

# The interrelationship of mathematics and physics

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**Annotation:** This scientific paper discusses the aspects of mathematics and physics

**Keywords:** physics, chemistry, astronomy, mathematics, differentiation, integrated textbooks

In the days of our great-grandfathers Al-Khwarizmi and Abu Rayhan Beroea, allies studied them holistically and in connection with one another, not engaging in individual types of subjects as they are now. The scientific work of the hypocrites of the ancient world is much broader, and they are also aware of the professions of natural sciences, such as rheumatoid arthritis, physics, astronomy, chemistry, and so on. That is why such people were called allies. From the roughly awakening periods of our history, science and craftsmanship began to flourish. By the 18th and 19th centuries, the individual separation of subjects resulted in mathematics, physics, chemistry, biology, astronomy, and other subjects. After the emerging independent sciences perfected and reached a logical completion, they began to find their own application in life. Therefore, in doing so, every fan of the natural mathematical cycle began to study the properties of the real world in their own way. As a result of the work of scientists known to Galiles, Newton, Decart, Leybnist, Bernulli, Gauss, Eyrey, Koopernick, and the world, mathematics, astronomy, physics, and other individual sciences began to develop. (Matthew 24:14; 28:19, 20) The differentiation of mathematics became increasingly rapid, and they began to study the interrelated properties and characteristics of the outside world separately. Along with the process of differentiating science, the need to study its properties in order to thoroughly study the outside world began to emerge without compromising its interrelationship.

The resulting rise in sea levels from the meltdown, the source of the historic centre of the university, the meltdown, and the reed. Therefore, as a result of the cooperation of scientists working in various fields, new subjects began to emerge on their border. The de'fferensialization of science, in turn, led to their integration, or integration process. As a result of the integration process of science, hundreds of subjects such as mathematics, physics, crystallography, crystal physics, crystallization, theoretical mechanics, biochemistry, biophysics, biochemistry, geochemistry, geophysics, astrophysics, radiotics, and cybernetics have emerged, without which it is impossible to imagine the development of modern science and technology.

The development of natural sciences, in turn, had a profound effect on the development of mathematics. Many physical concepts and ideas began to be used in the context of mathematics. Many concepts, such as "mechanical meaning of the crop," "harmonic distortions," and "Crystal Panels," are reflected in some fields of mathematics. There are various interpretations of the term "integration"—this is the combination of parts, parts, and one whole. The main issue in integrating academic subjects in teaching is to ensure the unity of tasks, first of all, the objective, methods, forms to determine the tools and the results observed.

Mathematics of knowledge plays an important role in the integration of science.

The 5-6 grade mathematics course incorporates elements of arithmetic, algebra, geometry. Therefore, these textbooks serve as examples of integrated textbooks. Using the coordinates method can lead to the harmony of the algebra and geometry course. The introduction of vectors allows you to study geometric material in an algebraic way, thus leading to the approach of these two courses. Mathematics, physics, chemistry to determine the extent to which mathematics, skills, and skills in mathematics are used to teach physics and chemistry and vice versa

a comparative analysis of the topics in their textbooks.

Physics

Mathematics

- 1 Mass and dimensions of molecules. Number of avogadro. Standard form of the thigh. Diameter.
- 2 Havoning namligi Percent.
- 3 The speed at which gas molecules move. Delete, geometric jisms.
- 4 Mechanical properties of solid particles. Funksiyaning grafigi.
- 5 The laws of return and fracture of light. Angle, return angle.
- 6 Qavariq botiq linzalar. Sferik sirt, qavariq, boriq, parallel nurlar.

Inorganic kimyo

Mathematics

- 1 Solving chemical issues Proporsiya, percent
- 2 Izotoplar, izobarlar The qualifications of division.
- 3 Crystal panjaralar. Ko'pyoqlilar.

Functional bonding is a widely used relationship in physics. A student who is well-versed in the function, its graph, its two events, the relationship between the collection, the compatibility and its properties quickly masters the functional bonds in physics. "Smooth Correct Movement" in physics is a linear function in mathematics  $y=kx+b$ . "Straight linear acceleration movement  $V=v_0 + at$  is like  $y=kx+b$ .

In the course of physics: or in the chemistry course:

Integrating education increases students' sense of enthusiasm, interest in learning subjects. It improves the level of knowledge in academic subjects, their mental activities develop. Of course, they learn about incompatibility through the incompatibility of science. In an integrated lesson, the continuity of training and the application of the knowledge gained make it easier for students. Let's take a look at examples of the relationship of mathematics and physics.

1) An object revolves around the arrow by law. Find the angle speed at the current  $t$  time of time and when  $t = 4$ .

2) An object with a mass of 2kg moves straight linearly according to the law  $x(t) = t^2 + t + 1$ .

1) Ta'sir qiluvchi kitchen toping.

2) Find the kinetic energy  $E$  2 seconds after the object begins to move.

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The issue of mathematics depends on chemistry.

1. The mass of two pieces of punishment . In the first piece, in the second, there is pure copper. If the amount of copper in the second piece of punishment is 15% more than in the first piece, how many percent copper is there in the first piece? 30 kg 5 kg 4 kg

2. 200 grams of water were added to the solution containing 40 grams of salt, after which its concentration decreased by 10%. How much water was in the solution and what was its concentration?

3. In a similar life, learning to solve issues used in practice will further increase students' interest in mathematics.

1. One side of a rectangular rectangle allocated for unscrupulousness is more than 10m from the other, which should be covered with an ihota wall. If the face of the plot is  $1200\text{m}^2$ , find the length of the ihota wall.

2. Find the distance between the points of the coordinate alignment:

a) A(2; 5) goes B(-1; 1)

b) A(-1; 0) goes B(1; 0)

g) C(7; 9) goes D(-5; 4) d) C(0.4; 2.54) goes D(-0.56; 1.54).

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