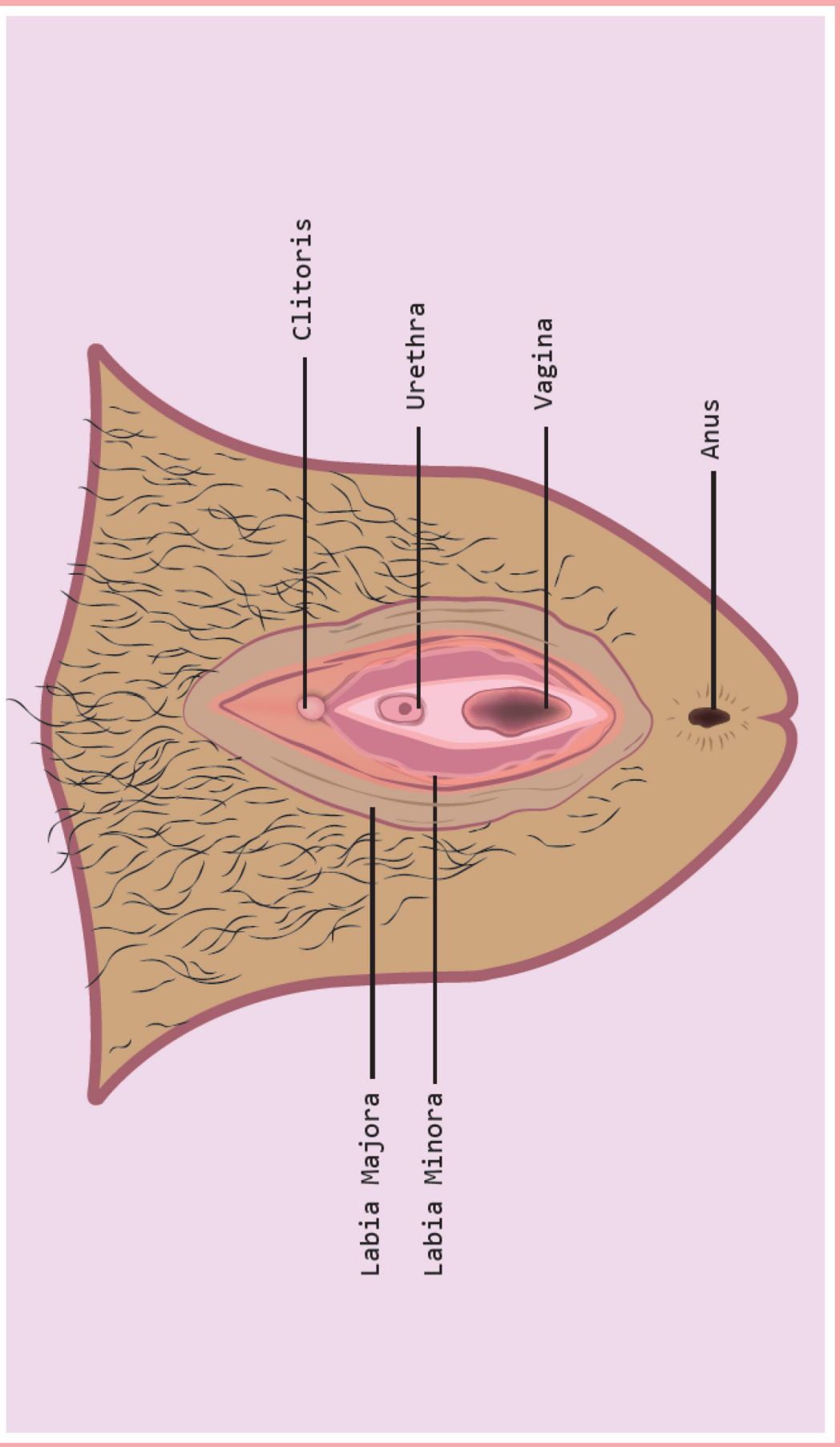
Female Anatomy

Internal



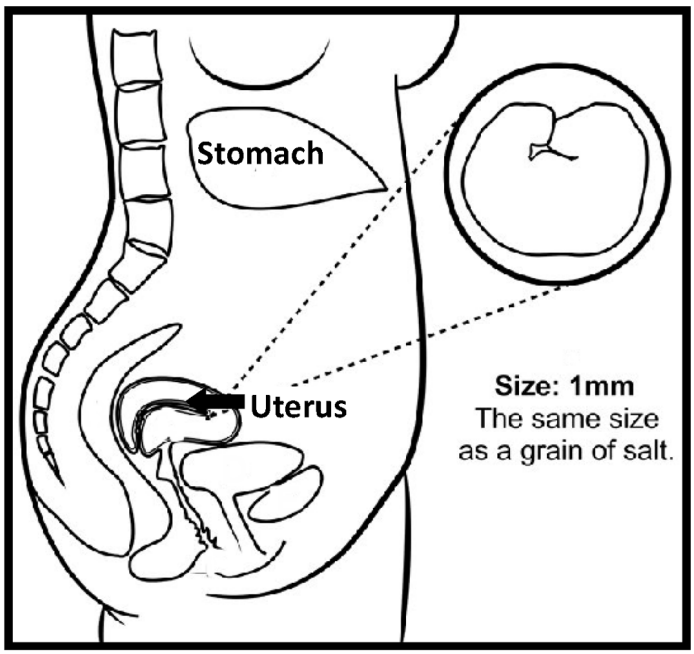
Female Anatomy

External

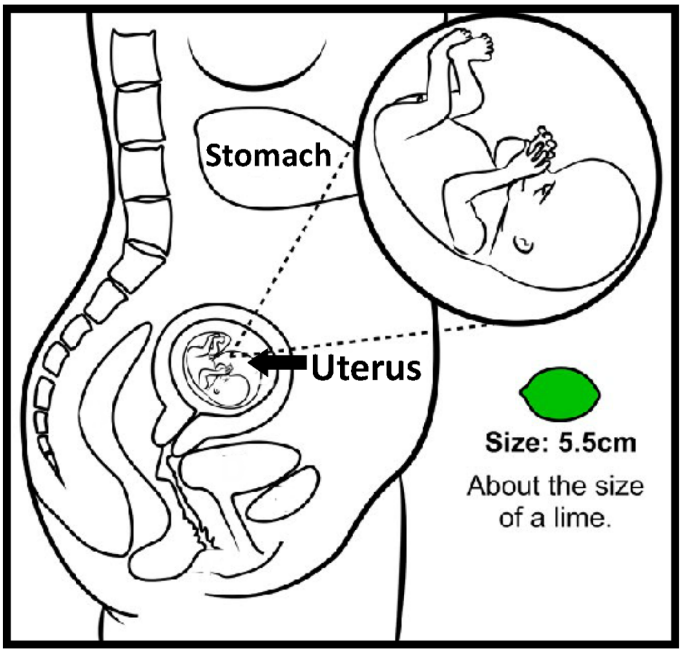


Pregnancy stages

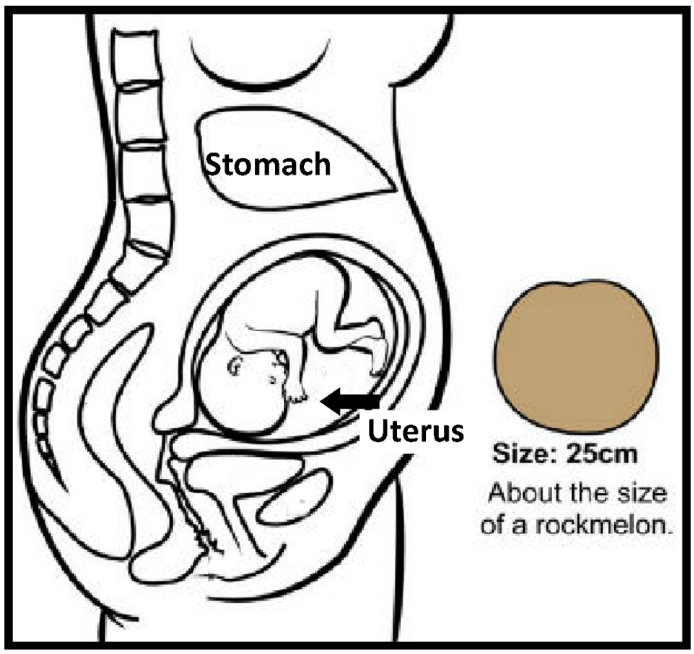
4 Weeks



12 Weeks



20 Weeks



40 Weeks (ready to be born)