## The Feto-Placental Clock and Events of Late Pregnancy: The Play

Screenplay adapted from Penny Simkin's Arrow and Carrie Kenner's The Feto-Placental Clock

Line	Who	Read Your Line Then Do This→	Toss Yarn Ball To
1	Babies	The baby starts everything! When baby is ready to be born, he will secrete a hormone called <i>CRH</i> (cortico-releasing hormone) which sends a chemical signal to the placenta.	Placentas
2	Placentas	When the placenta receives the chemical signal from baby, it will release estrogen and cortisol, two hormones that will help baby's lung's mature.	Babies
3	Babies	"Ahhnow I can breathe on my own!"	Placentas
4	Placentas	Now that the placenta is producing more estrogen, that chemical signal tells the uterus to	Uterus
5	Uterus	create more <i>oxytocin</i> receptor sites within the uterine muscle which means	Mothers
6	Mothers	I will have more Braxton Hicks contractions.	Placentas
7	Placentas	The increased estrogen production by the placenta also promotes the release of <i>prostaglandins</i> by the amniotic membranes. Prostaglandin is a hormone that produces enzymes that will	Uterus
8	Uterus	digest the collagen in the cervix, turning it to water, causing the cervix to soften and become thin.	Placentas
9	Placentas	In late pregnancy, the placental membranes normally become increasingly fragile, porous and permeable, which means	Mothers
10	Mothers	larger molecules from mother's bloodstream like iron and maternal antibodies can finally cross the placenta.	Babies
11	Babies	Baby will gain important immunities from mother and about six months worth of iron.	Keep
12	Babies	Baby is also gaining a special fat called "brown fat" that will help him or her regulate temperature after birth	Keep
13	Babies	Babies become capable of sucking in late pregnancy and that's great because	Mothers

14	Mothers	"My production of colostrum is increasing!"	Keep
15	Mothers	Mother's ovaries continue to secrete relaxin, a helpful hormone that relaxes all of mother's ligaments and cartilage during pregnancy, making the mother's pelvic joints wider and more mobile. That's especially important now because	Baby
16	Babies	Baby is descending and <i>engaging in the pelvis</i> , trying to find the best position for birth. This causes	Mother
17	Mothers	mother to experience a few of the classic complaints of late pregnancy: even more frequent urination and <i>lighter</i> , interrupted sleep.	Keep
18	Mothers	Mothers may have a <i>nesting urge</i> , which helps her prepare for impending parenthood and proves she has the energy available for labor.	Keep
19	Mothers	The increasing release of <i>prostaglandins from the amniotic membranes</i> may cause mother to have more frequent and softer bowel movements	Keep
20	Mothers	and more vaginal mucus since her cervix is softening, thinning and becoming stretchy	Keep
21	Mothers	and she may even see some <i>bloody show</i> , proving her cervix is changing and becoming ready.	Placentas
22	Placentas	The placenta begins making connexin, a hormone that helps the uterus contract in an efficient, coordinated way. These hormonal reactions will likely cause	Mothers
23	Mothers	Mother to have a restless backache before she has	Uterus
24	Uterus	Synchronized, progressing contractions which will eventually cause mother's cervix to open.	Keep