

Six stages in cell division (above) — this is a process where a cell, called the parent cell, divides into two or more cells, called daughter cells. This is known as mitosis and the daughter cell is then capable of dividing again.



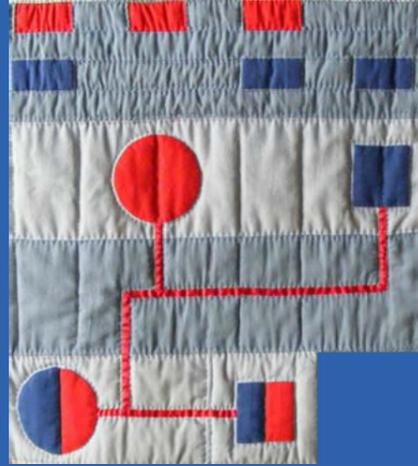
A chromosome is a single piece of DNA (Deoxyribonucleic acid). DNA contains the genetic instructions used in development and function of all known living organisms.



Humans have 23 pairs of chromosomes. Each parent contributes one chromosome to each pair, so children get half of their chromosomes from their mothers and half from their fathers. The small purple 'Y' chromosome on the far right means that this set belongs to a man.

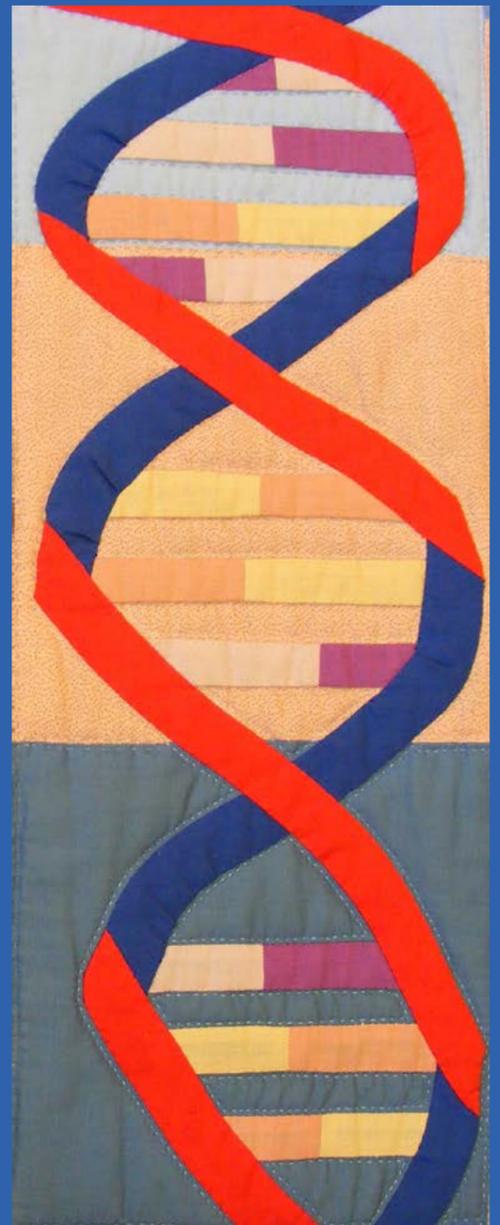
The DNA double helix which stores the genetic code.

The son in this family has inherited the blue gene from both parents but the daughter has not.



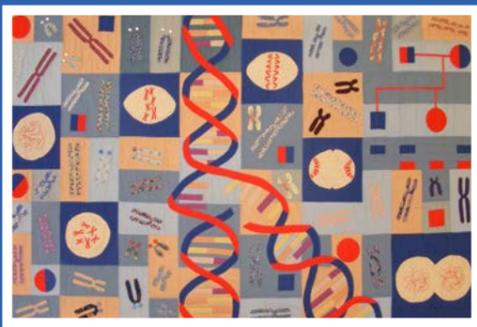
A pedigree diagram is used to represent genetic relationship. The squares are males and circles are females. Vertical lines extending down lead to children with the oldest generations at the top.

Use this leaflet as a guide to the symbols depicted on Pathology and Genetics quilt made by Sarum Quilters.



The pair of quilts in the Pathology waiting room were made by Sarum Quilters who are:

- Elisabeth Brandwood
- Annabelle Downing
- Eileen Dyson
- Margaret Eyres
- Elaine Fulford
- Sue Goodridge
- Diana Latham
- Nancy Latham
- Janet McCallum
- Jo Pearson
- Kate Shepherd



Designed by Janet McCallum & completed March 1992



ArtCare is the arts service for Salisbury Health Care NHS Trust and receives an annual donation from the Stars Appeal. Funds are also raised through exhibition sales and donations.

The arts contribute to a welcoming hospital environment and help to create a positive atmosphere for everyone.

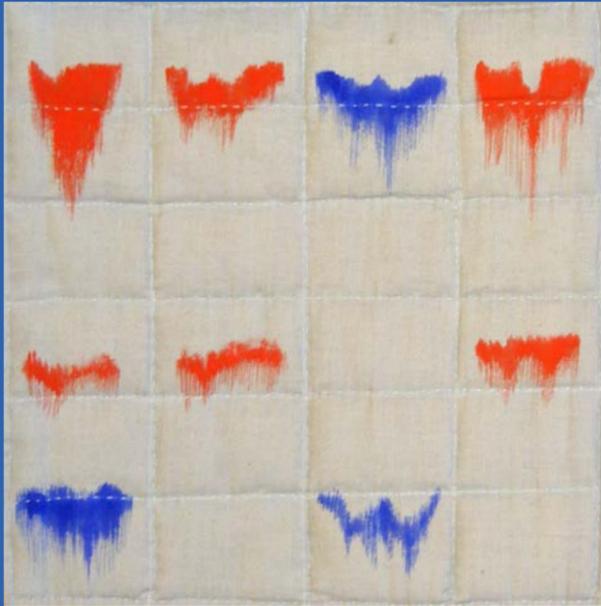
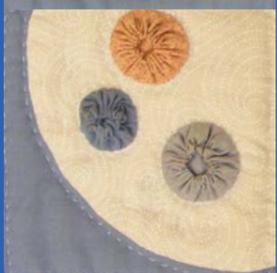
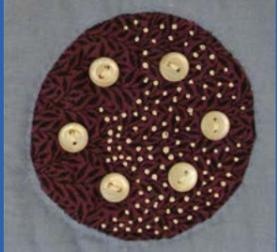
## About the artworks





From top to bottom (left) are some of the tools of the laboratories.

- Microscope slide
- Two Petri dishes with various moulds and bacteria (named after German bacteriologist Julius Petri)
- Test tubes



Graph



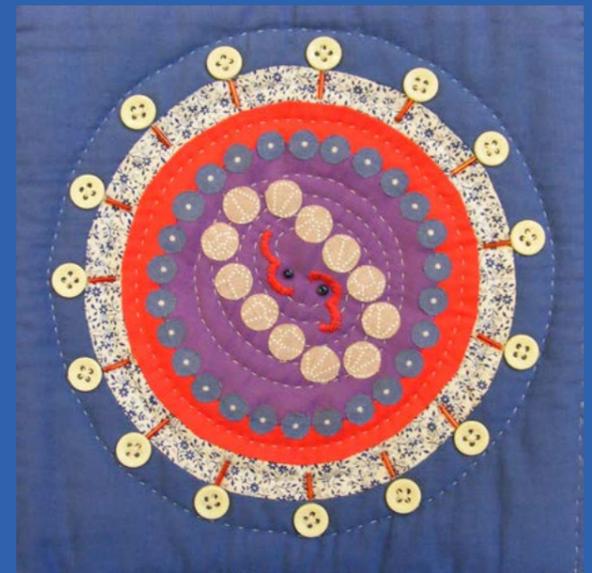
Chromatography is a technique for analysis of chemical substances. It shows how various components of the substance move through the adsorbent at different rates, according to their degree of attraction to it, and producing bands of colour.



Fungi are more closely related to animals than plants most fungi are largely invisible to the naked eye. Some are used as sources for antibiotics used in medicine



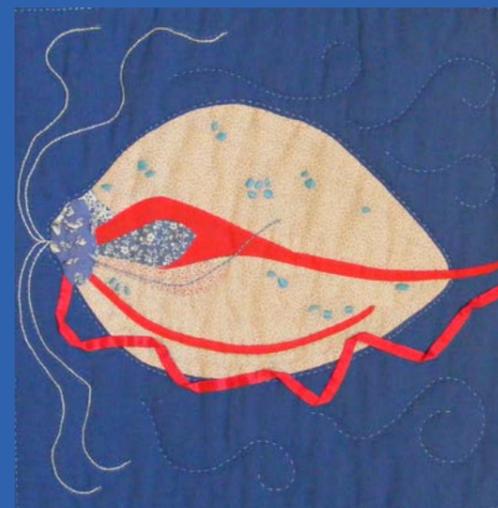
A slice through kidney tubules



AIDS virus (Acquired Immuno Deficiency Syndrome) and HIV (Human Immunodeficiency Virus), the virus that causes AIDS, was first discovered in 1981 and is one of the worst pandemics the world has ever known.



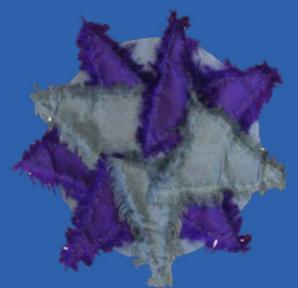
Anti-body diagram



Trichomonas parasite. A parasite is an organism that lives on or in an organism of another species, known as the host, from which it obtains nutriment.



White cells protect the body by fighting infection and attacking foreign material



A virus (from the latin virus meaning toxin or poison is a sub-microscopic infectious agent that is unable to grow or reproduce outside a host cell. Not all viruses cause disease.



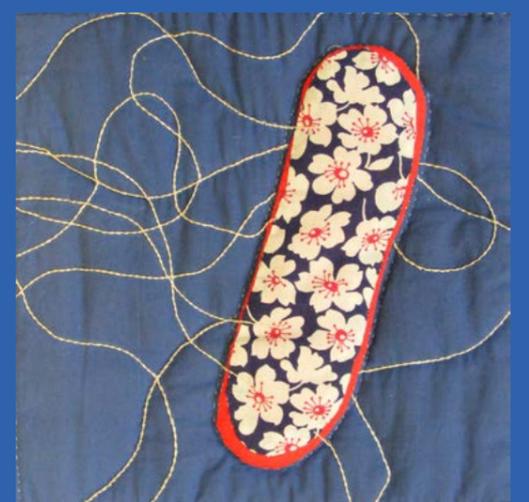
Bacteria are microorganisms that inhabit every environment on Earth: in soil, water, organic material, animals, humans and plants.



Platelets circulate in the blood of mammals and help the formation of blood clots.



Red blood cells are the most common type of blood cell and are the means of delivering oxygen to the body.



E-coli bacteria