Unit 2 Key Area 2

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| **Hormone** | A chemical produced at one site and has an effect at another site |
| **Hormones are produced** | by endocrine glands |
| **Hormones control** | the onset of puberty, sperm production and the menstrual cycle |
| **The pituitary gland produces** | Follicle stimulating hormone, interstitial cell stimulating hormone and luteinising hormone |
| **FSH at the testes** |  promotes sperm production in the seminiferous tubles |
| **ICSH at the testes** | stimulates the interstitial cells to produce testosterone |
| **Testosterone stimulates** | sperm production in the seminiferous tubules and activates the prostate gland and seminal vesicles |
| **High concentration of testosterone** | inhibits the secretion of FSH and ICSH by the pituitary |
| **FSH at the ovaries** | stimulates the development and maturation of each follicle and the secretion of oestrogen by the ovary tissue |
| **LH at the ovaries** | triggers ovulation and the development of the corpus luteum from the follicle which in turn, secretes progesterone |
| **When the ovary wall secretes oestrogen it** | stimulates cell division of the endometrium, repair of the endometrium and stimulates the pituitary to secrete LH |
| **When to corpus luteum secretes progesterone it** | promotes development and vascularisation of the endometrium and inhibits secretion of FSH and LH by the pituitary |
| **The menstrual cycle lasts for** | 28 days |
| **High concentrations of Oestrogen trigger** | production of LH and FSH by the pituitary gland at approx “day 14” of the menstrual cycle |
| **High concentrations of LH** | around day 14 causes ovulation to occur |
| **The Follicular Phase is the** | first half of the menstruation cycle |
| **The Luteal Phase** |  is the second half of the menstruation cycle |
| **High levels of oestrogen and progesterone during the luteal phase** | inhibit the pituitary gland, so concentrations of FSH and LH drop and no new follicle develops at this time |
| **If fertilisation does not occur** | low levels of LH leads to degeneration of the corpus luteum. Oestrogen and progesterone levels also rapidly drop. |