## **SCIENCE 1.9**

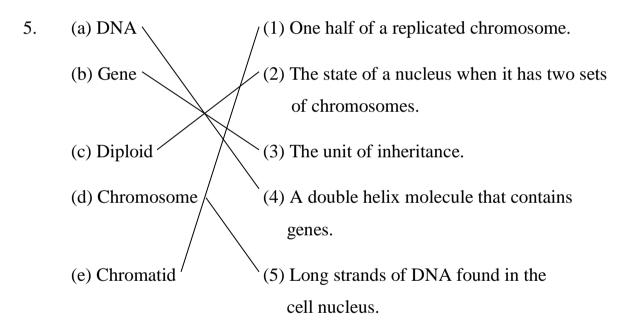
## ANSWERS

## WORKSHEET TWO

- 1. A human has 46 chromosomes or 23 pairs of chromosomes in a body cell.
- 2. Human sex cells contain half the number of chromosomes 23, (they are haploid), compared with body cells which contain 46.
- 3.

Organism	Egg	Sperm	Fertilised egg
Human	23	23	46
Koala	8	8	16
Tomato	12	12	24

4. Chromosomes are made up of genes (which are made up of DNA).



- 6. Before a cell divides each one of the chromosomes copies itself and forms two exact copies known as chromatids. These are held together by a centromere (a central point).
- 7. A karotype is a picture of the number of chromosomes an organism contains. The homologus pairs will be together and also the sex determining chromosomes will be shown, XY for a male, XX for a female. It can also be used to tell if an organism will have abnormalities because of an incorrect number of chromosomes.

## **CHROMOSOMES**