- → For EXTRA Protection
- : Also has CELL MEMBRANE and CYTOPLASM
- **NO NUCLEUS**
- → Bacterium has genetic material in a SINGLE CHROMOSOME
- → <u>Circular Loop</u> shape
- : FLAGELLA allows some species to SWIM
- → NO Flagellum = Can't Swim/Move
- : PLASMIDS carry some of DNA
- → <u>Small Circular RINGS</u>
- → 75% of Bacteria have it
- : Contain a form of CHLOROPLAST
- → Can carry out Photosynthesis
- → Usually get energy from FEEDING off live or dead ORGANISMS
- : EXAMPLES Lactobacillus Bulgaricus (Used to make **YOGUHRT**)

- Pathogens (Used to spread DISEASE)

: Carries out MRS GREN

→ Can also respond to Stimuli (e.g. towards some food, away from poisonous chemical)

VIRUSES

Viruses = **PARASITES**

- : Can only reproduce INSIDE Living Cells
- Can live in PLANTS, ANIMALS or BACTERIA
- Size => Viruses < Bacteria
- : 0.01 to 0.1 micrometres wide
- Viruses are NOT made up of CELLS : They aren't species, they're TYPES



(Membrane from HOST

- NO Nucleus or Cytoplasm
- Genetic Material (DNA or RNA) makes up a few genes : All that's needed to reproduce
- The 'envelope' isn't made 'stolen' from HOST CELL
- DON'T do any of MRS GREN
 - : Except <u>REPRODUCTION</u> = border of a living thing/non-living chemical
 - → Takes over Host Cell and it's GENETIC MACHINERY
 - → Uses Machinery to make more Virus Cells >>> Host Cell Dies
 - → Particles are Released to take over other cells
- EXAMPLES: Flu, Measles, Mumps
- FIX: Immune System destroys viruses : Some Immune Systems attacked BY Virus (e.g. HIV)
- Also affects **Plants**
 - : TMV affects chloroplasts on Tobacco Plant