



كلية العلوم

القسم : الفيزياء

السنة : الثانية

المادة : لغة تخصصية ١

المحاضرة الثامنة / نظري /

{{ مكتبة A to Z }}

مكتبة A to Z : Facebook Group

كلية العلوم ، كلية الصيدلة ، الهندسة التقنية

يمكنكم طلب المحاضرات برسالة نصية (SMS) أو عبر (What's app-Telegram) على الرقم 0931497960



Session 8

How is the ocean floor studied ?

The ocean is 11 km deep in some places . People cannot safely dive down to such extreme depths . They use technology such as sonar , drills , underwater exploration vessels , and satellites .

With Sonar

Sonar stands for sound navigation and ranging . This technology uses sound waves to measure distances . Scientists use sonar to determine ocean `s depth by sending sound pulses from the ship down into the ocean . The sound moves through the water , bounces off the ocean floor , and returns to the ship , where the sound waves are

picked up by receivers . Computers on the ship calculate the time the sound takes to travel from the ship to the ocean floor and back again .

With satellites

Satellites can measure variations in the height of the ocean`s surface . The features of the ocean`s surface . The feature of the ocean floor can affects the height of the water above them . Scientists can use satellite data to make maps of the sea floor . Satellites can gather data from much larger area than sonar . satellites can also measure other features ,such as the ocean`s surface temperature , with a high degree of accuracy .

In underwater vessels

Scientists use underwater vessels to explore the ocean . Some vessels have pilots and can carry researchers . Other vessels are remotely operated . Remotely operated vessels(ROVs) , are flown from the surface by remote control . ROVs can be used to explore the ocean at depth that are too dangerous for piloted vessels to explore .

With Deep Sea Drilling

Scientists can collect core , or long tubes of rock and sediment ,from the sea floor . Floor are drilled using equipment on large ships . By studying the layers of rock and sediment in the cores , Scientists learn about the history of earth .