Student 3.

Embryo Transfers

Embryo transfer allows the best quality cows to have a greater influence on the genetic enhancement of the herd [1].

1. Choose a cow with great genetics to be the donor cow, and a cow to be the surrogate (the cows that will have calve, but not be genetically related to the calf).
2. Give the donor cow FSH hormone, which will make the donor cow produce multiple eggs [2].
3. All the cows involved are given CIDRs to synchronise their reproductive cycles. A CIDR is inserted in the vagina of the cow and slowly releases the hormone progesterone, which puts the reproductive system on hold, by stopping the cow producing oestrogen [2].

5. After a period of time, the CIDR is removed and two days later the reproductive cycle starts up again with the release of eggs.
6. The donor cow is then artificially inseminated, fertilisation takes place and embryos will form.
7. Through key hole surgery, the embryos are flushed out into the uterus of the cow and are sucked up by a syringe.
8. Because the reproductive cycles of all the cows are at the same point in time, the embryos can be implanted into the surrogates cows straight away.
9. The embryo is implanted into the surrogates cow with a catheter that is inserted through the vagina, cervix and released in the uterus [3].
10. Normal pregnancy then continues.