# WE STUDY CELLS AND THE SUBSTANCES INSIDE THEM, SO THAT WE CAN BETTER UNDERSTAND THE LIVING BODY, HOW IT WORKS AND WHAT LEADS TO GOOD HEALTH.

## FIND-A-WORD

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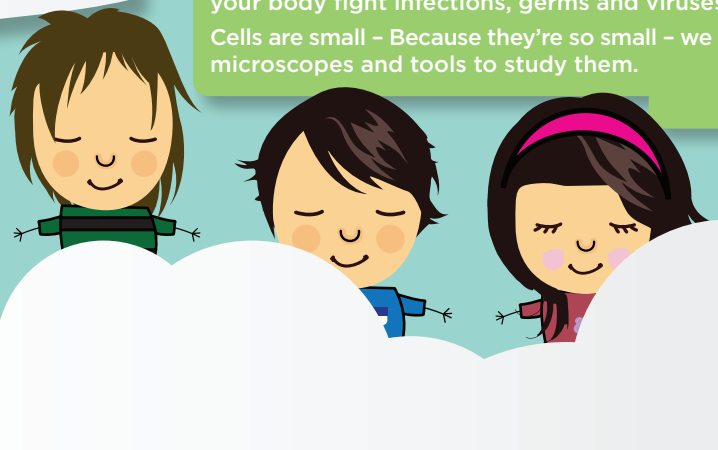
|---|---|---|---|---|---|---|---|---|---|
| J | B | O | N | E | U | C | L | O | M |
| S | W | M | U | S | C | L | E | S | I |
| M | N | A | N | O | S | E | G | T | C |
| A | U | U | V | B | Z | X | E | F | R |
| L | R | F | G | O | W | H | R | C | O |
| L | Q | H | N | D | C | E | M | L | S |
| L | I | F | E | Y | Q | A | S | R | C |
| L | R | W | Z | C | E | L | L | S | O |
| B | Q | C | M | E | Y | T | F | J | P |
| R | A | D | M | Z | B | H | S | Q | E |

CELLS
NANO
BONE
HEALTH
LIFE

MICROSCOPE
MUSCLES
BODY
GERMS
SMALL



## SIZING IT ALL UP


1cm (centimetre) = 10mm (millimetres) = 10,000µm (micrometres) = 10,000,000nm (nanometres). An ant is about 3mm in size or 3,000µm or 3,000,000nm

## CELLS – YOU, ME AND EVERY LIVING THING

Cells are the building blocks of life. They all work together to build you and every single living thing.

People, dogs, cats, trees, and flowers – everything that is alive is made up of cells!

The simplest living things consist of only one cell, like bacteria.

More complicated living organisms like people, are made up of trillions of cells!

There are many types of cells within a body, all with different jobs.

Lots of cells together can form tissue, bone, muscle, and other parts of your body.

Other cells (red blood cells) transport oxygen around your body.

White blood cells make up your immune system and help your body fight infections, germs and viruses.

Cells are small – Because they're so small – we need special microscopes and tools to study them.

## NANO = SUPER SMALL

Cells might be small – but the substances that do the work inside the cell are even smaller!

These substances are called molecules.

They are so small that we have a special term for them which is nano-sized.

Nano means 'one billionth' of something so a nanometre is one billionth of a metre!

The diameter of a piece of hair is about 100,000 nanometers thick, which is the same as 0.1mm!

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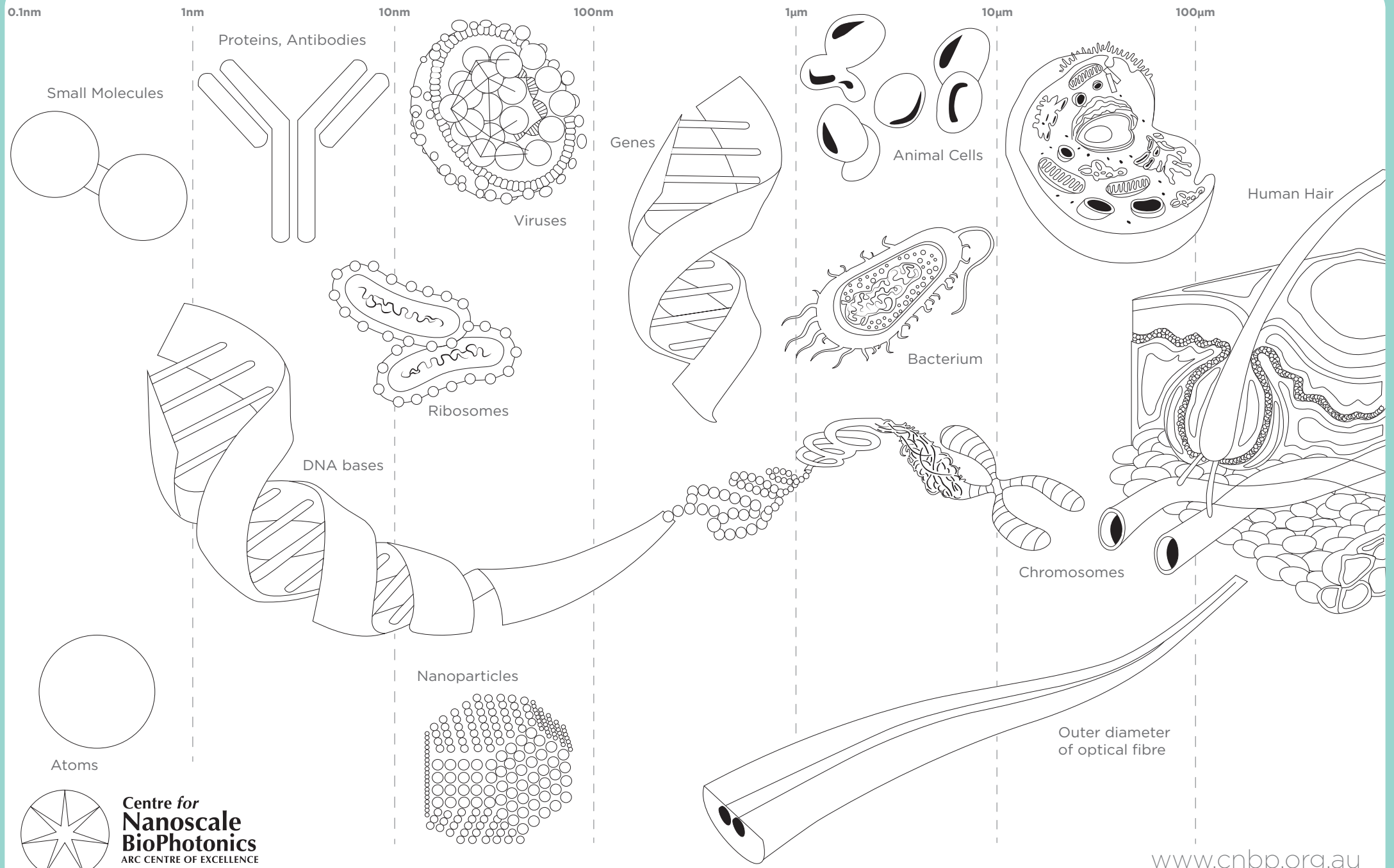
# A MATTER OF SCALE

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