# The Moscow Metro as an Object of Moscow Cultural Heritage.





The capital of Russia, Moscow, is a very big city. There are a lot of monuments, cathedrals, museums and churches in Moscow. People from many different countries strive to get there and to see the places of interest of this beautiful city. The objects of architecture and painting, created by great masters many years ago fascinate visitors of the capital and are the pride of Moscow people.

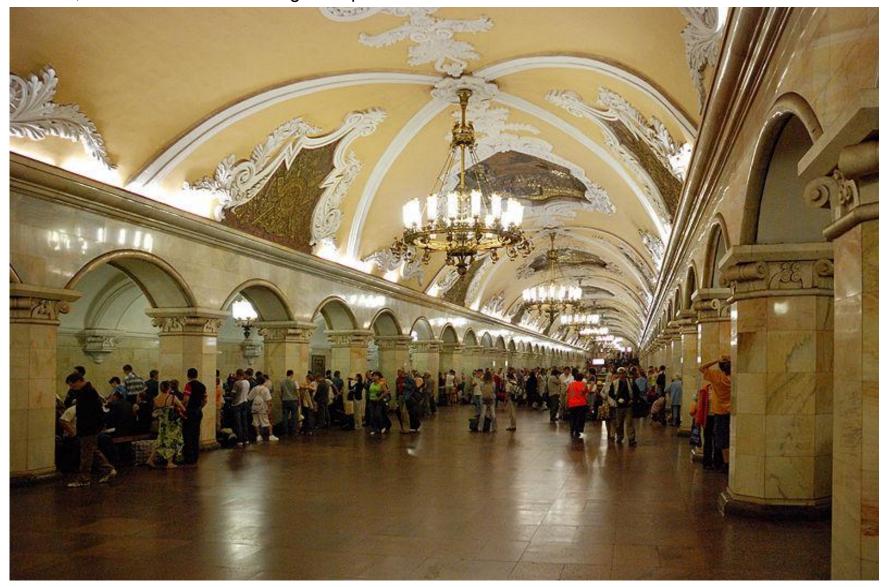
The most famous attraction of Moscow is The Red Square. It amazes with its grandiosity and splendour. The Cathedral of Saint Bassil the Blessed is one of the most beautiful works of architecture. The Bolshoy Theatre, The Tretiakovskaya Gallery and many others places are also unforgettable. But many people forget about a very important and in the majority of cases beautiful place of interest the Moscow Metro. It amazes with its size. It is one of the biggest metros in the world.

The new stations are modernized, unpretentious, but the old ones out of the first originally built stations correspond real works of art with mosaics, reliefs on the walls and with statues.

Unfortunately nowadays a lot of people don't understand or forget about the great historic and cultural value of the Moscow Metro. They throw litter, spoil decorations of the stations.

Our school organizes excursions to the Moscow Metro to its oldest and most beautiful stations. The aim of these excursions is to show that the Moscow Metro is also a place of interest like a museum that everyone should take care of it. Then it will be cleaner and more beautiful.

The **Moscow Metro** which spans almost the entire Russian capital, is the world's second most heavily used rapid-transit system. Opened in 1935, it is well known for the ornate design of many of its stations, which contain outstanding examples of socialist realist art.





In total, the Moscow Metro has 292.2 km (181.6 miles) of route length, 12 lines and 177 stations; on a normal weekday it carries over 7 million passengers. Passenger traffic is considerably lower on weekends bringing the average daily passenger traffic during the year to 6.8 million passengers per day. The Moscow Metro is a state-owned enterprise. The basic feature of Moscow metro is a good combination of reliability, comfort and transportation speed in tough conditions of a modern metropolis. It is the most popular kind of transport used by approximately 9 million passengers

At present Moscow metro share among other kinds of transport makes **up 57%**.

Every day **9915 trains** run over **12 lines** of the system (**292,2 km** and **177 stations**) with the minimum headway of 90 seconds.

Each line is identified by an alphanumeric index (usually consisting of just a number), a name, and a colour.

The voice announcements refer to lines by name, while in colloquial usage they are mostly referred to by colour, except the Kakhovskaya Line (number 11) which has been assigned shade of green similar to that of the Zamoskvoretskaya Line (number 2), Koltsevaya Line (number 5) and Butovskaya Line (number L1). Most lines run radially through the city, except the Koltsevaya Line (number 5), which is a 20-km-long ring connecting all the radial lines and a few smaller lines outside. On all lines, travellers can determine the direction of the train by the gender of the announcer: on the ring line, a male voice indicates clockwise travel, and a female voice counter-clockwise. On the radial lines, travellers heading toward the centre of Moscow will hear male-voiced announcements, and travellers heading away will hear female-voiced announcements. In addition, there is an abundance of signs showing all the stations that can be reached in a given direction.

The system was built almost entirely underground, although some lines (numbers 1, 2 and 4) cross the Moskva River, while line number 1 also crosses the Yauza River by bridge. Less than 10% of the stations are at or above the surface level. The surface sections of the Metro include the western part of Filyovskaya Line continuing as Arbatsko-Pokrovskaya Line between Kievskaya and Molodyozhnaya (eight surface stations), and the Butovskaya Light Metro Line (L1) with 4 elevated stations. The other surface stations are Vykhino, Izmaylovskaya and Vorobyovy Gory (the latter is unique in the world being built into a lower level of a bridge). There are several short surface stretches, including those between the stations Avtozavodskaya and Kolomenskaya (where a new station Technopark is going to be built), and between Tekstilshchiki and Volgogradsky Prospekt.



#### The lines of the Moscow Metro

The colours in the table correspond to the colours of the lines in the map above.

Name	Index and colour	Cyrillic Name	First Opened	Latest addition	Length	Stations
<u>Sokolnicheskaya</u>	1	Сокольническая	1935	1990	26.2 km	19
<u>Zamoskvoretskaya</u>	2	Замоскворецкая	1938	1985	36.9 km	20
Arbatsko-Pokrovskaya	3	Арбатско-Покровская	1938	2008	37.7 km	18
<u>Filyovskaya</u>	4	Филёвская	1958	2006	14.7 km	13
Koltsevaya	5	Кольцевая	1950	1954	19.4 km	12
Kaluzhsko-Rizhskaya	6	Калужско-Рижская	1958	1990	37.6 km	24
<u>Tagansko-Krasnopresnenska</u> <u>ya</u>	7	Таганско-Краснопресненская	1966	1975	35.9 km	19
Kalininskaya	8	Калининская	1979	1986	13.1 km	7
Serpukhovsko-Timiryazevska ya	9	Серпуховско-Тимирязевская	1983	2002	41.5 km	25
<u>Lyublinskaya</u>	10	Люблинская	1995	2007	21.2 km	12
<u>Kakhovskaya</u>	11	Каховская	1995 <sup>2</sup>	1969	3.4 km	3
<u>Butovskaya</u>	L1 <sup>3</sup>	Бутовская	2003	2003	5.5 km	5
Total:					292.2 km	177

постановление и 806, постанование в 806, постанование и 806, пост

О строительстве метрополитена в

Совет Народных Комиссаров Союза ССР ПОСТАНОВЛЕТ:

1.Участок от Сокольников до площади Свердлова с закладной на большую глубину строить закрытым способом безотлагательно.

2.06 остальных участках решить после заключения советской и иностранной экспертизи, максимально ускорив совыв совещения с экспертами.

Созыв совещания с экспертами поручить т.т. Нагановичу, Межлауну Госплан СССР) вместе с т. Роттертом.

3. Считать "Метрострой" зажнейшей государственной стройкой с обеспечением ее лесоматерналами, металлом, пементом, средствами транспорта и т.п., как первостепенной важности ударной стройки всесоюзного значения.

4. Предложить Моссовету совместно с Госпланом Союза ССР в декадный срок представить в Совет Народных Комиссаров Союза ССР доклад об обеспеченности строительства метрополитена металлом и другими строительными материалами и о мероприя тиях для полного обеспечения этого строительства строительными матермалами.

председатель совета , молотов (экриенн).

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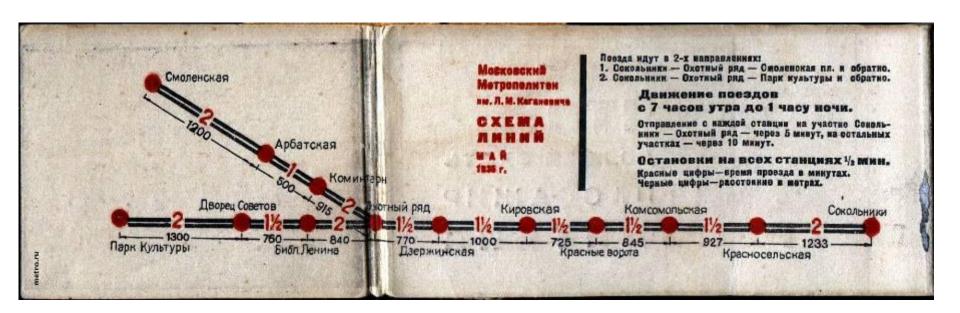
ви Упр. Дел.

The first plans for a rapid transit system in Moscow date back in the times of the Russian Empire, but they were postponed by World War I, the October Revolution and the Russian Civil War. It was not until that the decision to construction of the Moscow Metro was taken by the Central Committee of the USSR Communist Party. The first lines the 1930s under designed general plan by Kaganovich, and the Metro was initially (until 1955) named after him ("Metropoliten im. L.M. Kaganovicha"). Advice was given by the London Underground, the world's oldest metro system (partly because of this connection Gants tube Hill although not completed until much later, is reminiscent in design of many stations on the Moscow Metro).

## First stage

The first line was opened to public on May 15, 1935 at 7am. The line was 11 km long, and included 13 stations. It connected Sokolniki to Park Kultury with a branch from Okhotny Ryad to Smolenskaya (the first Metro map is available on pic.). The latter branch was further extended westwards to the new station Kiyevskaya in March 1937 (making the first Metro crossing of the Moskva River by the Smolensky Metro Bridge). The construction of the first stations was based on other underground systems, and only a few original designs were allowed: (Krasniye Vorota, Okhotniy Ryad and Kropotkinskaya). Kiyevskaya station was the first to use national motifs.

On May 14, 1935, the Komsomol was awarded the Order of Lenin by Stalin's suggestion for the contribution of the Komsomol members to construction of the first Metro stage.



# Second stage

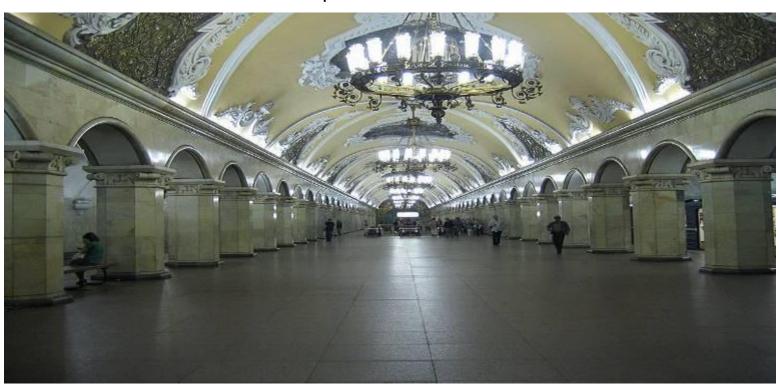
The second stage was completed before the war. In March 1938 the Arbatskaya branch was split in two and extended to Kurskaya station (now the dark-blue Arbatsko-Pokrovskaya Line). In September 1938 the Gorkovskaya Line opened between Sokol and Teatralnaya. Here the architecture was based on the most popular of the stations already in existence (Krasniye Vorota, Okhotnyi Ryad and Kropotkinskaya) and the compositions followed the popular art deco style, though merging it with socialist visions. The first deep level Column station Mayakovskaya was built at the same time.



### Third stage

Building work on the third stage was delayed but not interrupted during the World War II, and two Metro sections were put into service: Teatralnaya - Avtozavodskaya (3 stations, crossing the Moskva river in a deep tunnel) and Kurskaya - Partizanskaya (4 stations) were inaugurated in 1943 and 1944 respectively. War motifs replaced socialist visions in the architectural design of the stations.

During the Siege of Moscow, in the autumn and winter of 1941, metro stations were used as air-raid shelters and the Council of Ministers moved its offices to the platforms of Mayakovskaya, where Stalin made public speeches on several occasions. Chistiye Prudy station was also walled off and the headquarters of the Air Defence installed there.



# Fourth stage

After the war, construction started on the fourth stage of the Metro, which included the Koltsevaya Line and a deep part of the Arbatsko-Pokrovskaya line from Ploshchad Revolyutsii to Kievskaya, and a surface extension to Pervomaiskaya in the early 1950s. The exquisite decoration and design of so much of the Moscow Metro is considered to have reached its peak in these stations.

The Koltsevaya Line was planned first as a line running under the Sadovoye Koltso (Garden Ring), a wide avenue encircling the borders of Moscow's city centre. The first part of the line - from Park Kultury to Kurskaya (1950) - follows this avenue. But later plans were changed and the northern part of the ring line deviates 1-1.5 km outside the Sadovoye Koltso, thus providing service for 7 (out of 9) rail terminals. The next part of the *Koltsevaya* line opened in 1952 (Kurskaya - Belorusskaya) and in 1954 the ring line was completed.

There is an interesting urban legend about the origin of the ring line. A group of engineers approached Stalin with plans for the Metro, to inform him of current progress and of what was being done at that moment. As he looked at the drawings, Stalin poured himself some coffee and spilt a small amount over the edge of the cup. When he was asked whether or not he liked the project so far, he put his cup down on the centre of the Metro blueprints and left in silence. The bottom of the cup left a brown circle on the drawings. The planners looked at it and realized that it was exactly what they had been missing. Taking it as a sign of Stalin's genius, they gave orders for the building of the ring line, which on the plans was always printed in brown. This legend, of course, may be attributed to Stalin's cult of personality. In fact the line was never shown as a circle on the Metro map until 1980, long after Stalin's death. Prior to this time, the line was depicted much closer to the shape of the actual route.



# **During the Cold War**



The beginning of the Cold War led to the construction of a deep part of the Arbatsko-Pokrovskaya Line. The stations on this line are very deep and were planned as shelters in the event of nuclear war. After finishing the line in 1953, the upper tracks between Ploshchad Revolyutsii and Kiyevskaya were closed and later reopened in 1958 as a part of the Filyovskaya Line. In the further development of the Metro, the term "stages" was not used any more, although sometimes the stations opened in 1957–1959 are referred to as the "fifth stage".

During the late 1950s, the architectural extravagance of new metro stations was significantly toned down, and decorations at some stations. like VDNKh Alexeyevskaya, were greatly simplified compared with original plans. This was done on the orders of Nikita Khrushchev, who favoured a more spartan decoration scheme. A typical layout (which quickly became known as "Sorokonozhka" - "Centipede", which comes from the fact that early designs had 40 concrete columns in two rows) was developed for all new stations, and the stations were built to look almost identical, differing from each other only in colours of the marble and ceramic tiles. Most of these stations were built with simplified, cheaper technologies which were not always quite suitable and resulted in extremely utilitarian design. For example, walls paved with cheap and simplistic ceramic tiles proved to be susceptible to vibrations caused by trains, with some tiles eventually falling off. It was not always possible to replace the missing tiles with the ones of the same color, which eventually led to infamous "variegated" parts of the paving. Not until the mid-1970s was the architectural extravagance restored, and original designs once again became popular. However, newer design of "centipede" stations, with 26 columns with wider ranges between them and more sophisticated, continued to dominate.

Why did they decide to built an underground in Moscow? How did they do that? How did metro function during the war? What is the difference between the modern and old stock cars? What is an escalator? Which is the most beautiful station? Why do trains not collide? Do they use computers in their work? Who usually helps a passenger if he does not know how to get to the required station?..

The answers to such kinds of questions are given at the Public Museum of Moscow metro.





The idea to open a museum first came with the commissioning of the first stage of Moscow metro though the museum was created much later in 1967 at the initiative of Moscow metro and the with active support of Zinaida Troitskaya, the then deputy general Manager of Moscow

The foundation of the 1st exposition were documents collected by metro staff (about metro people).

At present the collection is one of the most important records of Moscow metro history being continuously assembled for years. Traditionally interesting are working models of different technical systems.

The annual number of the museum visitors is about 9 thousand moscovites and guests of the capital. Over half of them are schoolchildren and students. For them a visit to the museum is an acquaintance with one of the major transport system of Russia and with Moscow metro staff. Some visitors became permanent visitors and then come to work to Moscow metro.





The latest technologies and computer data base are being actively introduced in the Public Museum. At present the Museum is developing an Information Zone with use of computer technologies. The data base will allow visitors to explore the entire collection and help the museum staff to keep traditions in their investigations. The latest example was the exterior and interior decoration of the train called «People's Volunteer». On the walls inside the train they arranged posters telling the history of the 18th division of volunteer corps and Moscow metro operation during WWII.

We are also developing new services. From 2006 we have been making video excursions on the history and present of Moscow and Moscow metro. Visitors may also visit metro systems of St. Petersburg, Minsk and other cities. The museum has a rich library on the history of our metro system. Books are usually in popular demand with schoolchildren and students who write thesis and reports.

Introduction of modern technologies is typical for almost all our museums which develop mutual activities and communication. We have close ties with Moscow city museums and first and foremost with the State Politechnical museum. Collaboration helps develop and upgrade the introduced technologies and to adopt the best from the other museums



# **Newest stations**

Sretensky Bulvar



Strogino



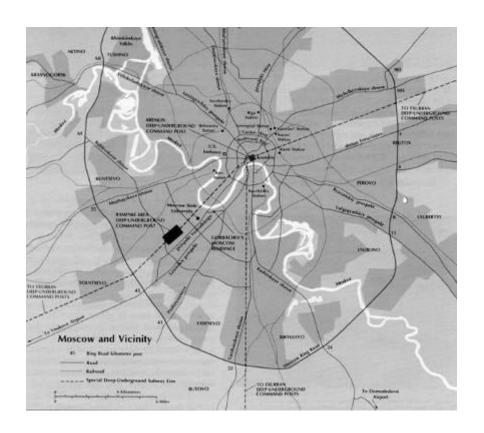
Kuntsevskaya subway station



Slavyansky Bulvar



#### Metro 2



Although this has not been officially confirmed, many independent studies suggest that a second, deeper metro system exists under military jurisdiction designed for emergency was and evacuation of key city personnel in case of nuclear attack during the Cold War. It is believed that it consists of a single track and connects the Kremlin, chief HQ (Genshtab), Lubyanka (FSB Headquarters) and the Ministry Defence, as well as numerous other secret installations

There are also entrances to the system from several civilian buildings such as the Russian State Library, Moscow State University (MSU) and at least two stations of the regular metro. It is speculated that these would allow for the evacuation of a small number of randomly chosen civilians, in addition to most of the elite military personnel. A suspected junction between the secret system and normal Metro is behind the station Sportivnaya of the Sokolnicheskaya Line.

The final section of this system was completed in 1997.