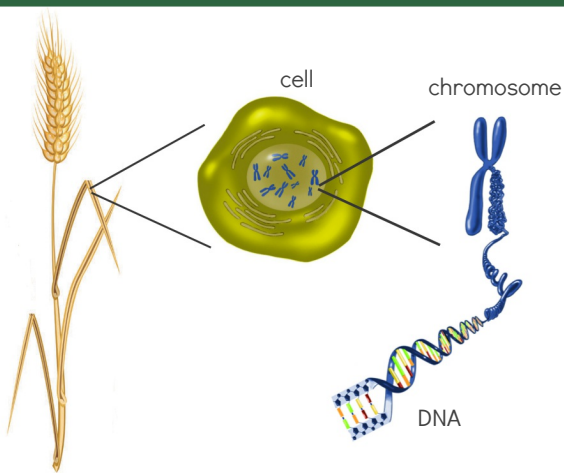


HOW TO SEPARATE CHROMOSOMES

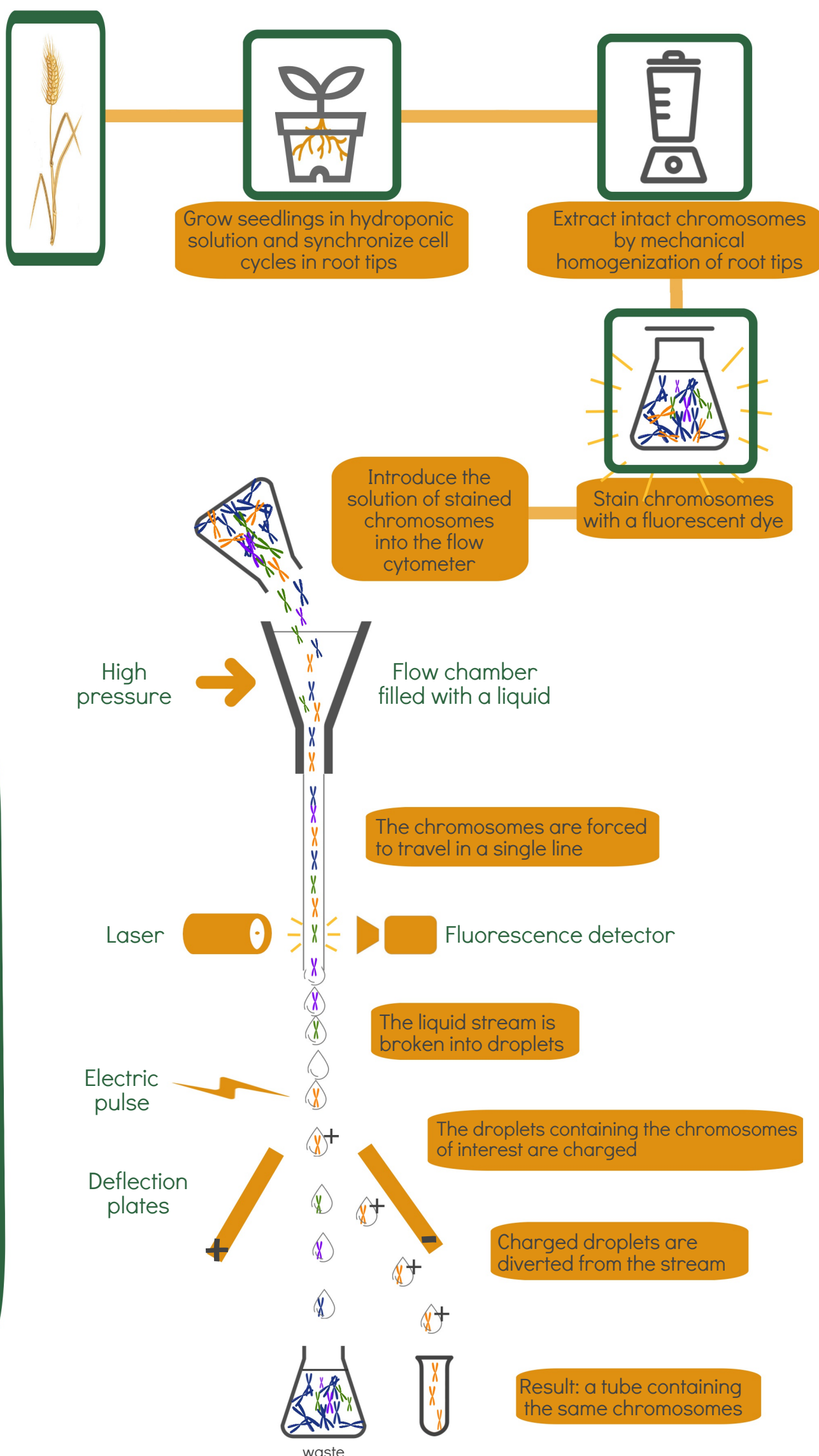
The basic materials used to sequence the wheat genome

Chromosomes hold the genetic information



- Chromosomes are structures located inside the nucleus of animal and plant cells.
- Chromosomes are made of DNA – the genetic information of the organism – tightly wrapped around proteins.
- In every living organism, cells divide to produce new cells or to replace old ones.
- During cell division, chromosomes are released from the nuclei and can be separated from each other.

Flow cytometry separates chromosomes one from another



Chromosome separation can be used in a range of applications

- Sequence large complex genomes, such as the wheat genome, chromosome by chromosome
- Make experiments cheaper and more targeted, by reducing the complexity of study samples
- Construct chromosomal physical maps
- Locate and isolate important genes in plants