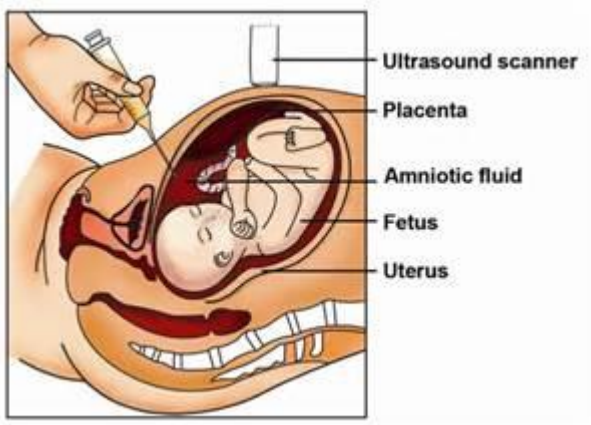
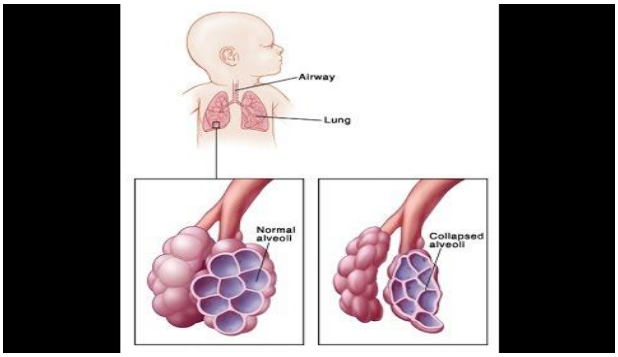
Amniocentesis: Perform to obtain amniotic fluid containing fetal cells; under direct visualization of ultrasound.	A thin needle is inserted through the abdominal and uterine walls to withdrawn amniotic fluid into a syringe (with cast-off cells) Sufficient fluid must be present for the test to be done (15-17 weeks' gestation and 12-14 weeks' gestation for some disorders).  	*Early Pregnancy* -Used to assess genetic disorders -Tests for level of alpha-fetoprotein (AFP), which is also present in maternal blood -High AFP levels found in neural tube defects such as spina bifida (incomplete development of skull and brain.) -Low levels of AFP associated with chromosol disorders or gestationaltrophoblastic disease *Late pregnancy* -Assesses for severity of maternal-fetal blood incompatibility and fetal lung maturity; RhoGAM given Rh-negative women -Minimal risk for absorption in late pregnancy but higher in early pregnancy -safety concerns: risk of infection, pregnancy loss (although slight), and needle injuries to fetus or placenta.
Lecithin/sphingomyelin (L/S) ratio: This test measures the amount of two substances, lecithin and sphingomyelin, that are found in the amniotic fluid during pregnancy. The two substances are surfactants. These are chemicals made by the lungs that let them to work properly. Without surfactants, the small air sacs in your lungs (alveoli) would collapse, preventing oxygen from entering the bloodstream.	You might have this test if you're pregnant and expected to deliver before 39 weeks or your healthcare provider doesn't know exactly how many weeks pregnant you are. Your provider probably won't order this test if your baby may be born at less than 32 week. At that point, his or her lungs will be immature regardless of test results. In a developing fetus, the lungs are the critical factor in finding out whether a baby is ready for life outside the womb. Many healthcare providers use lab tests to predict how mature the baby's lungs are before delivery.  	You may be at risk for early delivery if you have any of these conditions: • Gestational diabetes • High blood pressure in pregnancy • Your water breaks early (premature rupture of amniotic membranes) • The placenta can't fully support the developing fetus (placental insufficiency) • Rh disease (erythroblastosis)