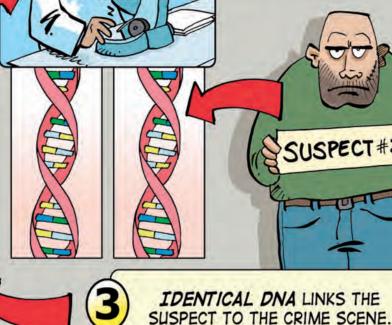


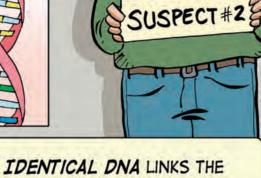
DNA IS A MOLECULE THAT DETERMINES HOW OUR BODIES ARE BUILT. IT IS FOUND IN ALL BODY TISSUES, AND EVERYONE (EXCEPT IDENTICAL TWINS), HAS UNIQUE DNA.



SCRAPED OFF IN A STRUGGLE.







IN A LABORATORY, THE

FORENSIC SCIENTIST

EXTRACTS THE DNA FROM

THESE CELLS AND

COMPARES IT TO DNA TAKEN

FROM A SUSPECT.

DNA RECORDS OF CONVICTED CRIMINALS WILL SOON BE KEPT TO COMPARE WITH DNA FOUND AT NEW CRIME SCENES.



DO YOU THINK WE ARE PLACING TOO MUCH TRUST IN THE INTEGRITY OF FORENSIC SCIENTISTS?

SO WHILE MOST





A SUSPECT HAS BEEN CONVICTED BECAUSE OF DNA FOUND ON THE BACK OF A **STAMP!** SALIVA CONTAINS

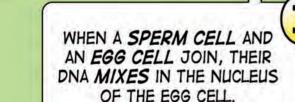
SMALL QUANTITIES OF CELLS, FROM THE WALLS OF THE



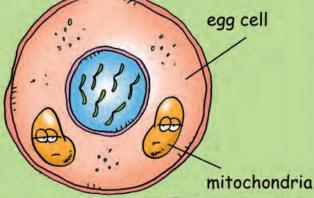
CHILDREN OFTEN LOOK LIKE THEIR PARENTS, BUT CAN WE BE SURE WHO THE TRUE PARENTS ARE?



COMPARING DNA CAN PROVE A PARENT-CHILD RELATION-SHIP, BECAUSE CHILDREN RECEIVE HALF THEIR DNA DIRECTLY FROM EACH PARENT.



BUT A SMALL AMOUNT OF DNA IS CARRIED IN A CELL ORGAN CALLED THE MITOCHONDRIA (THE ENERGY CENTRE OF THE CELL), AND DOES NOT MIX.



fertilised egg cell

DNA mixes

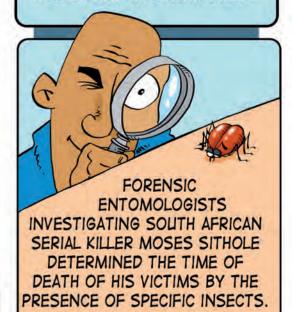
OF OUR DNA IS A COMBINATION FROM BOTH PARENTS, SOME ONLY COMES FROM OUR MOTHERS



BECAUSE THIS DNA STAYS UNCHANGED FOR GENERATIONS, IT CAN BE USED TO TRACE WHERE CULTURAL GROUPS COME FROM.



THE LEMBA TRIBES-PEOPLE OF SOUTH AFRICA HAVE LONG BELIEVED THAT THEY ARE DESCENDED FROM ONE OF ISRAEL'S TWELVE TRIBES. DNA TESTING HAS NOW REVEALED STRONG SIMILARITIES BETWEEN THIS TRIBE AND SOME JEWISH COMMUNITIES.

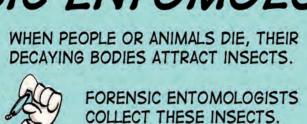


THIS HELPED THEM DETERMINE

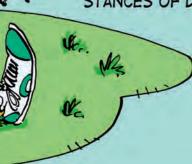
A PROFILE OF THE KILLER,

LEADING TO HIS ARREST.

FORENSIC ENTOMOLOGY



BY COMPARING THEM TO THE KNOWN LIFECYCLES OF THE INSECTS, THEY CAN LEARN ABOUT THE TIME AND CIRCUM-STANCES OF DEATH.





THE PUPAE EMERGE AT LEAST ONE WEEK LATER.



LIFECYCLE OF A FLY

I refuse to change.

ENTOMOLOGY IS THE

STUDY OF INSECTS.

BETWEEN EIGHT HOURS AND TWO DAYS TO HATCH INTO LARVAE.



DIFFERENT STAGES OF DECAY ATTRACT DIFFERENT INSECTS. EVEN THE DRIED SKIN AND BONES ARE EATEN BY SPECIFIC BEETLES AND TICKS. THEIR PRE-SENCE HELPS TO DETERMINE THE TIME OF DEATH.





