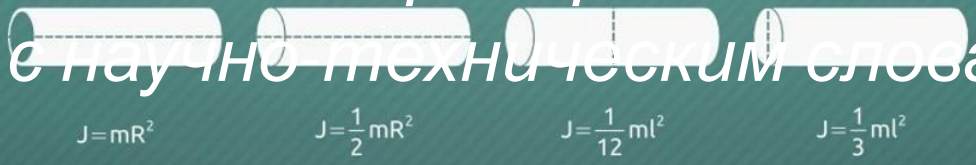
Физика пәнін оқытуда үштілдік білім берудің ерекшеліктері

Peculiarities of teaching the subject of physics in three languages

Особенности преподования предмета физики на трех языках

- **Цель:** *Развивать речевые умения учащихся в целях использования его в школьных предметах, а так же в физике и показать что английский язык является языком интегрирования. Углубить и расширить знания по английскому языку при создании проектов различных приборов связи. Учить работать с научно-техническим словарем*



- **The aim of the project work:** *To develop language skills of students in order to use it in school subjects, as well as in physics and to show that English is the language of integration. To deepen and expand knowledge of the English language when you create projects of different communication devices. Learn to work with scientific and technical dictionary*

- Үштілдік туралы Қазақстан Республикасының Президенті Н.Ә. Назарбаев білім және ғылым саласы қызметкерлерінің III съезінде сөйлеген сөзінде: «Ағылшын тілінің қажеттілігі әлемге тән қажеттілік, бүгінгі күн талабы. Ал орыс тілін жақсы білу – біздің байлығымыз» десе, 2015 жылғы «Жаңа әлемдегі жаңа Қазақстан» атты Жолдауында: «Қазақстан бүкіл әлемде халқы үш тілді пайдаланатын жоғары білімді ел ретінде танылуға тиіс. Бұлар: қазақ тілі-мемлекеттік тіл, орыс тілі-ұлтаралық қатынас тілі ж… жаһандық экономикаға о… тілі»

The state language is Kazakh, Russian is an official language. In his message N.Nazarbaev said: “Kazakhstani future generation must know three languages: Kazakh, Russian and English as an international language.”

Интегрированный урок требует особой подготовки. В ходе такого урока необходимо:

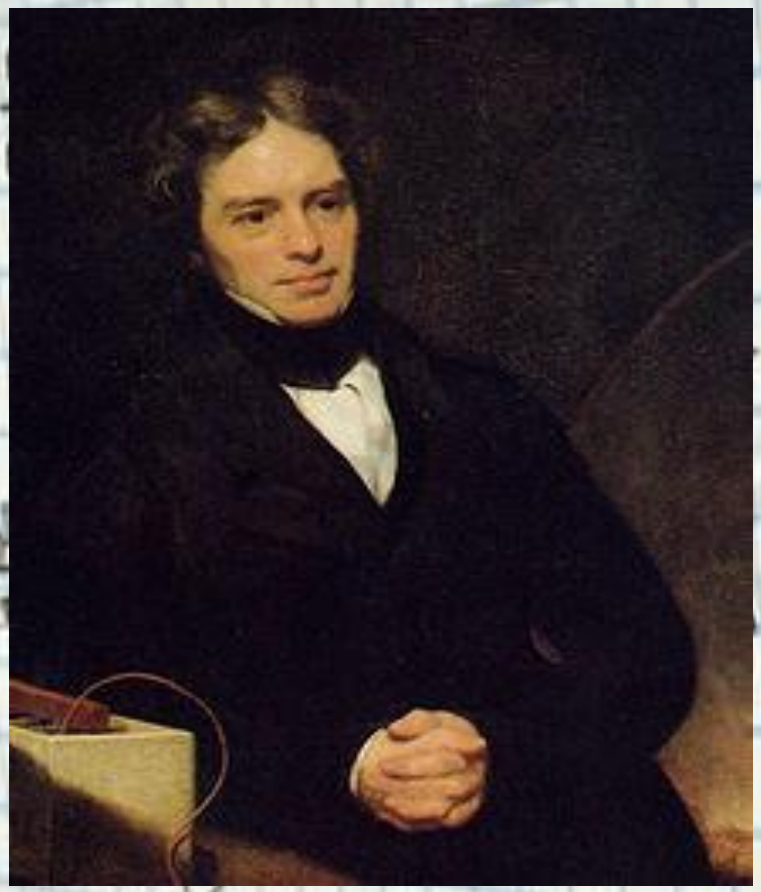
Тщательно проработать новую лексику; её количество должно быть ограничено с учётом подготовки класса.

Кратко и доступно изложить содержание изучаемой темы.

Разработать тесты и задания для закрепления лексики и развития навыков устной речи.

Michael Faraday

(22 September 1791-25 August 1867)



- English physicist, chemist, founder of electromagnetic field theory
member of the Royal society of London

Discoveries and inventions

- **1833-1834**, scientist have established the laws of electrolysis
  experimentally showed that depending on the environment changes the interaction force between the charges
  invented the Dynamo, which was later called DC generator

- **1846** Faraday found the connection between magnetic and optical phenomena, which later became the confirmation of the electromagnetic theory of light

"Turn magnetism into electricity" account in the laboratory of Faraday's diary

- After the discovery in **1820**. H. Oersted magnetic action of an electric current Faraday was fascinated by the problem of the connection between electricity and magnetism
- **1831**. Faraday experimentally discovered the phenomenon of electromagnetic induction

New words.

- **Катушка**- coil
- **Виток проволоки**- wire
- **Гальванометр**- galvanometer
- **Выдвигать**- extend
- **Стрелка** -pointer
- **Магнит**- magnet
- **Вставлять**- insert
- **Отклонение** – deflection
- **Противоположная сторона**- reverse
- **Электрическая обмотка**- winding
- **Электромагнитная индукция**- electromagnetic induction
- **Наводить, индуцировать**- induce
- **Индуцированный**-induced
- **Индукционный** –inductive

"The discovery of electromagnetic induction"

- During the ten yeas or so before his great discovery, many investigators took a great interest in the connection between electricity and magnetism. It had been definitely established by Oersted's experiment that magnetism could be produced from the electric current.

- The phenomenon of electric current in the conductor when changing magnetic flux penetrating the circuit of the conductor, is called electromagnetic induction. Induction current occurs only when changing the magnetic flux penetrating the loop.

Experience

- Into the coil from the turns of wire connected to the galvanometer, slide the magnet, the galvanometer needle is deflected, which indicates the occurrence of induction current. When removing the magnet from the coil is again observed deflection, but in opposite direction.

Conclusion

- Thus in this lesson we studied the phenomenon of electromagnetic induction which was discovered by Faraday, and we got acquainted with new scientific and technical terms and concepts, saw the possibility of expanding physical knowledge, having a deep knowledge of a foreign language.

- **Рабочая часть проекта**


Назарларыңызға
рахмет
Спасибо за внимание
Thank you for your attention