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THE EFFECTS OF CONNECTING ELEMENTARY MATHEMATICS LESSONS WITH NATURAL SCIENCES

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Abstract: This article presents how to further increase the efficiency of learning in primary grade mathematics classes, create mechanisms to make the results of the learning process promising based on inter-subject integration, and organize integrated lessons with natural science in mathematics classes.
Key words: Unfulfilling life, talented poet, great talent.

It is known that the science of mathematics sharpens the human mind, develops concentration, educates determination and will to achieve the intended goal, teaches discipline in an algorithmic way and, most importantly, encourages reflection and expands thinking.

STEAM (S - science, T - technology, E - engineering, A - art, M - mathematics) educational technology in the block-module of concrete sciences to demonstrate the relevance of the acquired knowledge, skills and competences of students to everyday life, to conduct educational research, perform experiments, design in lessons and extracurricular activities It is aimed at educating directed creativity, developing interests in creating news. In the implementation of this technology, students perform tasks such as creating projects for making various technical devices, creating a model of the device based on the project and using it in practice, finding its shortcomings and eliminating it.

Competency approach to mathematical education implies the acquisition by students of various forms of competences that allow them to act effectively in situations encountered in professional, personal and everyday life in society. Thus, in the competency-based approach, the basis of mathematical education is focused on strengthening the practical, applied directions.

As a result of using one or another level of integration in the educational process, the student's time and energy are saved, his knowledge opportunities are expanded. There will be an opportunity to save money spent by parents and the state on the education process; on the basis of inter-subject integration, mechanisms are created to make the results of the learning process prospective; legal and methodological opportunities will be created to train and improve the qualifications of teachers who manage the integrated educational process; on the basis of integrated programs, the level of economic

efficiency of the learning process is determined; favorable opportunities arise for wide use of international experiences in the field of organization of the educational process based on integrated programs.

In the 3rd grade, an integrated lesson in mathematics and natural sciences can be organized in the following order:

- How do you understand the word Odyssey?

- Odysseus is a hero of Greek mythology. His adventures and travels are described in the poem "About the Voyages of Odyssey". So an odyssey is a journey.

- Now Cousteau's ship is in the open ocean. He can take our helicopter on board at any time. We will build a helicopter immediately. Get to work constructors. Chief designer Karim. He helps me. You have to say the answer quickly and correctly. a detail of a helicopter (each example is a detail of a helicopter).

35 m=	Sm	2150 kg=	T	Kg
28 sm=	Mm	20 kg=		G
45 km=	M	5 min=	S	
2 h 30 min=	min			

We built the helicopter. Take a good seat. Go!

Clouds are visible ahead, now the speed is 300 km/h. Road

walking time is 4 hours. It is necessary to calculate the distance. Count faster, time is running out. The helicopter should go forward.

- Distance - 1200 km.

- Now it's time for breakfast.

1. Mantiqiy masalalar.

Two sons and two fathers ate 3 eggs. How many eggs did each eat? (From one, because they were: grandfather, father. Fertilizer).

5 apples should be distributed among 5 girls in such a way that 1 apple remains in the basket (the apple should be given to 1 girl along with the basket).

The following notes are written on the board: 80×40=32000 (0)

60×3 = 180 (P)

40×50 = 2000 (S)

140:20 = 7 (K)

300:10 = 30 (A)

2400:30 = 80 (L)

100000: 1000 = 100 (I)

After the children say the answer, the teacher hangs the cards with the answer and the letter on the

board.

Second task: Arrange the answers in order of increasing numbers, and you will find the name of the ship:

7-K, 30-A, 80-L, 100-1, 180-P, 2000-S, 32000-0.

- Our helicopter has landed on the ship, Cousteau's team is waiting for us. Let's get to know them.

- Let the anchor rise! Go full speed ahead! We are going out to sea.

2. Problem solving (action).

- You will receive the first task from Cousteau's team. We will test your math skills. The teacher reads the condition of the problem.

- Now let's move on to mathematical research. What do you know about sharks?

- Shark is a predatory fish. There are about 300 of them. The most dangerous and aggressive of them is the man-eating white shark. Sharks can eat anything in their path. That's why they are called marine sanitarians.

- So sharks, unknowingly, benefit greatly (a video of a great white shark is shown).

- What do you know about swordfish?

- Swordfish is a predator. He has a one meter long sword in his nose. He bursts into the shoal of fish and damages fish, squid and even sharks with his sword. With his sword, he can even tear apart a fishing boat.

Task 1. A mackerel can swim at a speed of 20 km per hour. The speed of a shark is 6 km/s more than the speed of a mackerel. A swordfish can swim 5 times faster than a shark. How fast can a swordfish swim? (Children solve independently.)

Mackerel - 20 km/h

Shark -? 6 km/h more than

Swordfish - ? 5 times more than

20+6=26 km/s is the speed of a shark.

26+ 5= 130 km/h - the speed of a swordfish.

Answer: the speed of a swordfish is 130 km/h

Task 2. (the student reads the problem on the card). The four-winged flying fish is capable of flying great distances. The length of such a record distance is 1080 meters, and its duration is 60 seconds. Find out how long it is:

1080:90= 12 m/sec.

Children solve independently. The informant is checked using cards.

Task 3. (the student reads what is on the card). The thick-skinned sea turtle is included in the Red Book. She lays 200 eggs a year, while the land turtle lays about 20. How many eggs does a sea turtle lay?

Children solve orally: 200:20=10 times more.

- Tell me, children, why are there so few sea turtles? Considering the data we calculated, it should be the other way around, right?

- Not all hatched turtles reach the sea. Animals kill them. People also hunt large turtles for their tasty meat.

- And now we climb the ship from the bottom of the sea and move along the coral reefs. What are coral reefs?

- Corals are not plants. They are composed of very small animals - polyps. Each polyp looks like a small mole. Coral reefs are formed from these nests.

- Currently, there is a great danger for coral reefs, people are destroying them with thermonuclear devices. They are dying from pollution and starfish attacks. The skeleton of coral polyps is used in construction. Lime is taken from them and various decorations are made.

Task 4. (the student reads the problem on the card). The area of coral reefs is 120,000 km2, and the width is 60 km. How long do coral reefs stretch? Make an equation and solve the problem. Short note on the board.

s = 120,000 km^2

b=60km

a=?

60a = 120000 km

a = 2000 km - the length of the reefs:

We passed the coral reefs. • SOS. message means "Save our lives" in the language of sailors. Help is being sought because whales are dying.

Task 5. Every year, 8 million tons of oil fall into the ocean due to cracks or shipwrecks. This one ton of oil pollutes 12 km2 of sea surface. How many km2 of water surface is polluted in a year?

Year I - 8 million tons

I ton - km2

I year- ? km2

And in 3 years? 96? 3=288 km^2.

To sum up, elementary education mathematics lessons provide students with information about the seas, their surface, elimination of factors that cause water pollution, and protection of aquatic creatures through an integrative approach with natural science. To make students love nature. teaches to pay special attention to its protection to all the animal and plant world in it.

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