22 a) *Read the text* ***Alfred Nobel — a Man of Contrasts*** *and say why he is remembered by the whole of mankind.*

Alfred Nobel — a Man of Contrasts

Alfred Nobel, the great Swedish inventor and industrialist, was a man of many contrasts. He was a scientist with a love of literature, and industrialist who managed to remain an idealist. He made a fortune but lived a simple life, and although cheerful in company he was often sad in private. A lover of mankind, he never had a wife or family to love him; a patriotic son of his native land, he died alone on foreign soil. He invented a new explosive, dynamite, to improve the peacetime industries of mining and road building, but saw it used as a weapon of war to kill and injure his fellow men. During his useful life he often felt he was useless. "Alfred Nobel," he once wrote of himself, "ought to have been put to death by a kind doctor as soon as, with a cry, he entered life." World-famous for his works he was never personally well known, for throughout his life he avoided publicity. "I do not see," he once said, "that I have deserved any fame and I have no taste for it." But since his death, his name has brought fame and glory to others.

He was born in Stockholm on October 21, 1833 but moved to Russia with his parents in 1842, where his father made a strong position for himself in the engineering industry. Most of the family returned to Sweden in 1859, where Alfred rejoined them in 1863, beginning his own study of explosives in his father's laboratory. He had never been to school or university but had studied privately and by the time he was twenty was a skilful chemist and excellent linguist, speaking Swedish, Russian, German, French and English. Alfred Nobel was imaginative and inventive. He was quick to see industrial openings for his scientific inventions and built up over 80 companies in 20 different countries. Indeed his greatness lay in his outstanding ability to combine the qualities of an original scientist with those of a forward-looking industrialist.

But Nobel's main concern was never with making money or even with making scientific discoveries. Seldom happy, he was always searching for a meaning to life, and from his youth he had taken a serious interest in literature and philosophy. Perhaps because he could not find ordinary human love he never married — he came to care deeply about the whole of mankind. He was always generous to the poor. "I'd rather take care of the stomachs of the living than the glory of the dead in the form of stone memorials," he once said. His greatest wish, however, was to see an end to wars, and thus peace between nations, and he spent much time and money working for this cause until his death in Italy in 1896. His famous will, in which he left money to provide prizes for outstanding work in Physics, Chemistry, Physiology, Medicine, Literature and Peace, is a memorial to his interests and ideals.

(From "Reading for Adults"
by R. Lewis, McVincent, S. Weir)

b) *Say:*

- how Alfred Nobel distinguished himself throughout his lifetime;
- what the Nobel Prizes are given for.

23 *Read this quotation and comment on it:*

Scientific discovery and scientific knowledge have been achieved only by those who have gone in pursuit of it without any practical purpose whatsoever in view.

Max Planck

24 *Read the list of Nobel prizewinners. What achievements were the Nobel prizes given for?*

Some Famous Nobel Prizewinners

PHYSICS

Pierre and Marie Curie (France)	—	the discoverers of radium	1903
Guglielmo Marconi (Italy)	—	inventor of wireless	1909
Max Planck (Germany)	—	discoverer that energy only exists in particular amounts, called quanta	1918
Albert Einstein (USA)	—	evolver of theory of relativity	1921
Niels Bohr (Denmark)	—	discoverer of the structure of the atom	1922
Klaus von Kitzing (Germany)	—	discoverer of an exact method for measuring electric resistance	1985
Richard Taylor (Canada), Jerome Triedman, Henry Kendall (USA)	—	for their work on quarks, the particles that make up protons, neutrons and electrons	1990

CHEMISTRY

Ernest Rutherford (Britain)	—	for his work on radioactivity	1908
Willard Libby (USA)	—	for developing radiocarbon dating	1960
Elias Corey (USA)	—	for his work in synthesizing chemical compounds	1990

PHYSIOLOGISTS AND DOCTORS

Ivan Pavlov (Russia)	—	for his work on conditioned reflex	1908
Sir Frederick Banting (Canada)	—	for the discovery of the drug insulin	1923
Sir Alexander Fleming and Ernst Chain (Britain) and Lord Florey (Australia)	—	for discovering penicillin	1945
James Watson (USA) and Francis Crick and Maurice Wilkins (Britain)	—	for discovering the molecular structure of DNA	1962
Michael Bishop and Harold Varmus (USA)	—	for their study of cancer-causing genes	1989

LITERATURE

Rudyard Kipling (Britain)	1907
Rabindranath Tagore (India)	1913
W. B. Yeats (Ireland)	1923
George Bernard Shaw (Britain)	1925
Thomas Mann (Germany)	1929
Ivan Bunin (Russia)	1933
Luigi Pirandello (Italy)	1934
T. S. Eliot (Britain)	1948
Bertrand Russell (Britain)	1950
Winston Churchill (Britain)	1953
Ernest Hemingway (USA)	1954
Albert Camus (France)	1957
Boris Pasternak (USSR)	1958
Mikhail Sholokhov (USSR)	1965
Alexander Solzhenitsyn (USSR)	1970
Joseph Brodsky (USSR)	1987

FOR THE CAUSE OF PEACE

Theodore Roosevelt (USA)	1906
Woodrow Wilson (USA)	1919
Austen Chamberlain (Britain)	1925
Albert Schweitzer (West Germany)	1952
Lester Pearson (Canada)	1957
Martin Luther King, Jr. (USA)	1964
Willy Brandt (West Germany)	1971
Andrey Sakharov (USSR)	1975
Mother Teresa of Calcutta (India)	1979
Lech Walesa (Poland)	1983
Mikhail Gorbachev (USSR)	1990