Ocean Floor

Features of the Ocean Floor:
- continental shelf
- volcanic island arc
- mid ocean ridge
- seamount
- guyot
- ocean trench
- abyssal plain
- abyss
- continental slope
- continent
Ocean Floor Lab

• Each group will create & label a model of the ocean floor.
• The model must be completed today.
• There are 8 elements that must be included. Each person must design and label at least 2 elements.
• All of the clay stays in the tray.
• The lab is worth 16 points: 2 points for each ocean feature.
• Inappropriate lab behavior = Points taken off grade for the lab. Possible ISI for disrespecting lab materials.
• The team to build the best model gets a Snake Bite!
The Ocean Floor

• Oceanographers discovered the shape of the ocean floor by measuring the depth of the floor in many places.

• Early tools included lead weights lowered on ropes or cables to the ocean floor.

• Today, sophisticated side-sonar and satellite data are fed into computers.
A Note About Ocean Models

- All models of the ocean floor show features with vertical exaggeration – the models are taller and steeper than they actually are.
- If models were drawn to scale, they would need to be very large.
- The Pacific Ocean is 6,000 miles wide and 6 miles deep in some places. If you made a model where 1 foot = 6 miles, the model would be more than 1,000 feet wide and more than 3 football fields in length.
Ocean Floor Vocabulary

A. **Shoreline**: line which marks the edge of the ocean water

B. **Continental Shelf**: shallow, submerged part of the continent just off shore

C. **Continental Slope**: land from continent’s end to ocean floor

D. **Trench**: narrow, very deep valley

E. **Guyot**: underwater volcanic mountain

F. **Abyssal Plain**: flat, nearly level areas; forms most of the ocean floor

G. **Ridges**: great underwater mountain ranges

H. **Rift**: valleys between ridges
Ocean Floor Model #1

A. shoreline
B. continental shelf
C. continental slope
D. trench
E. guyot
F. abyssal plain
G. ridges
H. rifts
Ocean Floor Model #2

- Continental slope
- Guyot
- Abyssal plain
- Ridges
- Rifts
- Continental shelf
- Trenches
Design & label the ocean floor that includes the following features:

A. SHORELINE
B. CONTINENTAL SHELF
C. CONTINENTAL SLOPE
D. TRENCH
E. GUYOT
F. ABYSSAL PLAIN
G. RIDGES
H. RIFT
Materials

Each team will receive the following:

- One tray
- Wax paper
- Toothpicks
- Scissors
- Tape
- Labels of ocean floor vocabulary
Procedures

• Most important part of this process is the way your team works together
• Each person should take a turn doing a job
• Line your tray with wax paper
• Place the dough on the paper
Make a plan

• Take time to press out the dough
• Give yourself an even layer to play with
• Remember the different models
• Which design will your team create?
Work Together!
Start to Create
Remember the labels

- This picture only shows 6 labels
- Your team needs all 8 to receive full points