

Help make science and technology come alive for your students

with the Offshore Energy Center's (OEC)

Mobile Oilfield Learning Unit (MOLU)



The Mobile Oilfield Learning Unit (MOLU) is a 1.2 million dollar engaging traveling exhibit. It features six self contained learning centers with curriculum-based, hands-on activities about energy and the technologies and sciences involved with the oil and gas industry. The curriculum for each of the 24 activities is based on national standards and can be adapted to state standards as needed. Although the MOLU is geared to 5th grade students, it is also appropriate for other age groups. Twenty-five schools participated in the pilot program, and the MOLU is available for booking.



The exhibit is transported via truck/trailer for exhibition and set up in school gymnasiums or common areas. The modules are opened to reveal the display area which includes the various elements of each particular learning activity and accompanying materials. The MOLU can reach up to 192 students per exhibition day, with no more than 48 students rotating through the exhibit each 90 minutes (1-1/2 hours). Students will receive a "MOLU PASS" with questions that correlate to the activities on all 24 stations which they complete during their rotation. Following the visit, the students keep the MOLU PASS, and the teachers will have the opportunity to review the answers.

Pre- and post-visit materials accompany the units for enhancement of the learning experience including but not limited to:

- Pre/Post Survey with answer sheets/answer key
- Post visit—"MOLU game"
- Career Interest Profile Form
- American Petroleum Institute's "Fuel-Less" 16 minute video
- Correlation of MOLU activities to National Science Standards.
 - State correlations available upon request

The Mobile Oilfield Learning Unit is available for use in your school. The cost for a one-day visit in the Houston area begins at \$950. Call for a specific quote. To make your reservation, or for more details, contact the Offshore Energy Center at 281-544-2963, or 281-679-8040 or e-mail: ocemolu@oceanstaroec.com.


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...are proud sponsors of the MOLU.

Educators rave about the MOLU and their experience.

"The experience was wonderful - I look forward to next year when MOLU returns."

Laura Evans, Bear Branch Elementary

"Very organized...loved the activity booklet the students answered questions in. Great effort, great job! Thank you."

Monica Tandon, Sutton Elementary School

"The kids really enjoyed it, and I did too. It was a great learning experience. We were able to review key vocabulary. Thanks a lot for your time."

Jossie M. Fussa, La Vace Stewart Elementary

"I wasn't sure what to expect but the program exceeded all my expectations. My students said it was awesome!"

Paula Ordeneaux, Village School

MOLU Correlations to National Science Standards - Grades 5-8

Station 1

Energy Lingo	Science and Technology and Society (F); Understanding about Science and Technology (E)
Holland Personality Types	Science as a Human Endeavor (G)
Historical Timeline	History of Science (G); Science and Technology and Society (F); Understanding about Science and Technology (E)
Engineering	Science as a Human Endeavor (G), Abilities of Technological Design (E); Abilities Necessary to do Scientific Inquiry (A)

Station 2

Formation of Petroleum	Structure of the Earth System (D); Populations, Resources, and Environments (F)
Rock Sedimentator Tube	Structure of the Earth System (D)
Porosity Turntable	Structure of the Earth System (D)
Microslide Viewing	Populations, Resources, and Environments (F); Structure and Function in Living Systems (C)

Station 3

Seismic	Structure of the Earth System (D); Science and Technology and Society (F); Understanding about Science and Technology (E)
Stereoscopic Map	Science and Technology and Society (F); Understanding about Science and Technology (E)
Thermal Pad	Transfer of Energy (B); Properties and Changes of Properties in Matter (B)
Flourescent Rocks	Structure of the Earth System (D)

Station 4

Drill Bit Display	Science and Technology and Society (F); Understanding about Science and Technology (E)
Rock Core Samples	Structure of the Earth System (D); Science as a Human Endeavor (G)
Strike Oil Game	Science as a Human Endeavor (G); Risks and Benefits (F)
ROV Simulator	Science and Technology and Society (F); Understanding about Science and Technology (E); Abilities of Technological Design (E)

Station 5

Distillation Process Puzzle	Properties and Changes of Properties in Matter (B); Science and Technology and Society (F); Understanding about Science and Technology (E)
Cost Comparison	Understanding about Scientific Inquiry (A); Abilities Necessary to do Scientific Inquiry (A)
Pass the Petroleum	Science and Technology and Society (F); Understanding about Science and Technology (E); Science as a Human Endeavor (G)
Oil Products	Science and Technology and Society (F); Science as a Human Endeavor (G)

Station 6

Viscosity Tubes	Properties and Changes of Properties in Matter (B)
Rigs and Platforms	History of Science (G); Science as a Human Endeavor (G); Science and Technology and Society (F); Understanding about Science and Technology (E)
Carbon Cycle	Structure of the Earth System (D); Transfer of Energy (B)
Oil Gears	Properties and Changes of Properties in Matter (B); Science and Technology and Society (F); Understanding about Science and Technology (E)