

Pigs On A Boat

Supplies

1. Pennies (30 or more)
2. Container of Water
3. Plastic Lids (1 small, 1 medium)
4. 2 5X8 Pieces of Aluminum Foil
5. Towel



Directions

1. Place the container of water on a surface that would be fine getting wet.
2. Choose one of the lids to be your first boat.
3. Estimate (guess) how many pennies (piggies), when placed on the lid floating in the water, will make your boat sink. Write this number down.
4. Place the pennies (piggies) on your "boat" one at a time. Count as you place them on the lid. You might want to keep track by making a mark on the paper each time you place a penny. (tallies)
5. How close to your estimate were you?
6. Try again with the next lid. Estimate, record, place, then check your answer.
7. After you have used the lids as the boats, think about why one boat may have held a different amount of pennies? Was it the size, shape, or how thick it was?
8. Design a boat out of one of the rectangle sheets of aluminum foil. Estimate how many pennies it will take to make it sink.
9. Record your estimate and check it by placing pennies on it until it sinks.
10. Make another boat with a change in the shape or size. Estimate how many pennies it will take to make it sink.
11. How did your change affect the amount of pennies it could safely hold.