

Why Do Boats Float?



**Nimitz Aircraft Carrier:
200,000,000 lbs.**



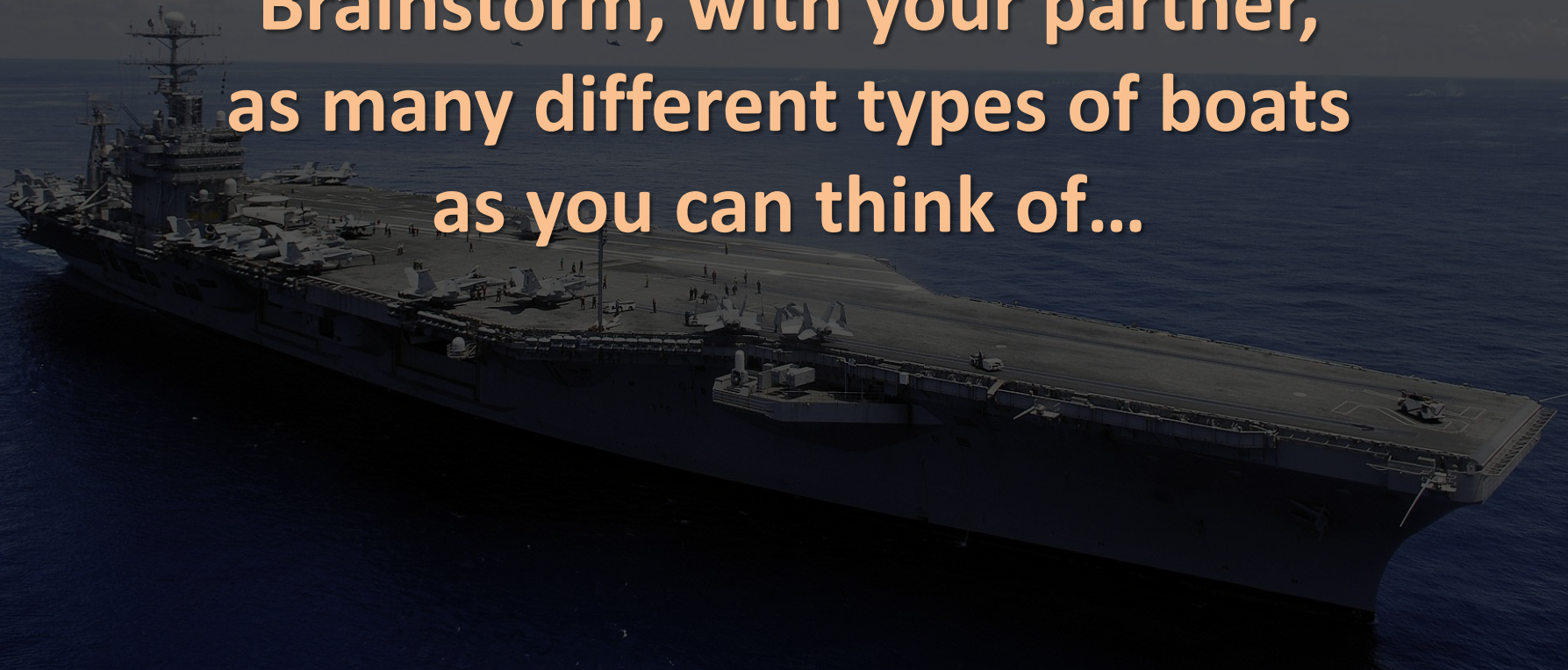
Take out a blank piece of paper,
label it **Page 112: Intro to Boats**



Take out a blank piece of paper,
label it **Page 112: Intro to Boats**

Type I Writing:

Brainstorm, with your partner,
as many different types of boats
as you can think of...









Isaiah, Jr.







USA-253
253-A2U

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Boats float when their
density is _____

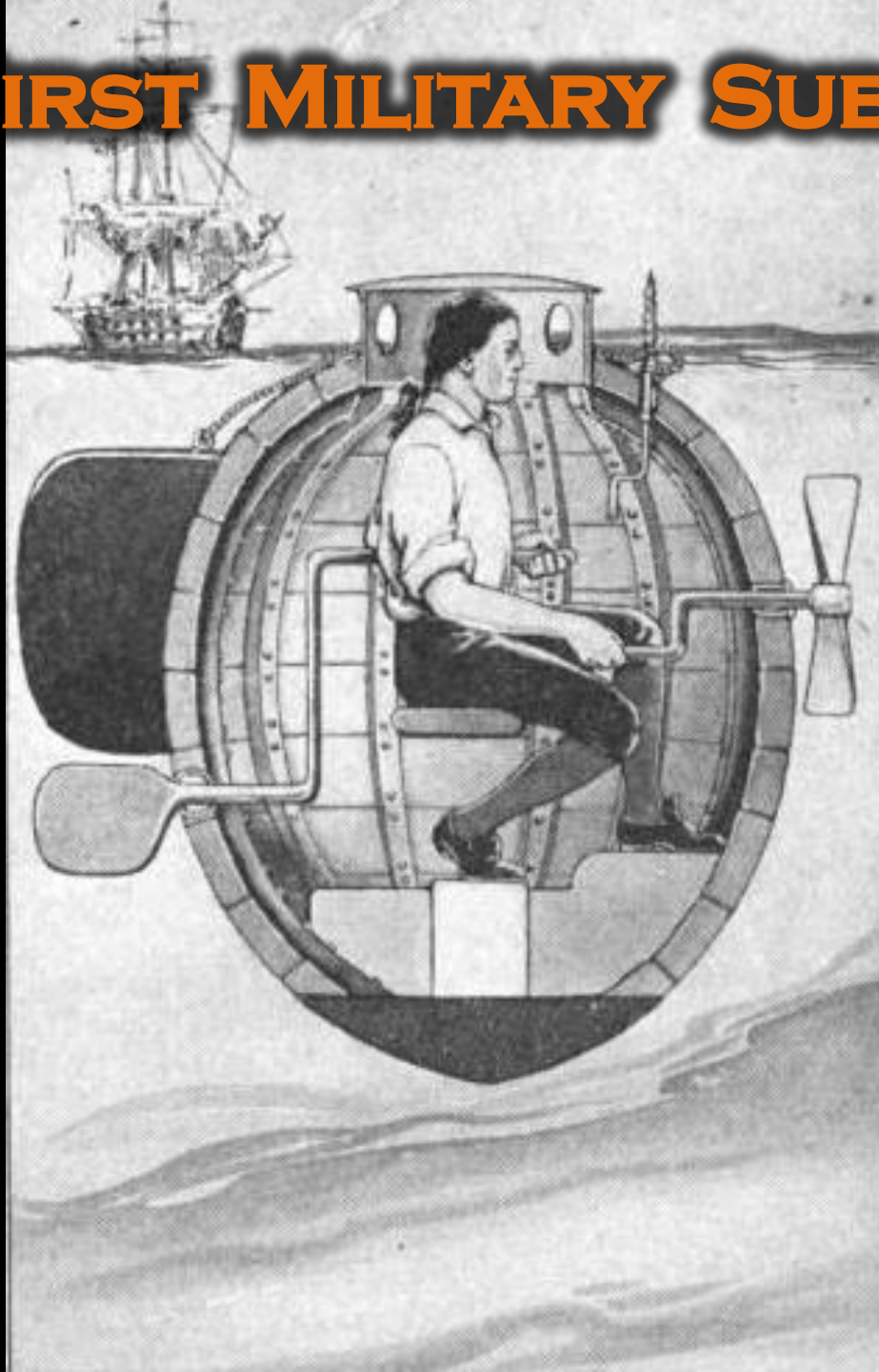


Boats float when their
density is less than 1 g/ml.

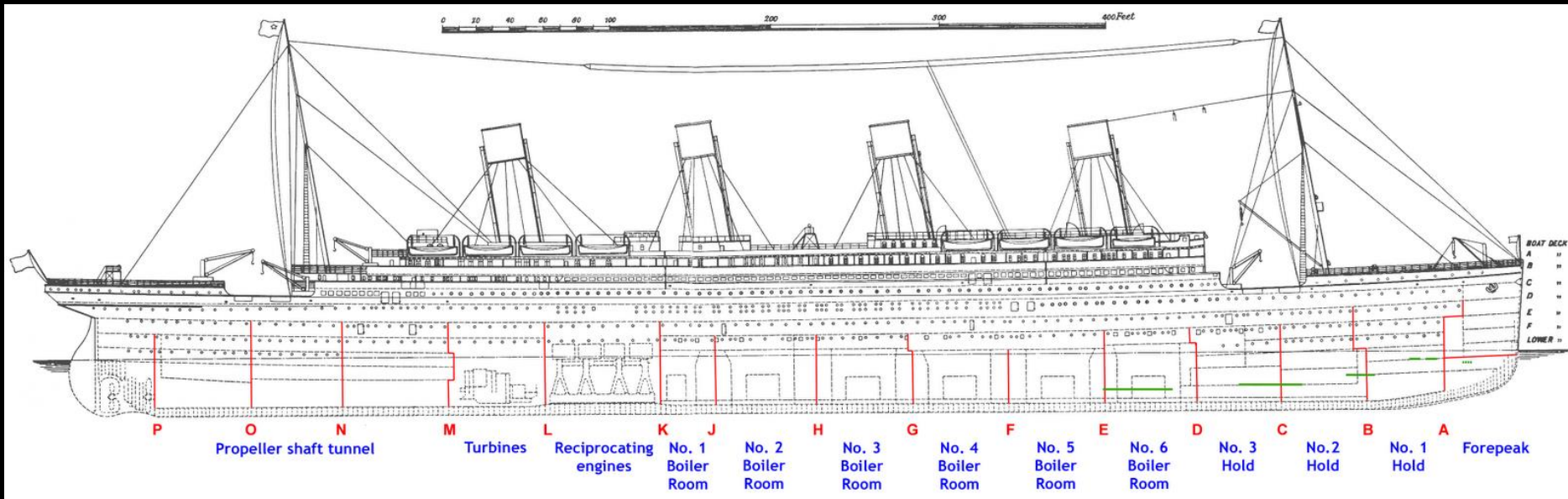




THE FIRST MILITARY SUBMARINE

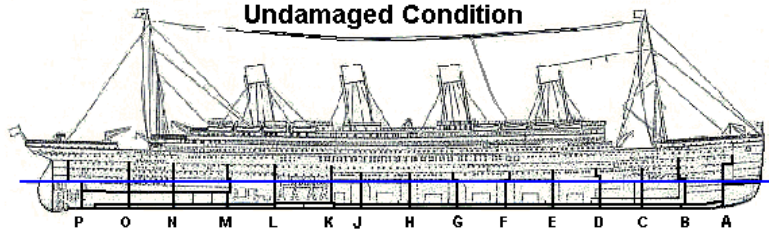


The Titanic

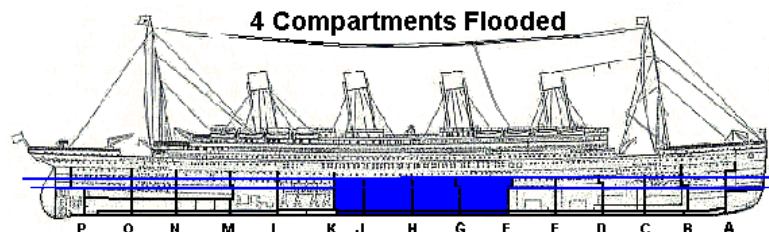


Permissible Flooding Conditions

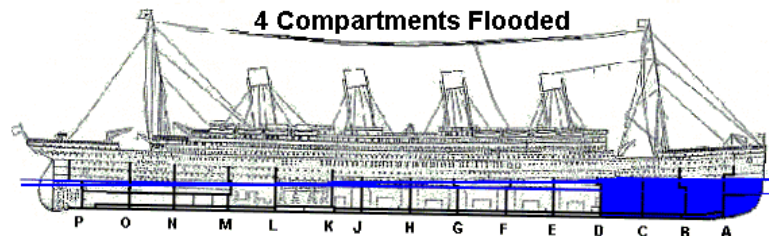
Undamaged Condition



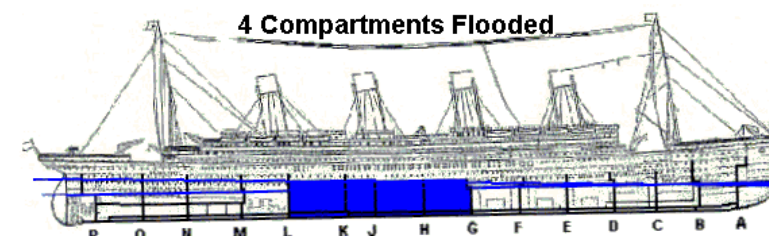
4 Compartments Flooded



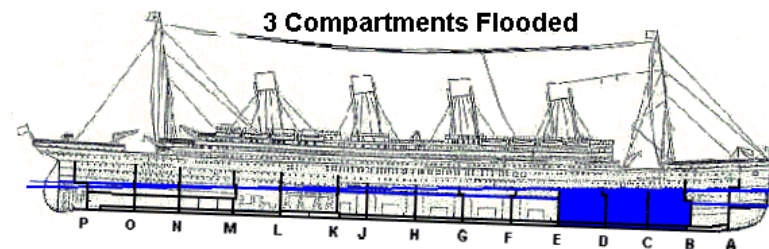
4 Compartments Flooded



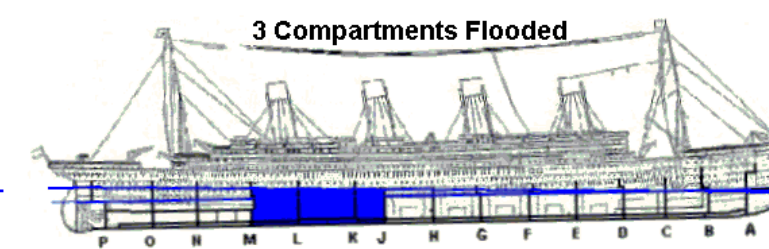
4 Compartments Flooded



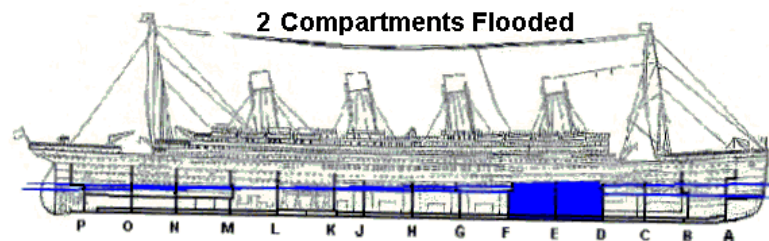
3 Compartments Flooded



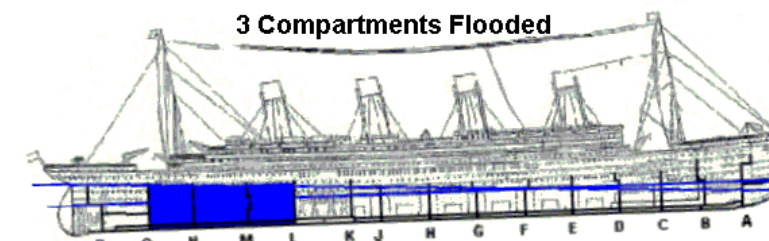
3 Compartments Flooded



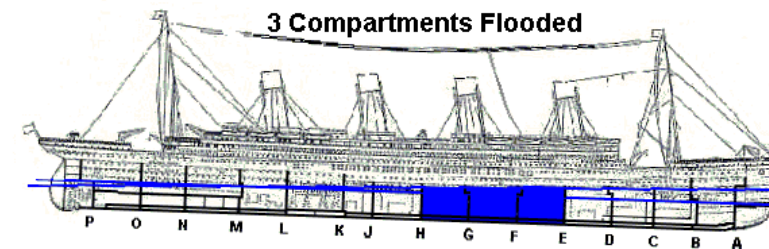
2 Compartments Flooded



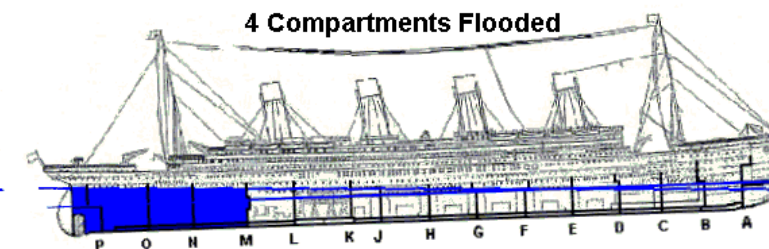
3 Compartments Flooded



3 Compartments Flooded



4 Compartments Flooded



Boats sink when their
density is _____



Boats sink when their
density is more than 1 g/ml.



Your Goal: Design a boat that can hold as much weight as possible.



Your Supplies:

- One sheet of paper, 22 x 28cm
- 30 cm of masking tape
- 4 index cards
- One sheet of tin foil, 30 x 30 cm
- 20 toothpicks
- 12 Styrofoam peanuts

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22

30

30