

REZYUME

Ushbu maqolada didaktik o'yin texnologiyalaridan foydalangan holda maktab geografiya darslarida o'quvchilarning bilim, ko'nikma va malakalarini shakllantirish usullarini takomillashtirish, shuningdek, fikrlash darajasi va dars samaradorligini oshirishga e'tibor qaratiladi.

РЕЗЮМЕ

В данной статье речь пойдет о повышении уровня мышления и результативности урока, а также о совершенствовании путей формирования знаний, умений и навыков учащихся на школьных уроках географии с использованием дидактических игровых технологий.

SUMMARY

This article focuses on improving the level of thinking and effectiveness of the lesson, as well as on improving the ways of forming students' knowledge, skills and abilities at geography lessons using didactic game technologies.

KONSTRUKTIV MASALALAR YECHIMINI ANIQLASHNING ENG QULAY USULI

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Tayanch so'zlar: shaxs, suyuqlik, idish, konstruksiya, konstruktiv masala, matematik kompetentlik.

Ключевые слова: личность, жидкость, прибор, конструкция, конструктивная задача, математическая компетентность.

Key words: personality, liquid, device, design, constructive problem, mathematical competence.

Kirish Shaxs va davlat(jamiyat) o'rtasidagi aloqa ikki tomonlama xususiyatga ega. Shu bois har qanday davlat(jamiyat) o'z fuqarolarining yaxshi yashashi, mehnat qilishi, iqtidori va salohiyatini ro'yobga chiqarish, uni namoyon eta olishi uchun yetarli darajada shart-sharoitlar yaratib bera olishi lozim.[1:8]

Quyida, boshlang'ich sinf matematika darsliklaridagi suvga(suyuqlikka) bog'liq bo'lgan, bo'lajak boshlang'ich sinf o'qituvchilarining matematik kompetentligini rivojlantirishga xizmat qiluvchi konstruktiv masalalar va ularning yechimlarini bayon etamiz. Qurilishi suvga bog'liq bo'lgan konstruktiv masalalarni boshlang'ich sinf matematika darsliklarida yetarlicha uchratish mumkin. Ushbu konstruktiv masalalarning yechimi aksariyat hollarda suyuqlikni bir idishdan ikkinchi idishga quyish orqali bajariladi. Keltirilgan masalalarning quvonarli jihati shundaki, ushbu konstruktiv masalalar mohiyatiga kundalik hayotimizda kutilishi mumkin bo'lgan muammolar(masalalar) mohirlik bilan singdirilgan.

2016 -yilgi 3-sinf matematika(Burxonov va ...) darsligida berilgan(836-masala) konstruktiv masalaning yechimiga olib boruvchi eng qulay usulni aniqlash masalasi, tadqiqotimizda yechilishi lozim bo'lgan muammo sifatida olindi.

Asosiy qism 2016-yilgi 3-sinf matematika darsligida berilgan 836-masalaga o'xshash bo'lgan konstruktiv masalalar uchun, umumiy qonuniyat yaratish orqali bo'lajak boshlang'ich sinf o'qituvchilarining matematik kompetentligini yuqori darajada rivojlantirish mumkin.

Umumiy masala Juft hajmli idishdagi suyuqlikni, hajmlari yig'indisi berilgan juft hajmli idish hajmiga teng bo'lgan toq hajmli ikkita bo'sh idish yordamida teng ikki qismga ajratish masalasi.

Ushbu masalaning yechimini aniqlash uchun quyidagi metodni taklif etamiz.

Tavsiya etilgan metod Mazkur metod orqali masala yechimini aniqlash quyidagi bosqichlarda amalga oshiriladi:

1-bosqich.1-bosqichda berilgan masaladagi idishlarni quyidagicha nomlab oling.

- Juft hajmli idish – birinchi idish.

- Toq hajmli idishlardan hajmi kattasi – ikkinchi idish.

- Toq hajmli idishlardan hajmi kichigi – uchunchi idish.

2-bosqich. Masala shartida berilgan suyuqliklarning idishlarda ko'rinishi 4 xil holatda nomoyon bo'ladi. Mazkur holatlarga 3-idishga nisbatan qarang.

1-holat. 3-idishda suyuqlik mavjud emas.

2-holat. 3-idish suyuqlikka to'la.

3-holat. 3-idishda suyuqlik mavjud, biroq to'la emas(2-idish suyuqlikka to'la bo'lgan vaziyat).

4-holat. 3-idishda suv mavjud, biroq to'la emas(2-idish bo'sh bo'lgan vaziyat).

3-bosqich. Ushbu bosqichda quyidagi qoidalarga amal qilgan holda masala yechimini aniqlang:

1-qoida. Agarda 3-idish bo'sh bo'lsa, 1-idishdan faqat 3-idishga suyuqlikni quyib, 2-idishga quyishingiz tafsiiya etilmaydi.

2-qoida. 3-idish suyuqlikka to'lib turgan bo'lsa, undan 2-idishga suyuqlikni quyib oling, ushbu jarayonda 3-idishda suyuqlik qolmaganda keyingi qadam uchun 1-qoidani qo'llang.

3-qoida. 2-idish suvga to'la bo'lib, 3-idish suvga to'la bo'lmasdan, biroq unda suv mavjud bo'lsa, u holda 2-idishdagi suvni 1-idishga quyib oling va keyingi qadamda 4-qoidadan foydalaning.

4-qoida. 2-idish bo'sh, 3-idish suvga to'la bo'lmasdan, biroq unda suv mavjud bo'lsa, u holda 3-idishdagi suvni 2-idishga quyib oling va keyingi qadamda 1-qoidadan foydalaning.

Yuqorida aytilgan qoidalarining har biri bittadan holatga mos keladi, Masala yechimiga erishish uchun birinchi holatda 1-qoidadan, ikkinchi holatda 2-qoidadan, uchunchi holatda 3-qoidadan, to'rtinchi holatda 4-qoidadan foydalaning.

Tajriba sinov ishi Quyida 2 ta masalani tavsiya etilgan metod orqali tajribadan o'tkazib ko'ramiz.

1-masala. 8 litrli idish suvga to'lib turibdi, 3 va 5 litrli bo'sh idishlar yordamida sutni 4 litrdan qilib teng taqsimlang.[2]

1-jadval				
Idishlar				Holatlar
Idishlardagi mavjud suvlar miqdori	8 litr suv mavjud	bo'sh idish	bo'sh idish	Dastlabki holat
1-qadam	8	0	0	1-holat
2-qadam	5	0	3	2-holat
3-qadam	5	3	0	1-holat
4-qadam	2	3	3	2-holat
5-qadam	2	5	1	3-holat
6-qadam	7	0	1	4-holat
7-qadam	7	1	0	1-holat
8-qadam	4	1	3	2-holat
yechim	4	4	0	

Yechim. 1-jadvalda masala yechimini aniqlash algoritmi ko'rsatilgan. Algoritm yuqorida takidlab o'tilgan qonuniyat orqali qurildi, chunki masala sharti, juft hajmli idishdagi suyuqlikni, hajmlari yig'indisi berilgan juft hajmli idish hajmiga teng bo'lgan toq hajmli ikkita bo'sh idish yordamida teng ikki qismga ajratishdan iborat.

1-jadval asosida masala yechimini qurishning algoritmi.

1-qadam. 1-holat kuzatilmogda, demak 1-qoidadan foydalanamiz. 8 litrlik idishdagi suvdan 3 litrlikka quyib olamiz, bunda 8 litrlikda 5 litr suv qoladi.

2-qadam. (2-holat, 2-qoidani qo'llaymiz). 3 litrlikdagi suvni 5 litrlikka quyib olamiz, bunda 3 litrlikda suv qolmaydi.

3-qadam. (1-holat, 1-qoidani qo'llaymiz). 8 litrlikda qolgan 5 litr suvdan 3 litrini bo'shab qolgan 3 litrlikka quyamiz, bu jarayonda 8 litrlik idishda 2 litr suv qoladi.

4-qadam. (2-holat, 2-qoidadan foydalanamiz). 5 litrlik idishda 3 litr suv mavjud bo'lgani uchun, 3 litrlik idishdagi suvdan 2 litrini 5 litrlikka quyib bu idishni to'ldirib olamiz. Ushbu holatda 3 litrlik idishda 1 litr suv qoladi.

5-qadam. (3-holat, 3-qoidadan foydalanamiz). 5 litrlik idishdagi suvni 8 litrlik idishga quyib olamiz, bunda 8 litrlik idishda 7 litr, 5 litrlik idishda esa suv qolmaydi.

6-qadam. (4-holat, 4-qoidadan foydalanamiz). 3 litrlik idishda mavjud bo'lgan 1 litr suvni 5 litrlikka quyib olamiz.

7-qadam. (1-holat, 1-qoida). 8 litrlikdagi suvdan 3 litrlikka quyib olamiz, bunda 3 litrlik suvga to'lib, 8 litrlikda 4 litr suv qoladi.

8-qadam. (2-holat, 2-qoida). Ushbu qadamda 3 litrlik idishdagi mavjud suvni 5 litrlikka quyamiz va 5 litrlik idishda ham 4 litr suv hosil bo'ladi.

Tavsiya etilgan metod orqali, masala shartida berilgan 8 litrlik idishda berilgan suvni 4 litrdan qilib teng ikki qismga taqsimladik va natijada yechimga erishildi.

2-masala. 12 litrli idishdagi 12 litr sutni 7 va 5 litrli idishlardan foydalanib qanday qilib teng ikkiga bo'lish mumkin?[3:154]

Yechim. Masala yechimining nazariy asosi:

1-qadam. (1-holat, 1-qoida). 5 litrlik bo'sh idish 12 litrlik idishdagi sut yordamida to'ldirilsa, 12 litrlikda 7 litr sut qoladi.

2-qadam. (2-holat, 2-qoida). 5 litrlik idishdagi hamma sutni 7 litrlikka quyib olamiz.

3-qadam. (1-holat, 1-qoida). 5 litrlik bo'sh idish 12 litrlik idishdagi sut yordamida ikkinchi bor to'ldirilsa, 12 litrlikda 2 litr sut qoladi.

4-qadam. (2-holat, 2-qoida). 7 litrlik idish, 5 litrlik idishdagi sut yordamida to'ldirilsa, 5 litrlikda 3 litr sut qoladi.

5-qadam. (3-holat, 3-qoida). 7 litrlikdagi mavjud sutni to'liq 12 litrlikka quyib olamiz, bu jarayonda 12 litrlik idishda 9 litr sut hosil bo'ladi.

6-qadam. (4-holat, 4-qoida). 5 litrlik idishdagi 3 litr sutning hammasini 7 litrlikka quyib olamiz.

7-qadam. (1-holat, 1-qoida). 5 litrlik bo'sh idish 12 litrlik idishdagi sut yordamida to'ldirilsa, 12 litrlikda 4 litr sut qoladi.

8-qadam. (2-holat, 2-qoida). Agar 5 litrlikdagi sutdan 7 litrlikka quysak 7 litrlik idish sutga to'lib, 5 litrlik idishda 1 litr sut qoladi.

9-qadam. (3-holat, 3-qoida). Ushbu qadamda 7 litrlik idishdagi sutni 12 litrlikka quyib olamiz, natijada 12 litrlik idishda 11 litr sut hosil bo'ladi.

10-qadam. (4-holat, 4-qoida). 5 litrlikda mavjud bo'lgan 1 litr sutni 7 litrlikka quyib olamiz.

11-qadam. (1-holat, 1-qoida). 5 litrlik bo'sh idishni 12 litrlik idishdagi sut yordamida to'ldiramiz, bunda 12 litrlikda 6 litr sut qoladi.

12-qadam. (2-holat, 2-qoida). 5 litrlik idishdagi sutni to'liq 7 litrlik idishga quyib olsak, 7 litrlik idishda ham 6 litr sut hosil bo'ladi.

Masala shartiga ko'ra 12 litr sut teng ikki qismga bo'linish kerak edi. 3-jadval algoritmi asosida bunga erishdik. Bu shuni anglatadiki, tadqiqot ishida tavsiya etilgan metod mazkur masala yechimini aniqlash jarayonida ham o'zini oqladi.

Muhokamalar va natijalar. Tadqiqot ishida tavsiya etilgan metoddan foydalanish jarayonida, bir nechta konstruktiv masalalar tahlil qililib, barchasida masala yechimini qurish algoritmi bir xil bo'lganligi sababli, quyidagi natija olindi:

Natija. Juft hajmli idishdagi suyuqlikni(idish suyuqlikka to'la), hajmlari yig'indisi berilgan juft hajmli idish hajmiga teng bo'lgan toq hajmli ikkita bo'sh idish yordamida teng ikki qismga ajratish mumkin va bu jarayon aytib o'tilgan juft hajmli idish miqdorining son qiymatiga teng bo'lgan qadamda aniqlanadi.

Maqolada bayon etilgan, birinchi va ikkinchi masalalar yechimlarini aniqlanish algoritmlariga e'tibor berib, haqiqatdan ham 1-masalaning yechimi 8 qadamda, 2-masalaning yechimi esa 12 qadamda aniqlangan.

Xulosa. Tadqiqot ishida tavsiya etilgan usulni puxta o'zlashtirgan bo'lajak boshlang'ich sinf o'qituvchilari(boshlang'ich sinf o'qituvchilari) soni ko'paytirilgan, yechimini aniqlash muammoli deb qaralgan konstruktiv masalalarni darsliklardan olib tashlashga ehtiyoj qolmaydi.

Ushbu tadqiqot ishining keng targ'ib qilinishi orqali kadrlarimiz(bo'lajak boshlang'ich sinf o'qituvchilari) maqolada keltirilgan konstruktiv masalalarning yechimlarini qurishda muammolarga duch kelmaydi, bu esa maqolada yechimi ko'rsatilgan va ularga o'xshash bo'lgan konstruktiv masalalarning boshlang'ich sinf matematika darsliklariga(3-4-sinflar) kiritish uchun asos bo'ladi.

Shuni ham takidlash joizki, tadqiqot ishining mohiyatida yoritib berilgan metod orqali yechimi aniqlanadigan bir nechta konstruktiv masala yaratish mumkin.

Birinchi va ikkinchi masalalarning yechimi ko'rsatilgan algoritmdagi har bir qadam uchun alohida konstruktiv masala hosil qilsa bo'ladi, bu degan so'z 12 qadamda yechimi aniqlanadigan 2-masala uchun yana 11 ta masala hosil qilish mumkinligini anglatadi. Namuna sifatida, 2-masaladagi 7-qadam uchun quyidagi masalani ayta olamiz: - "12 litrlik idishda 9 litr, 7 litrlik idishda esa 3 litr suv mavjud, keltiril-

gan idishlar va 5 litrlik bo'sh idish yordamida qanday qilib jami suvni teng ikki qismga ajratish mumkin?"

Qiziquvchi kitobxonlarga, xususan bo'lajak boshlang'ich sinf o'qituvchilariga ushbu masalalarni maqolada bayon etilgan metoddan foydalangan holda yechishni tavsiya etamiz.

Adabiyotlar

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РЕЗЮМЕ

Maqolada juft hajmli idishdagi suyuqlikni (idish suyuqlikka to'la), hajmlari yig'indisi berilgan juft hajmli idish hajmiga teng bo'lgan toq hajmli ikkita bo'sh idish yordamida teng ikki qismga ajratish masalasi uchun umumiy qonuniyat taklif etilgan.

РЕЗЮМЕ

В статье предлагается общая закономерность разделения жидкости в двухобъемном контейнере (контейнер наполнен жидкостью) на две равные части с использованием двух пустых однообъемных контейнеров, сумма которых равна объему данного двухобъемного контейнера.

SUMMARY

The article proposes a general pattern of liquid separation in a two-volume container (the container is filled with liquid) into two equal parts using two empty one-volume containers, the sum is equal to the volume of this two-volume container.

ANALYSIS OF THE MOVEMENT ACTIVITIES OF PUPILS IN THE EVALUATION OF PHYSICAL EDUCATION AND SPORTS IN GENERAL SECONDARY SCHOOLS

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Tayanch so'zlar: jismoniy tarbiya va sport, o'ziga ishonch, jismoniy tarbiya va sport dasturi, psixologik va emotsional foyda, akademik ko'r-satkichlar, aqliy hushyorlik, o'z-o'zini hurmat qilish, psixologik farovonlik.

Ключевые слова: физическое воспитание и спорт, уверенность в себе, программа физического воспитания и спорта, психологические и эмоциональные преимущества, успеваемость, умственная активность, самооценка, психологическое благополучие.

Key words: physical education and sports, self-confidence, physical education and sport program, psychological and emotional benefits, academic performance, mental alertness, self-esteem, psychological well-being.

Introduction. Recent studies suggest that there is a positive relationship between intellectual functioning and regular physical activity. At present, a number of important issues are being addressed in our country to improve the health of the population. In particular, the involvement of our youth in physical education and sports has become one of the most burning issues in Uzbekistan [3]. Thus, it is of considerable importance in our country to bring physical education and sport to a new, modern level in all educational institutions. It is clear that physical exercise has a positive impact on the level of health of the body and the mental state of a person. Therefore, it constitutes physical education and sport play a crucial role in education of young generation. It follows that it is noteworthy to study the extent of pupils' movement activities in schools. The aim of the study is to engage schoolchildren in physical education and sports based on a study of the volume of physical activities they do. In order to achieve this aim, the following tasks below are required to be carried out:

1). study and analysis of the general state of involvement of students in physical education and sports in our country;

2). to determine the level of children's needs and interest in physical education and sports by conducting pedagogical and psychological surveys;

3). to put forward proposals for the development of measures for the development of mass sports movement in schools.

Literature review. The famous researchers and scientists are working in the field of this scientific problem, and still carrying investigation as well as scientific articles are being published by them in prestigious journals and magazines, for example:

One of the scholars Michel Bronikowski who is the author of book called "Physical education teaching and learning" pointed out that "it is important for all teachers to equip their pupils with social skills that enable them to recognize and look up to universal social and moral values and

positive attitudes. But the process of developing those does not happen automatically during schooling, so it has to be enhanced by specially designed educational tasks and programmes." [8].

An article of "Physical education makes you fit and healthy, physical education's contribution to young people's physical activity levels" that was published by S. Fairclough and G. Stratton deals with the matters of regular physical activity participation throughout childhood years provides immediate health benefits, by impacting on body composition, as well as the fact that it contributes to children's health and fitness level [9].

An article called "Physical education", "health and physical education", "physical literacy" and "health literacy": Global nomenclature confusion" was published by Timothy Lynch and Gregory J. Soukup who provided information on the role of physical education and sport that develop the knowledge, understanding and skills to support schoolchildren to be resilient, cultivate a strong sense of self, make health-enhancing decisions in relation to their health and physical activity participation [10].

Another scientist Richard Stead Dr Mary Nevill carried out a study of a positive relationship that exists between physical activity and cognitive ability of school aged children, and physical education and sport's positive impacts on anxiety, depression, mood, and wellbeing on his scientific work called "The impact of physical education and sport on education outcomes: a review of literature" [11]. –

It is crystal clear from the book called "Physical education Class XI" published by Central Board of Secondary Education, Academic Unit, Shiksha Sadan, 17, that Physical Education helps the learners acquire skills that improve their performance, sharpens knowledge of strategy and tactics, and helps them to transfer knowledge from one context to another, including sport and recreational and outdoor activities. Participation in physical education and sports builds confidence, provides the learning opportunities to