

INTRODUCTION TO GENETICS

WHAT IS YOUR GENOME?

- Your genome can be thought of as a book that contains the instructions to life.
- Chromosomes are the chapters in this book.
- DNA are the words written across the pages.
- The 3,000,000,000 units of DNA that make up your genome are packaged into 23 pairs of chromosomes and exist in every cell of your body

WHAT ARE GENES & WHAT DO THEY DO?

- Genes are important paragraphs interspersed throughout the book and only makeup 1.5% of your genome. You have 20,000 – 25,000 genes.
- Genes contain information for human traits and the biological building blocks for your cells.
- DNA

 AACGAC TACATCC GGATGA

 RNA

 TAGCTG ATGTAGG CGTACA



- To make these building blocks, your body makes a photocopy of the required paragraphs, generating a copy of the gene called **RNA**
- The RNA, is then used by your body to make your biological building blocks called proteins.