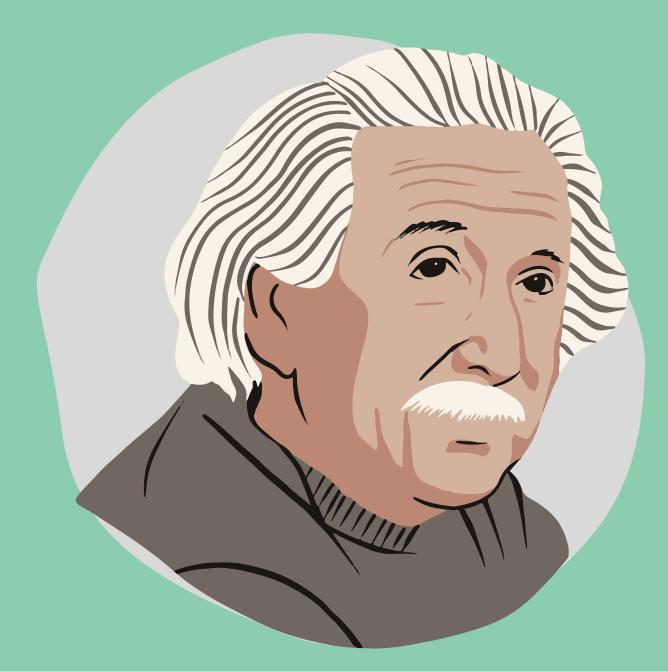
() upschool **BE THE CHANGE** A Book for Changemakers 6

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'Alone we can change today, but together we can change forever.'

ALBERT EINSTEIN





ALBERT EINSTEIN WAS BORN ON THE 14TH OF MARCH, 1879, IN GERMANY AND HE SPENT A LOT OF HIS CHILDHOOD IN MUNICH. ALBERT LEARNED A LOT ABOUT ELECTRONICS AND SCIENCE FROM HIS DAD WHO OWNED AN ELECTRONICS COMPANY.

ALBERT REALLY LOVED STUDYING MATH AND SCIENCE IN SCHOOL. HE FINISHED STUDYING IN A SCHOOL IN SWITZERLAND AND STARTED SEARCHING FOR A JOB THERE AS A PROFESSOR, BUT ENDED UP WORKING IN A PATENT OFFICE.

IN 1905 EINSTEIN CAME UP WITH THE CONCEPT THAT LIGHT IS MADE UP OF PARTICLES CALLED PHOTONS. AT THE TIME, OTHER SCIENTISTS DIDN'T AGREE WITH HIM, BUT LATER EXPERIMENTS PROVED HIS THEORY. THIS WAS SUCH AN IMPORTANT DISCOVERY FOR SCIENCE AND SO EINSTEIN WAS AWARDED THE NOBEL PRIZE FOR PHYSICS IN 1921.

MOTHER TERESA



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MOTHER TERESA WAS BORN IN USKUB, OTTOMAN EMPIRE ON THE 26TH OF AUGUST, 1910. WHEN SHE WAS JUST 18 YEARS OLD, SHE DECIDED TO DEVOTE HER LIFE TO GOD AND JOINED THE SISTERS OF LORETO TO BECOME A MISSIONARY TO INDIA.

IN 1950, MOTHER TERESA FORMED 'THE MISSIONARIES OF CHARITY', A GROUP WITHIN THE CATHOLIC CHURCH WITH THE PURPOSE OF TAKING CARE OF "THE HUNGRY, THE NAKED, THE HOMELESS, THE CRIPPLED, THE BLIND, THE LEPERS, ALL THOSE PEOPLE WHO FEEL UNWANTED, UNLOVED, UNCARED FOR THROUGHOUT SOCIETY, PEOPLE THAT HAVE BECOME A BURDEN TO THE SOCIETY AND ARE SHUNNED BY EVERYONE".

IN 1979, MOTHER TERESA WAS AWARDED THE NOBEL PEACE PRIZE HOWEVER INSTEAD OF RECEIVING THE TRADITIONAL NOBEL HONOR BANQUET, SHE ASKED THAT THE MONEY FOR THE BANQUET BE DONATED TO THE POOR PEOPLE OF INDIA.



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ROSA PARKS WAS BORN IN ALABAMA, USA, ON THE 4TH OF FEBRUARY, 1913 AND FACED A LOT OF RACISM WHILE GROWING UP IN THE SOUTH.

ON THE 1ST OF DECEMBER IN 1955, ROSA MADE HER FAMOUS STAND BY SITTING DOWN ON THE BUS AFTER A HARD DAY AT WORK. ALL THE SEATS ON THE BUS HAD FILLED UP AND THEN A WHITE MAN BOARDED. THE BUS DRIVER TOLD ROSA AND SOME OTHER AFRICAN-AMERICANS TO STAND UP SO THE WHITE MAN COULD SIT DOWN. ROSA REFUSED TO DO THIS. THE BUS DRIVER SAID HE WOULD CALL THE POLICE BUT ROSA DIDN'T MOVE. SOON THE POLICE SHOWED UP AND ROSA WAS ARRESTED.

IN 1996 ROSA WAS AWARDED THE PRESIDENTIAL MEDAL OF FREEDOM AND IN 1999 SHE RECEIVED THE CONGRESSIONAL GOLD MEDAL AS THE 'MOTHER OF THE MODERN DAY CIVIL RIGHTS MOVEMENT'

OPRAH WINFREY



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OPRAH WINFREY WAS BORN ON THE 29TH OF JANUARY, 1954, IN MISSISSIPPI, USA.

OPRAH WAS A GIFTED SPEAKER FROM A YOUNG AGE AND SHE OFTEN SPOKE AT CHURCH, AT WOMEN'S GROUPS, AND AT SCHOOL. WHEN SHE WAS IN HIGH SCHOOL SHE WON A SPEECH CONTEST AND EARNED A FULL SCHOLARSHIP TO COLLEGE.

AT ONLY 19 YEARS OLD, OPRAH BECAME THE FIRST FEMALE AFRICAN-AMERICAN NEWS ANCHOR IN NASHVILLE HISTORY.

THE OPRAH WINFREY SHOW TRANSFORMED OPRAH INTO ONE OF THE MOST FAMOUS PEOPLE IN THE COUNTRY. OVER 10 MILLION PEOPLE WATCHED HER SHOW EVERY DAY. OPRAH IS A PHILANTHROPIST AND HAS GIVEN AWAY MILLIONS OF DOLLARS TO EDUCATIONAL CAUSES. SHE CREATED THE 'OPRAH'S ANGEL NETWORK' CHARITY TO PROVIDE GRANTS TO NONPROFIT ORGANISATIONS AROUND THE WORLD.

MARIE CURIE







MARIE CURIE WAS BORN ON THE 7TH OF NOVEMBER, 1867, IN POLAND, AS THE DAUGHTER OF TWO TEACHERS.

MARIE WAS TAUGHT TO READ AND WRITE EARLY AND WAS A VERY SMART CHILD WHO DID WELL IN SCHOOL STUDIES.

IN 1903, MARIE CURIE. PIERRE CURIE AND HENRI BECQUEREL RECEIVED THE NOBEL PRIZE IN PHYSICS FOR THEIR WORK IN RADIATION. MARIE WAS THE FIRST EVER WOMAN TO BE AWARDED THAT PRIZE. IN 1911, MARIE WON ANOTHER NOBEL PRIZE, THIS TIME IN CHEMISTRY, FOR DISCOVERING TWO ELEMENTS; POLONIUM AND RADIUM. MARIE WAS THE FIRST PERSON TO BE AWARDED TWO NOBEL PRIZES.

AT THE START OF WORLD WAR 1, MARIE LEARNED THAT DOCTORS COULD USE X-RAYS TO HELP DETERMINE WHAT WAS WRONG WITH AN INJURED SOLDIER. IT WAS HER IDEA THAT X-RAY MACHINES COULD BE MOVED FROM HOSPITAL TO HOSPITAL IN A TRUCK AND THIS HELPED OVER 1 MILLION SOLDIERS DURING THE WAR.

THOMAS EDISON





THOMAS EDISON WAS BORN ON THE 11TH OF FEBRUARY, 1847, IN OHIO, USA.

ONE DAY, THOMAS SAVED A CHILD FROM A RUNAWAY TRAIN. TO SAY THANK YOU, THE CHILD'S FATHER TRAINED THOMAS AS A TELEGRAPH OPERATOR. THIS DEVELOPED HIS INTEREST IN COMMUNICATIONS, WHICH WOULD BE THE FOCUS OF MANY OF HIS INVENTIONS.

THOMAS EDISON MAY BE CONSIDERED THE GREATEST INVENTOR IN HISTORY. HE HAS OVER 1000 PATENTS IN HIS NAME AND MANY OF THEM STILL HAVE A MAJOR EFFECT ON OUR LIVES TODAY.

THOMAS WAS ALSO A BUSINESS ENTREPRENEUR. HE HAD A LARGE INVENTION LABORATORY WHERE LOTS OF PEOPLE WORKED FOR HIM TO HELP DEVELOP, BUILD, AND TEST HIS INVENTIONS.

THOMAS EDISON USED HIS INVENTIONS TO FORM COMPANIES INCLUDING GENERAL ELECTRIC, WHICH IS ONE OF THE BIGGEST CORPORATIONS IN THE WORLD TODAY.



MARTIN LUTHER KING, JR.





MARTIN LUTHER KING, JR. WAS BORN ON THE 15TH OF JANUARY, 1929, IN GEORGIA, USA.

HE LED NON-VIOLENT PROTESTS TO FIGHT FOR THE RIGHTS OF ALL PEOPLE INCLUDING AFRICAN AMERICANS. HE BELIEVED IN A WORLD WHERE RACE WOULD NOT IMPACT A PERSON'S CIVIL RIGHTS. HE IS CONSIDERED ONE OF THE GREAT SPEAKERS OF MODERN TIMES, AND HIS SPEECHES STILL INSPIRE MANY TO THIS DAY.

IN HIS FIRST MAJOR CIVIL RIGHTS ACTION, MARTIN LUTHER KING, JR. LED THE MONTGOMERY BUS BOYCOTT, WHICH STARTED WHEN ROSA PARKS REFUSED TO GIVE UP HER SEAT ON A BUS TO A WHITE MAN. MARTIN HELPED TO ORGANISE A BOYCOTT OF THE PUBLIC TRANSPORTATION SYSTEM IN MONTGOMERY, WHICH LASTED FOR OVER A YEAR. EVENTUALLY, MARTIN PREVAILED AND SEGREGATION ON THE MONTGOMERY BUSES CAME TO AN END.

> MARTIN LUTHER KING, JR. WAS THE YOUNGEST PERSON TO BE AWARDED THE NOBEL PEACE PRIZE IN 1964.

JANE GOODALL





JANE GOODALL WAS BORN ON THE 3RD OF APRIL, 1934, IN ENGLAND, UK.

JANE SPENT HER LATE TEENS AND EARLY TWENTIES SAVING MONEY TO GO TO AFRICA AND AT THE AGE OF TWENTY-THREE, WENT TO VISIT A FRIEND WHO LIVED ON A FARM IN KENYA. IN 1960 JANE BEGAN STUDYING CHIMPANZEES THOUGH SHE HAD NO FORMAL TRAINING OR EDUCATION. THIS MAY HAVE ACTUALLY HELPED HER AS SHE HAD HER OWN UNIQUE WAY OF OBSERVING AND RECORDING THE CHIMP'S ACTIONS AND BEHAVIOURS.

JANE SPENT THE NEXT FORTY YEARS OF HER LIFE STUDYING CHIMPANZEES. SHE DISCOVERED MANY NEW AND INTERESTING THINGS ABOUT THE ANIMALS.

JANE WON MANY AWARDS FOR HER ENVIRONMENTAL WORK INCLUDING THE J. PAUL GETTY WILDLIFE CONSERVATIONS PRIZE, THE LIVING LEGACY AWARD, DISNEY'S ECO HERO AWARD, AND THE BENJAMIN FRANKLIN MEDAL IN LIFE SCIENCE.

FRIDA KAHLO





FRIDA KAHLO WAS BORN ON THE 6TH OF JULY, 1907, IN MEXICO.

FROM AN EARLY AGE, FRIDA ENJOYED ART THOUGH SHE HAD VERY LITTLE FORMAL ART EDUCATION. HER FATHER WAS A PHOTOGRAPHER AND SHE GAINED SOME APPRECIATION FOR LIGHT AND PERSPECTIVE FROM HIM.

FRIDA HAD NEVER REALLY CONSIDERED ART AS A CAREER UNTIL AFTER SHE WAS IN A SERIOUS BUS ACCIDENT. WHILE RECOVERING, FRIDA TURNED TO ART FOR SOMETHING TO DO AND DISCOVERED IT WAS A WAY TO EXPRESS HER EMOTIONS AND HER VIEWS OF THE WORLD AROUND HER.

ALTHOUGH FRIDA HAD SOME SUCCESS AS AN ARTIST DURING HER LIFETIME, SHE WAS NOT INTERNATIONALLY FAMOUS UNTIL THE LATE 1970S WHEN HER ARTWORK WAS REDISCOVERED BY ART HISTORIANS. SINCE THAT TIME, FRIDA HAS BECOME SO FAMOUS THAT THE TERM "FRIDAMANIA" HAS BEEN USED TO DESCRIBE HER POPULARITY.

SIR ISAAC NEWTON



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ISAAC NEWTON WAS BORN ON THE 4TH OF JANUARY, 1643, IN ENGLAND, UK.

IN HIS EARLY TWENTIES, HE SPENT TWO YEARS IN STUDY AND ISOLATION AT HIS HOME DEVELOPING HIS THEORIES ON CALCULUS, OPTICS, GRAVITY, AND THE LAWS OF MOTION.

IN 1696 NEWTON BECAME THE WARDEN OF THE ROYAL MINT IN LONDON. HE TOOK HIS DUTIES SERIOUSLY AND TRIED TO REFORM THE CURRENCY OF ENGLAND AND END CORRUPTION. HE WAS ELECTED PRESIDENT OF THE ROYAL SOCIETY IN 1703 AND WAS KNIGHTED BY QUEEN ANNE IN 1705.

IN HIS WORK, ISAAC NEWTON DESCRIBED THE THREE LAWS OF MOTION AS WELL AS THE LAW OF UNIVERSAL GRAVITY. THIS WORK WOULD GO DOWN AS ONE OF THE MOST IMPORTANT WORKS IN THE HISTORY OF SCIENCE. IT NOT ONLY INTRODUCED THE THEORY OF GRAVITY BUT DEFINED THE PRINCIPLES OF MODERN PHYSICS.

Thank you for being the change

'You will never understand true happiness until you help somebody who can never repay you!'

M. Gandhi