**«Famous Mathematicians»**

**Exercise 1**

**a)** *Read the following text. Guess the meaning the international words or consult a dictionary;*

**b)** *Write down your translation.*

**M. V. Lomonosov**

We think of M.V. Lomonosov as the father of Russian science. Some of his scientific works were a great contribution [**ֽ**kɔntrı'bju:∫(ə)n] to the world ([wɜ:ld] *мировую*) sience. Many people think that Lomonosov was a great man. It was he who founded the first Russian University. He worked a lot in the field of natural ['næt∫(ə)r(ə)l] sience, especially in physics and chemistry ['kemıstrı]. It was Lomonosov who originated [ə'rıʤ (ə)neıtıd] the study of geology [ʤı'ɔləʤı], geochemistry [**ֽ**ʤi:əu'kemıstrı] and physical chemistry in Russia. He also took great interest in history, mathematics and philosophy.

We know Lomonosov as the author of the first Russian book on grammar ['græmə]. He was the first to use Russian language when writing scientific books.

Working in various fields of science he also gave much of his time to practical application of natural sciences. He opened his first chemical laboratory and originated the production of glass (*стекло*) in Russia.

**Exercise 2**

*This is a text about Leonardo da Vinci* ['vınt∫ı]. *Read it and write a few questions to it to ask your group-mates.*

**Leonardo da Vinci**

Leonardo da Vinci is a man of legend ['leʤənd]. He was an artist ['α:tıst], who was interested in technology. He was an engineer [**ֽ**enʤı'nıə] and a scientist who was a great artist. In his time, in the fifteenth century he was recognized as an artist and as an engineer. He studied geometry, mechanics, hydraulics [haı'drɔ:lıks], botany ['bɔtənı], anatomy [ə'nætəmı], geology, architecture ['α:kıtekt∫ə] and astronomy [əs'trɔnəmı]. He had a number of original [ə'rıʤ(ə)n(ə)l] ideas about the telescope ['telıskəup], hydraulic turbines ['tɜ:bın], tanks and aeroplanes ['eərəpleın] and ... computers. It was Leonardo who introduced [**ֽ**ıntrə'dju:s] an important and useful coefficient [**ֽ**kəuı'fı∫(ə)nt] of 'friction. It can be said that Leonardo was actually the first engineer with modern understanding (*понимание*) of elementary [**ֽ**elı'mentərı] principles ['prınsəpl] of machine [mə'∫i:n] functioning ['fлŋk∫ənıŋ]. In all his studies he was interested not only in theory but in the practical application of his theoretical concepts ['kɔnsept].

**Exercise 3**

**a)** *Read the text;*

**b)** *Write a plan of the text in the form of questions;*

**c)** *Speak about Albert Einstein (work in pairs).*

**Albert Einstein**

Albert Einstein (['aınstaın]) was born ([bɔ:n]) in Germany 1879. His un'usual 'talent for mathematics and physics began to show when he was a student at a technical school in Zurich (['zjuərık]). At the age of 21, after four years of study at the university, he began to work as a clerk [klα:k] at an office. And in 1905 he made some revolutionary discoveries in science. He published three papers. In his first paper he explained ([ıks'pleın]) *объяснять*) the photoelectric effect with the help of M. Plank's quantum theory. His second paper was a mathematical development of the theory of Brownian motion (['məu∫(ə)n]). His third paper was about the «Special Theory of Relativity» ([**ֽ**relə'tıvıtı]). It must be mentioned (['men∫ən] *упоминать*) that a great contribution to the theory of relativity had been made earlier by the great mathematicians Lorentz and Poincaré. Einstein's work was published in a physical journal. It stated that energy equals mass multiplied by the square of the speed of light (*свет*). This theory is expressed by the equation: *E = mc2* [si:'skweəd].

Scientists all over the world met this Einstein's work with interest and surprise [sə'praız]. But only very few physicists realized (['rıəlaız] *осознавать*) the importance of his theory at that time.

Another of Einstein's great discoveries was his unified ['ju:nıfaıd] field theory. It was the result of 35 years of intensive research work. He expressed it in four equations where he combined the physical laws that control forces (силы) of light and energy with the mysterious [mıs'tıərıəs] force of gravitation [**ֽ**grævı'teı∫(ə)n].

Albert Einstein gave all his life to science. He was an extremely talented man and a great thinker. He was always looking at the world around him with his eyes ([aız] *глаза*) wide open and he was always asking: «Why? Why is that so?»

His ideas made a revolution in natural ['næt∫(ə)r(ə)l] sciences of the 20th century.

**Exercise 16**

*Read these words and guess the meaning of the italicized words.*

'talent–*'talented;* mass–*'massive;* speed–*to speed*–*'speedily*– *'speediness*–*spee'dometer;* to con'trol–*con'trollable*–*uncontrollable;* 'magnetism–*mag'netic;* to re'peat–*repe'tition;* to 'indicate–*indication;* gravi'tation–*gravitational;* to 'illustrate–*illus'tration;* to sur'prise–*a sur'prise*–*surprising;* mys'terious–*a 'mystery;* to con-'sult–*consul'tation;* 'final–*fi'nality;* to ob'tain–*ob'tainable.*