

METHODOLOGY OF FORMING MATHEMATICAL ABILITY IN PRIMARY CLASS STUDENTS

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***Annotation.** In this article, methodical recommendations and methods for the formation of mathematics talent and potential in primary school students are presented. The main emphasis is on developing primary school students' interest in mathematics. Extracurricular activities, clubs and Olympics are covered in detail.*

***Keyword:** Mathematics, circle, potential, arithmetic material, organization, quiz, mathematical excursion, mastery rate, Math press.*

In our country, teaching mathematics in elementary grades is generally considered as the first stage of mastering the school mathematics course. Many of the topics in the high school math curriculum should be solidified in the elementary grades so that they remain in students' minds for a lifetime, while other topics should be studied early in the curriculum in preparation for further study in later grades. It is introduced only for the purpose of learning or it is introduced to have the opportunity to increase the level of thinking ability in the process of forming certain skills and abilities. The above considerations should be taken into account when it comes to children's conscious and firm acquisition of a certain amount of knowledge, skills and abilities in the field of mathematics in the primary grades of the school. One of the important issues of primary education was and remains the formation of students' conscious and solid calculation skills (often brought to automatism). The mathematics course involves summarizing the educational material to the extent that the students can, understanding the general principles and laws underlying the studied mathematical arguments, and understanding the connections between the observed phenomena. This mainly refers to the study of the properties of actions, existing connections between them, mathematical relations and connections that are the basis of practical learning and skills formed in children. The theory not only helps to acquire practical learning and skills, but is one of the main tools that helps the teacher to teach mathematical relationships between the issues considered in theory and practice, to increase the effectiveness of mathematics teaching. Teaching students to apply acquired knowledge, skills and abilities in different situations should be considered as a special issue of education. This is the

beginning of work aimed at preparing students for polytechnic. This issue is inextricably linked with the more general issue of developing children's cognitive abilities. Already in primary school, a lot of work should be done for children to observe and compare, distinguish similarities and differences in the compared phenomena, analyze, synthesize, generalize, abstract, clarify. The issue of forming children's ability to think logically is inextricably linked with the issue of developing correct, clear, concise mathematical speech in them. This is one of the important tasks of primary education. When talking about developmental education, it is a mistake to think that the work consists only in the development of cognitive abilities (perception, memory, thinking, imagination, speech). This is also the case when doing mathematics requires only explaining how memory and thinking can be tested (which is third-year teaching material). In order to avoid similar methodological mistakes that lead to artificial overloading of students, it is necessary to clearly imagine the whole system of working on the arithmetical material in grades I-IV, the importance of the elements of the theory provided for in the program and It is important to understand the position.

One of the main subjects taught in secondary schools is mathematics. The practical importance of this science is so great, the interdisciplinary connection is so strong that no life problem can be solved without mathematical elements and logical observations. Therefore, this science is taught from the time when the human mind and thinking begin to develop, up to the higher, higher education levels of the educational system. However, the process of teaching the concepts of mathematics, which is considered a serious and abstract science, is not always easy. Since mathematics is a fundamental science, the effective teaching of this subject at a certain stage of the educational system depends very much on how it was taught in the previous stages. As a result, the effective teaching of mathematics to future professionals and students depends, first of all, on how the elements of this subject are taught to the students of preschool educational institutions and elementary school students. will be Experiments show that the role of preparing preschool children for the first grade in the family, in kindergartens or in preparatory groups is invaluable in facilitating the learning of young students, ensuring their mental development, and educating independent work skills. . The main activity of my child at this age is play, and since my attention, interest and goals are not yet balanced and directed in one direction, teaching mathematics to children of this age is a rather complicated process. is considered, that is, it is very difficult to replace my child's game activity with mental activity, educational activity. That is why it takes a long time to achieve positive results through this process. However, the importance of mathematics in elementary grades is not only in imparting mathematical knowledge, but by teaching the elements of this science, the teacher introduces children to the world and explains natural phenomena. It develops them in

every way, that is, it develops their logical thinking and mathematical abilities, attention and intelligence, qualities of will, observation, independence and creative initiative. Getting students interested in science and getting them to be absorbed in learning is the main factor determining the effectiveness of primary education. For this reason, it is necessary to find forms of teaching that arouse great interest and motivation in academic work in all students and create a strong desire to learn the basics of science, to teach them to conduct logical observation, to connect science with life. such as binding are always urgent issues before educators and pedagogues. Extracurricular activities, Olympiads and clubs take the main place in making students interested in mathematics, along with interesting and effective lessons.

In mathematics, extracurricular work is understood as voluntary training of students based on the material related to the program, organized outside of class. The main tasks of extracurricular work are:

- ✚ deepening and expanding students' knowledge and practical skills;
- ✚ development of students' logical thinking, ingenuity, mathematical intelligence;
- ✚ to increase their interest in mathematics, to find gifted and talented children;
- ✚ education of demandingness, will, attitude to work, independence, organization and humanity.

The following types of extracurricular activities are found:

- ✚ Mathematical minutes, hours.
- ✚ Mathematics circles.
- ✚ Mathematical competition and Olympiads.
- ✚ Fun math nights and quizzes.
- ✚ Mathematical Press.
- ✚ Mathematical excursion.

Extracurricular activities have some distinctive features compared to classes:

1. It does not apply to the mathematics program by its content. But the imparted knowledge should match the strength of the students.
2. Extracurricular activities should attract all students as much as possible, that is, it should be interesting. Even low-achieving students can become active learners through curiosity.
3. Extracurricular activities are organized based on the principle of discretion, but it is necessary to ensure interest. These classes are not graded, but students who actively participate are encouraged.
4. Depending on the content and form of the training, it can last from 10-12 minutes to 1 hour.
5. Diversity of content and forms of extracurricular activities.

Extracurricular activities include: fun word problems, brain teasers, humor problems, missing information or information overload problems, logic problems, fun math stories, arithmetic puzzles, games, tricks, puzzles, historical information, etc.

The method of organizing and conducting extracurricular activities should be based on the following:

1. The lesson is conducted taking into account the knowledge, skills and abilities acquired by students.
2. Extracurricular activities are organized in order to be based on the principles of students' desire, curiosity, creativity and to satisfy their individual opinions.
3. The forms of conducting extracurricular activities are different from the lessons, and the interesting side is strong.

A necessary condition for this is the complexity of planning and systematic work. It should be noted that individual and group trainings should not be conducted systematically, on the contrary, the main work should be done in the classroom. Out-of-class work has a number of specific features compared to the form of a classroom lesson:

1. In terms of its content, it is not limited by the state program, mathematical material should be given in accordance with the knowledge and skills of students.
2. It is not yet possible to talk about the persistent interest of children in mathematics in primary grades.
3. Ingenuity, intelligence, quick calculations, use of effective methods of solving should be encouraged.
4. Lessons are scheduled for 45 minutes and can be scheduled for 10-12 minutes or an hour, depending on the content and forms of conducting extracurricular activities.
5. Extracurricular activities are characterized by a variety of content, depending on the form and type (interesting math classes, clubs, quizzes, etc.).

In order to arouse interest and support in mathematics minutes, these tasks should not be similar to ordinary mathematical tasks given in classes. All kinds of interesting arithmetical and geometrical problems, more difficult problems, funny problems, problems related to problem solving, interesting squares, rebuses, riddles, etc. serve as material for training. Math club is one of the most common types of work outside of the formal classroom in mathematics. Its main task is in-depth work with students who have a special interest in mathematics. The work of the math club differs from the fun math lessons in the following ways: When choosing students for the math club, their special interests, inclinations and capabilities in relation to mathematics should be taken into account. They independently prepare visual aids (abacuses, cards

with examples for some games, etc.), thoroughly prepare for conducting math evenings, etc. In order to hold a math club, you need to make a work plan for it in advance. For example, we present the approximate plans of some class activities in the second semester in the 2nd grade: I. activity.

1. Inventing rebuses.
2. Interesting questions about addition.
3. Exercises for testing knowledge of counting within 100.
4. Issues that require ingenuity.
5. It's a joke.
6. Riddles.
7. Happy counting (out of 20) game.

II. training.

1. Inventing rebuses.
2. Poetic issues that require ingenuity.
3. Exercises on the analysis of geometric figures.
4. It's a joke.
5. "Fill the number" game.

III. training. Class-type group exercise. The content of the use (possibilities) of historical materials in elementary mathematics lessons.

In fact, the great thinkers of the Uzbek people have created new ideas and doctrines in their researches and discoveries in the long past to educate people to be polite, morally high, perfect, hardworking, and patriotic. These are. Musa al-Khorazmi (783-850), Abu Rayhan Beruni (973-1048), Ibn Sina (980-1037); Omar Khayyam (1048-1131); Nasriddin al-Tusi (1201-1274); Mirza Ulug'bek (1394-1449), Ghiyasiddin al-Koshi; The rich scientific and spiritual heritage left to us by Ali Kushchi (1402-1474) and others is the basis of our opinion. In the works of these scholars, great attention is paid to children's study, work, manners, and the duties of teachers in this work. In particular, according to the opinion of Nasriddin al-Tusi, the teacher should feel the responsibility to win the trust of the students and take a place in their hearts in order to influence the students' intelligence. Abu Nasr Farabi says that one of the main tasks of a teacher is to focus on the acquisition of moral standards, practical skills and qualifications of young people. According to Ibn Sina, knowledge of historical sources is a noble and useful activity. He emphasizes that the study of science and things with the help of the human mind is considered important in the activity of a person. In the pedagogical work of Abu Rayhan Beruni, his ideas about the purpose, tasks and place of education, the development of a person and the young generation are built on the basis of humanism in the true sense. The most important of the pedagogical ideas of Abu Rayhan Beruni is the need to acquire knowledge carefully and firmly.

It is the sacred duty of every spiritual and creative specialist to deeply study the scientific heritage left by our ancestors and apply it to the process of education and training. Below we recommend an example of how to conduct a circle activity in the classroom to increase the effectiveness of the mathematics lesson in elementary grades.

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