

# 3.2 SKEWER CONTOUR MAPPING

## How can you map what you cannot see?

### MATERIALS

Per small group of students:

- Calibrated skewer with depth marks every half inch, up to 3 inches ( $\frac{1}{2}$ , 1,  $1\frac{1}{2}$ , etc.)
- Styrofoam sandwich box with stationary objects inside (i.e. rocks, potatoes, etc.)
- Grid Map placed on top of Styrofoam box

### DIRECTIONS

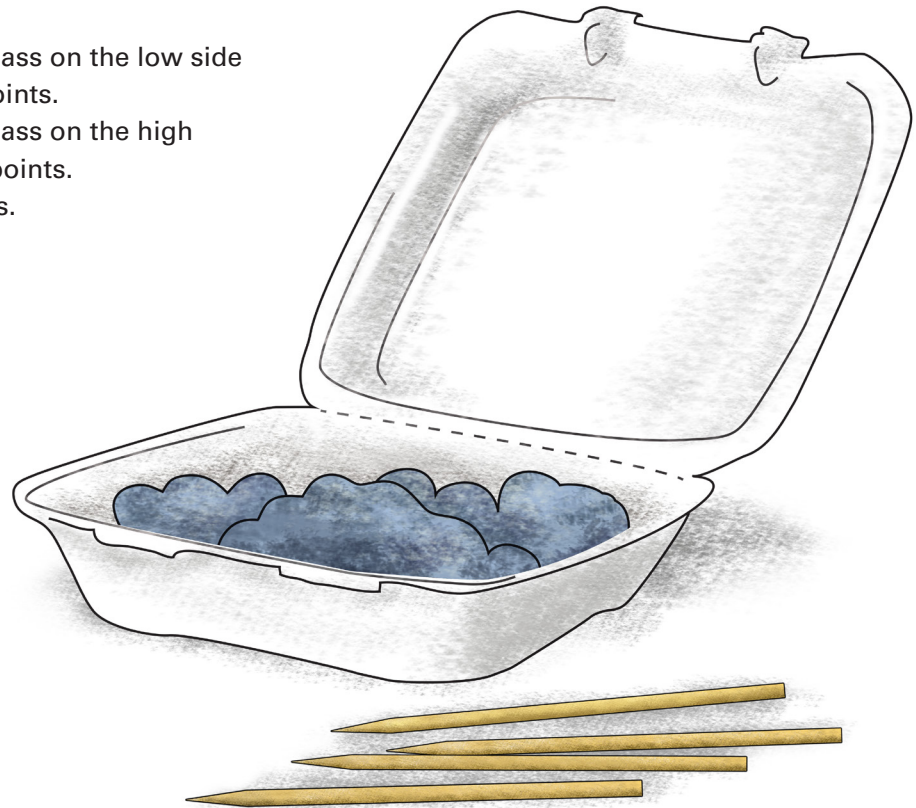
1. Select a calibrated skewer and a blank grid paper to record depth measurements.
2. Take depth measurements at all points. Record all measurements on the blank grid. Most measurements won't be exactly on a number, so round to the nearest half inch.
3. Contour map the data by drawing a line to connect depths of the same number.

*Follow these rules:*

- a. Each contour line must pass through all points of equal depth.
- b. Each contour line must pass on the low side of higher or shallower points.
- c. Each contour line must pass on the high side of lower or deeper points.
- d. Contour lines never cross.

### REFLECTION

1. Why is contour mapping important to the crude oil and natural gas industry?
2. What are the geologists looking for?
3. How can you map what you cannot see?
4. What technology has increased the accuracy of contour mapping?
5. What technology does the oil and gas industry use before it drills on land or offshore?



## 3.2 SKEWER CONTOUR MAPPING

1 ×	2 ×	3 ×	4 ×	5 ×	6 ×	7 ×
8 ×	9 ×	10 ×	11 ×	12 ×	13 ×	14 ×
15 ×	16 ×	17 ×	18 ×	19 ×	20 ×	21 ×
22 ×	23 ×	24 ×	25 ×	26 ×	27 ×	28 ×
29 ×	30 ×	31 ×	32 ×	33 ×	34 ×	35 ×
36 ×	37 ×	38 ×	39 ×	40 ×	41 ×	42 ×
43 ×	44 ×	45 ×	46 ×	47 ×	48 ×	49 ×
50 ×	51 ×	52 ×	53 ×	54 ×	55 ×	56 ×