

# Did You Ever Wonder?



**Curious Questions About the Biggest (and Best)  
Navy in the World!**

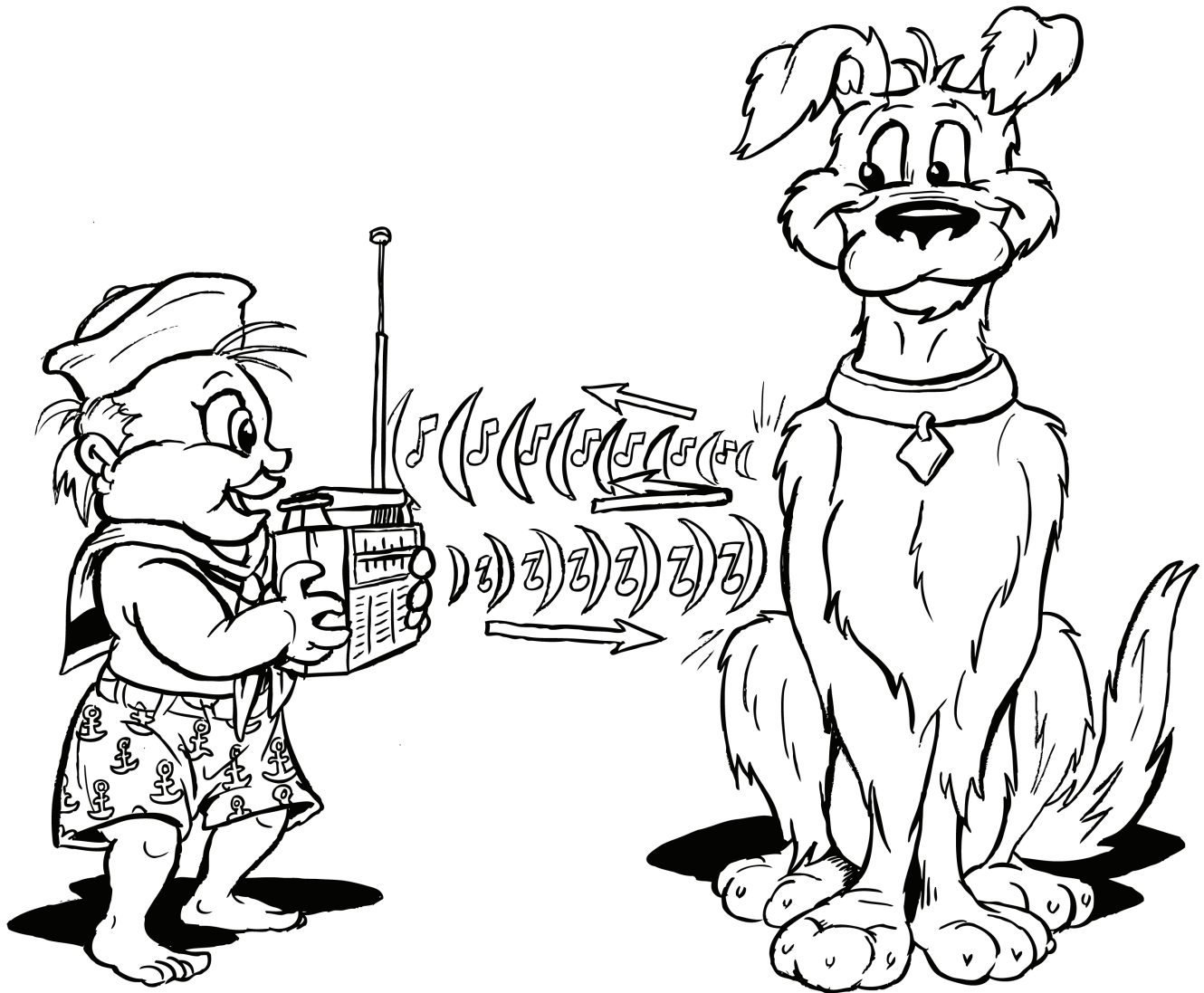


# Why does a steel ship float?



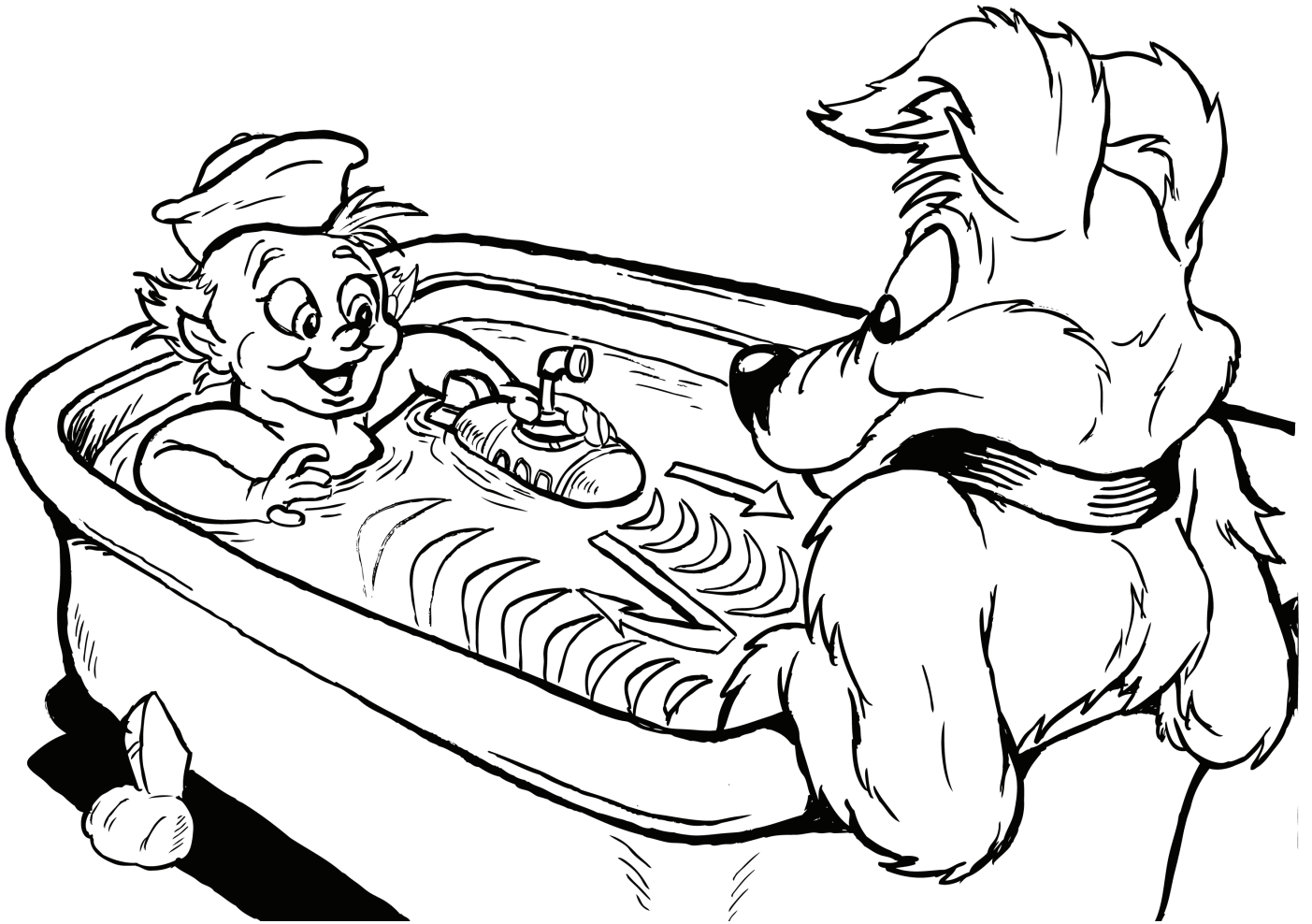
Ships float because of their shape. When you put them in the water, they can “displace” more water than they weigh. That is, ships are less “dense” than water. The remaining water pushes the ship up, and it “floats.”

# How does radar find things?



Radar works by sending out radio signals, and then waiting for them to bounce off things and come back. By measuring how long it takes for the signals to return, you can figure out how far away and high something is!

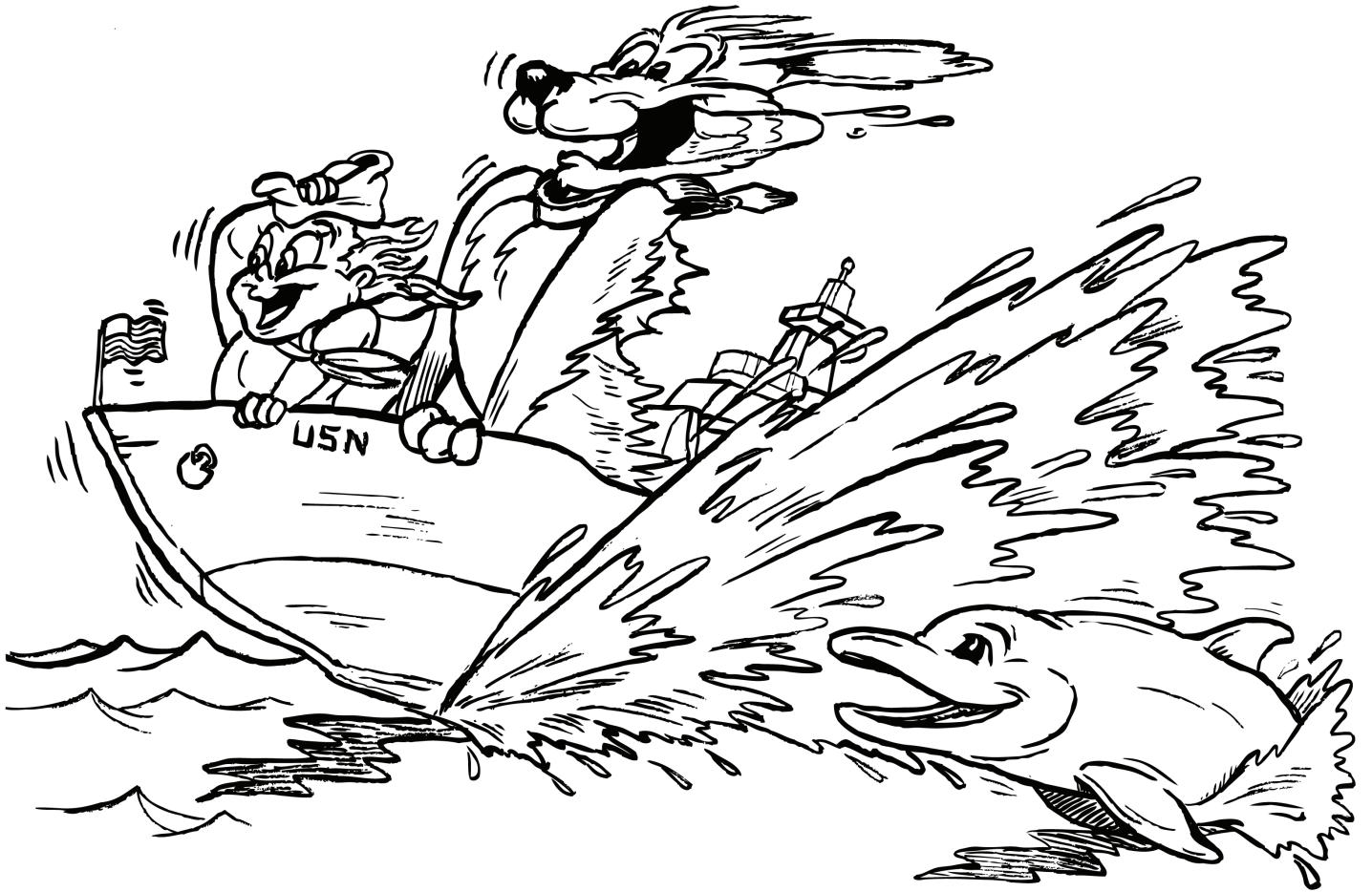
# Is sonar like radar?



You bet! Sonar works basically the same way as radar, but instead of sending out radio waves in the air, it sends out sound waves in the water. By measuring how long it takes for these sound waves to travel back and forth, Navy Sailors can figure out depth and distances.

Submarine Sailors use sonar to find other ships, underwater objects and submarines. Scientists use it to map the two-thirds of the Earth that is under water.

# How fast are Navy ships and subs?



It depends. Some ships like the Navy's submarines can go faster than 30 miles per hour. The aircraft carriers go even faster to help their jets take off.

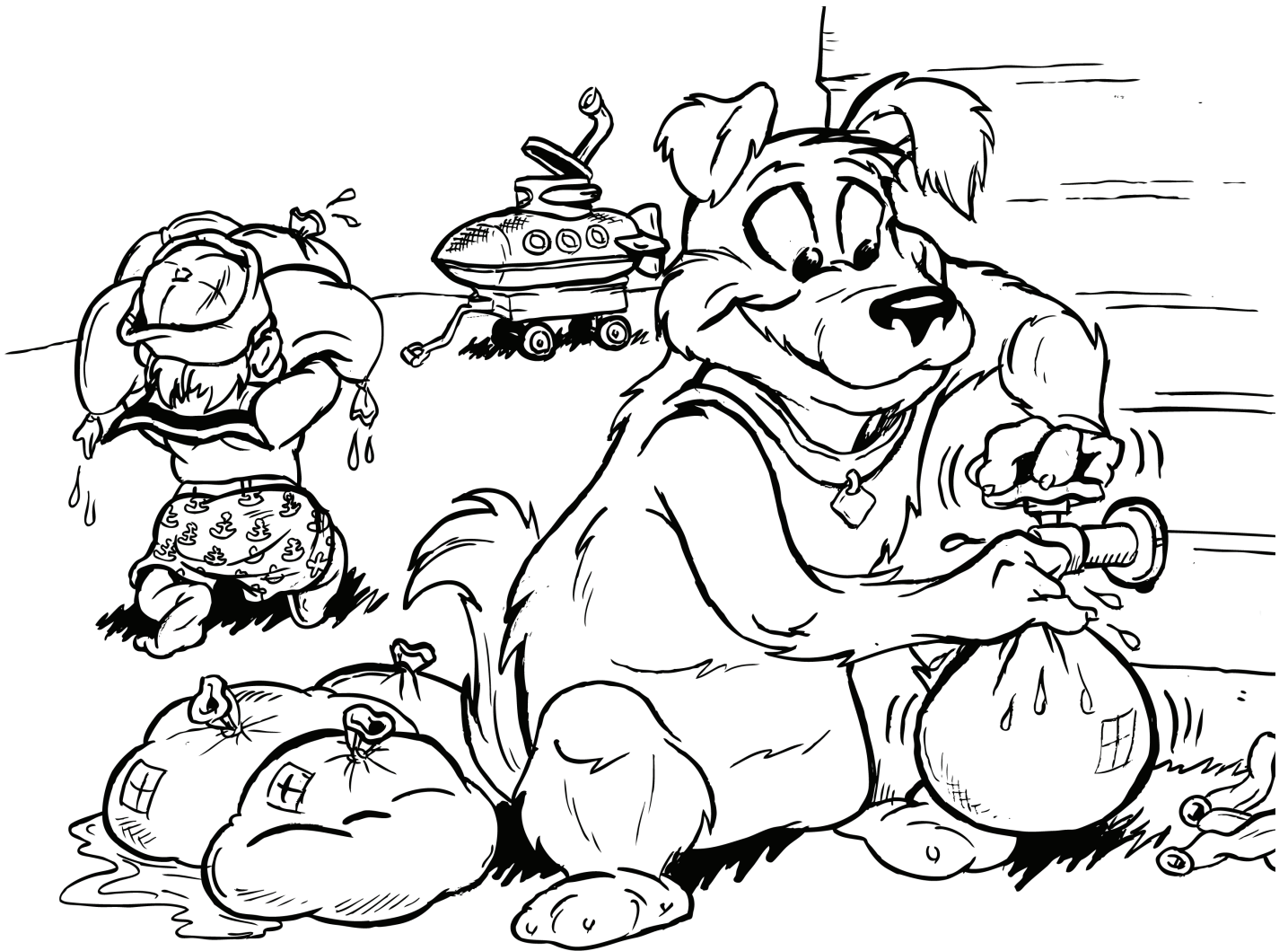
But the basic answer is: really, really fast!

# How do you paint a ship in the water?



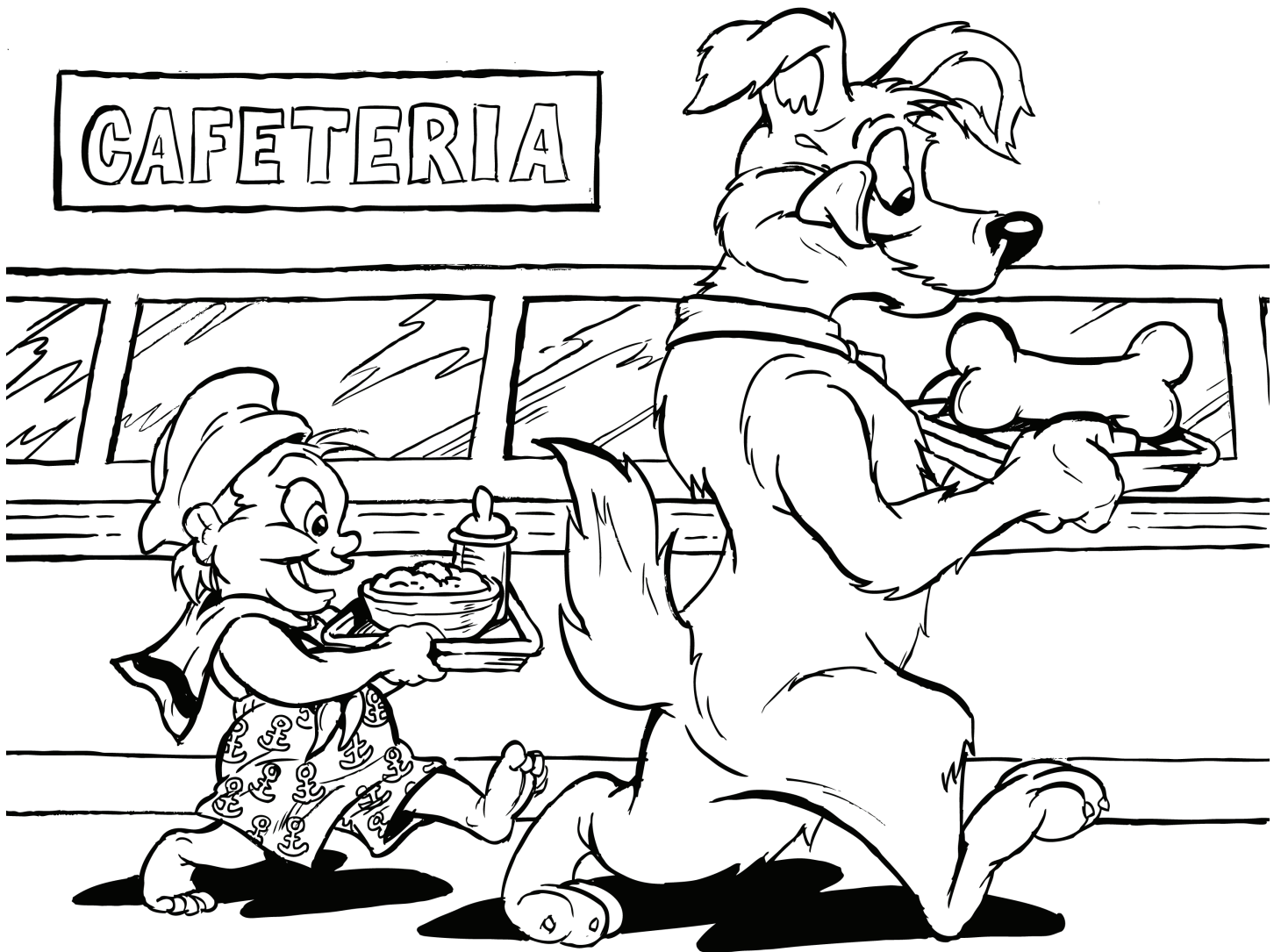
When a ship needs work, or a new coat of paint, the Navy sends them to the "shipyard." There they go into this cool area called the "drydock" where all that water is pumped out. Then the painters can get to every inch of the ship and give it a sparkling new paint job!

# How do subs sink and then come back up?



Submarines can sink below the water and come back up using "ballast tanks." The Sailors onboard will fill them up with water to make the sub go below the surface. When they want to come up, they squeeze the water out and fill the tanks with air.

# How do Sailors eat on a ship?



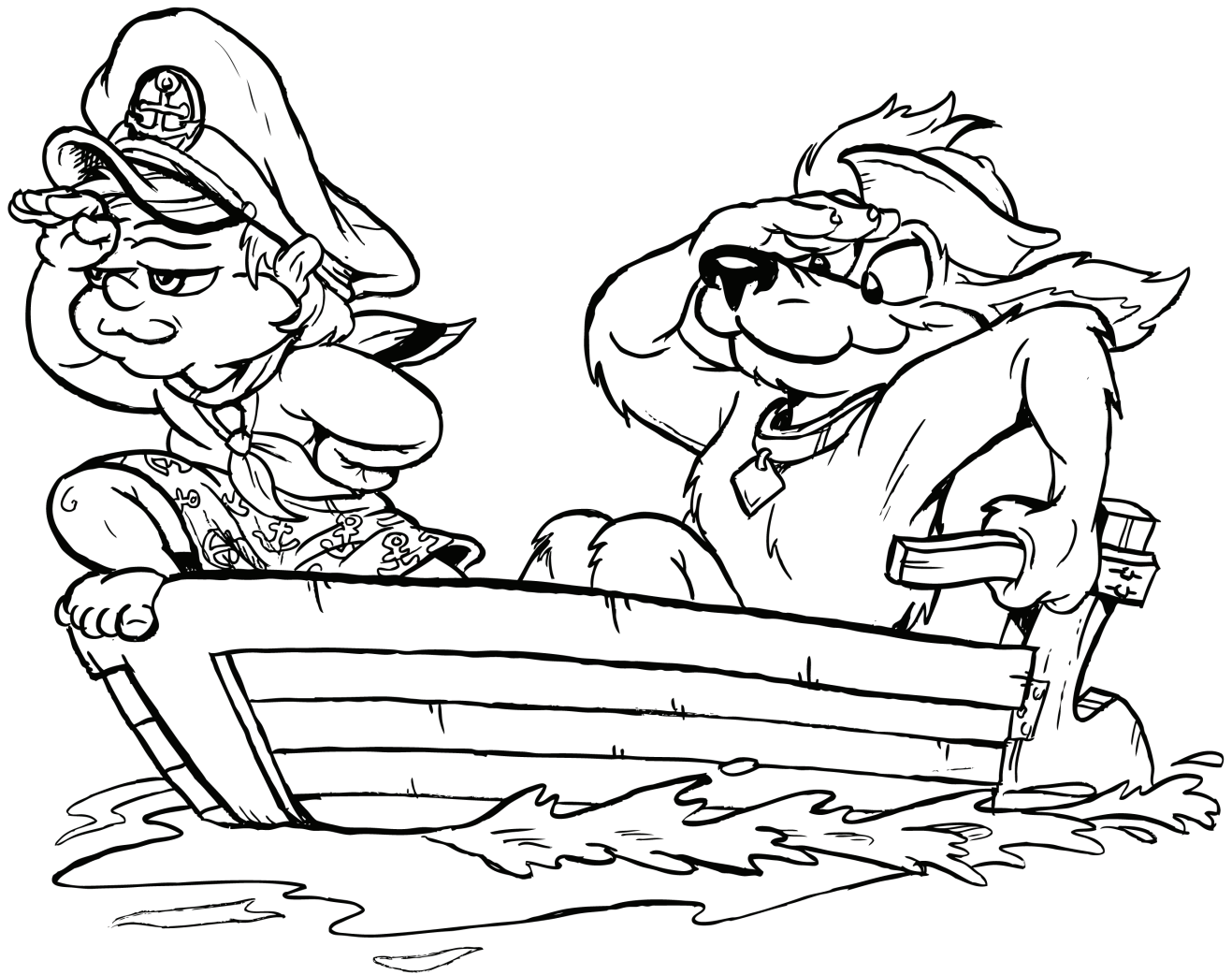
Some ships have two or three places for Sailors to eat.

An aircraft carrier can have six or seven.

They are like restaurants and they feed the entire crew every day. The cooks onboard an aircraft carrier usually make 18,000 meals a day!



# How do you make a ship go where you want?



Ships from the early days of sail to the Navy's modern steel ships all have one thing in common - a rudder to change their direction. On the bridge, the Captain tells a Sailor where to go. The Sailor turns a steering wheel called "the helm" and that moves the rudder at the very back of the ship. The rudder makes the ship go the way the Captain wants.



**Keeping America's Navy #1 in the World**