



**Grades
K-2**

Anchors Aweigh

Student Activity Workbook

Name: _____

Date: _____

**Engineering
Notebook**

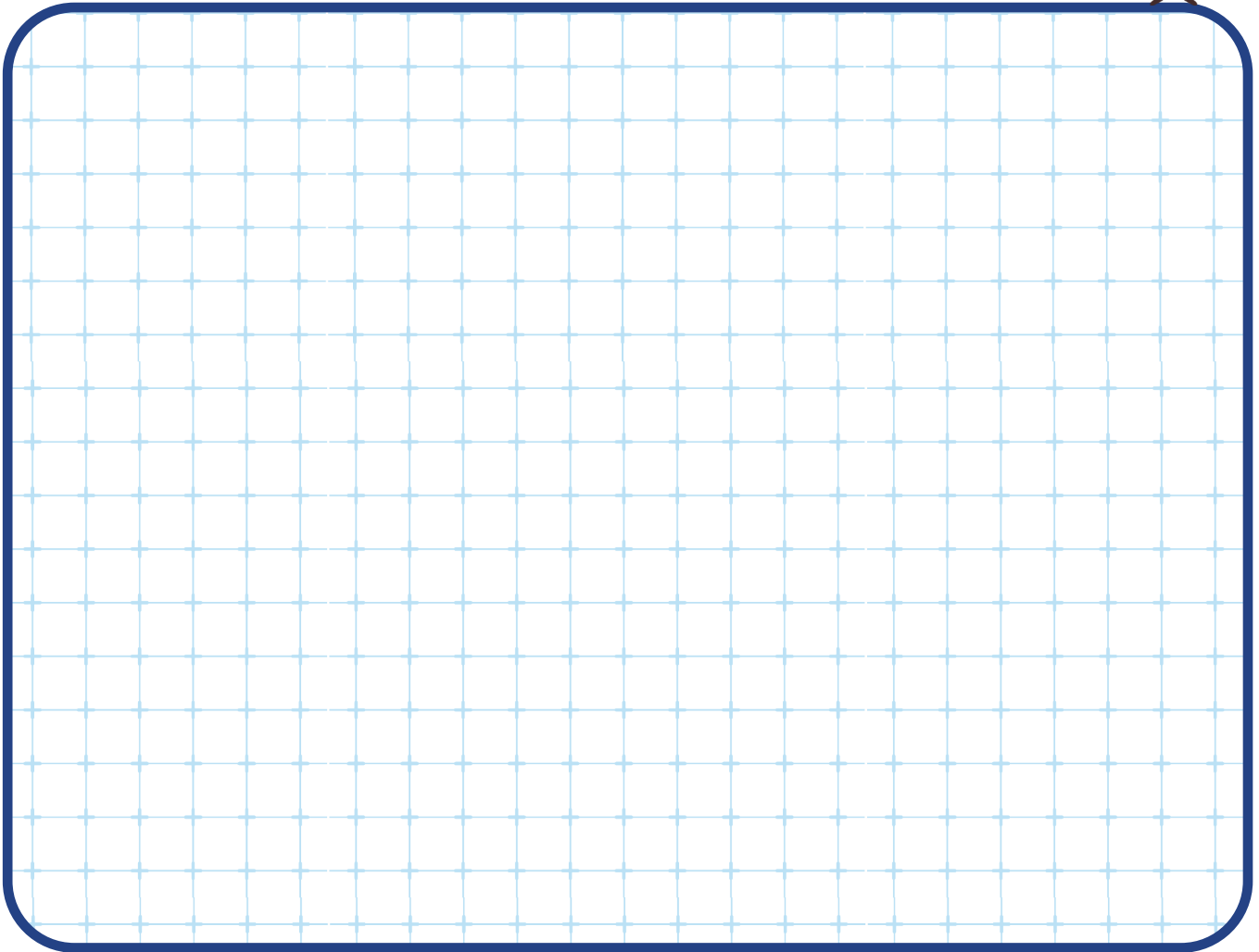


Seaworthy STEM™ in a Box Series

Anchors Aweigh!



- I** After building your anchor, draw the model of your anchor. Use different colors to represent the beads on your anchor. (Don't forget to count and draw the same amount on your anchor!)



Fun Fact!

Contrary to what many people assume, it is not the ANCHOR that stops a vessel moving, but in fact the cable connecting the two. Due to its length and weight, it forms a natural 'catenary' (curve), which acts as a 'spring' to absorb shocks.



- 2** Let's do some math! Look at the different color beads on your anchor. Look at the different colors and count each color.

Red: _____

Purple: _____

Orange: _____

White: _____

Yellow: _____

Black: _____

Green: _____

Pink: _____

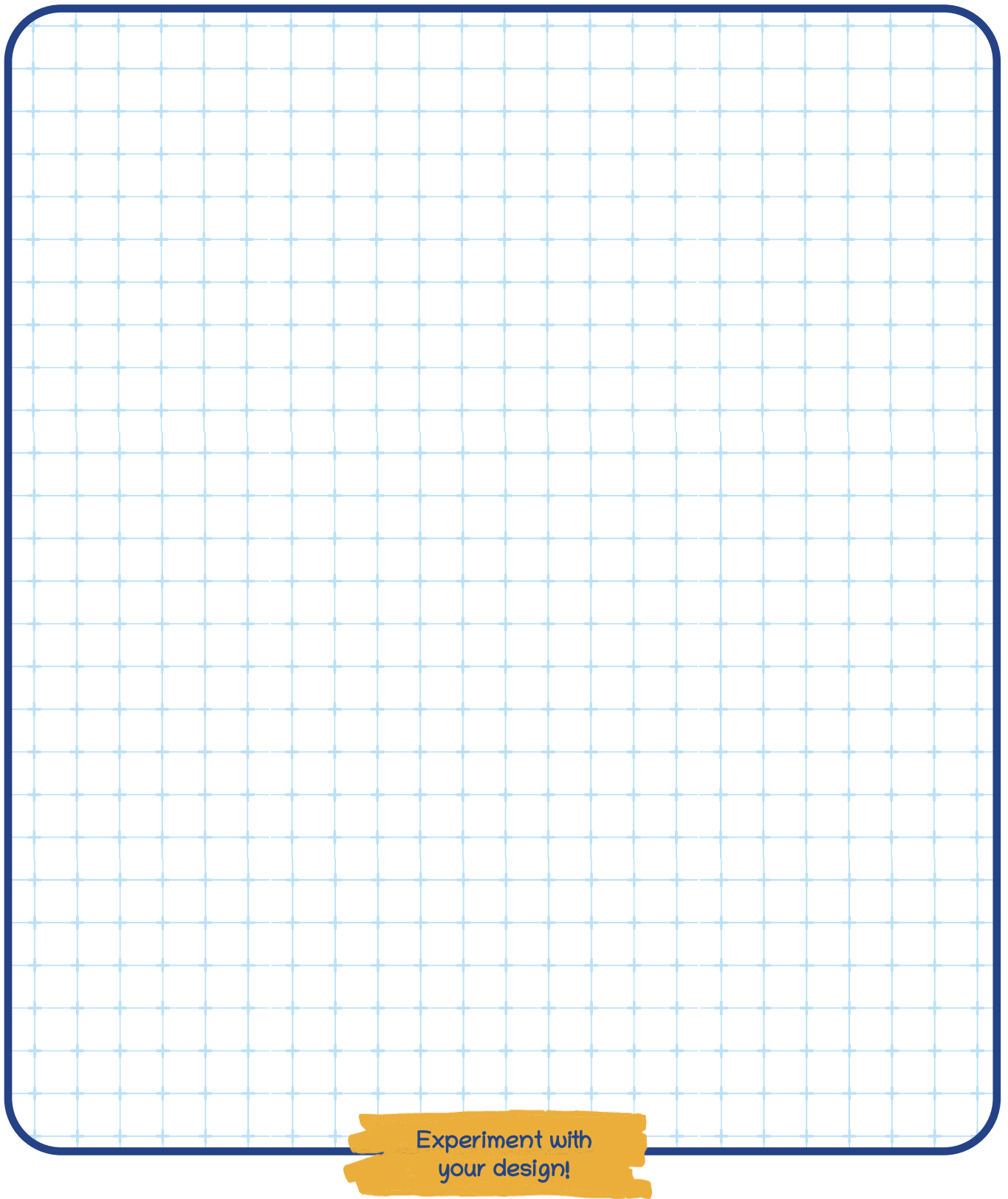
Blue: _____

- 3** Count and add all the beads and give the sum total below.

Total number of beads:

Fun Fact!
The word anchor is
Greek in origin, meaning
"crooked" or "hook."

- 4 **Engineering Design Challenge:** Now change the shape of your anchor to see if you can use fewer beads on your anchor to park your boat. Draw your design.



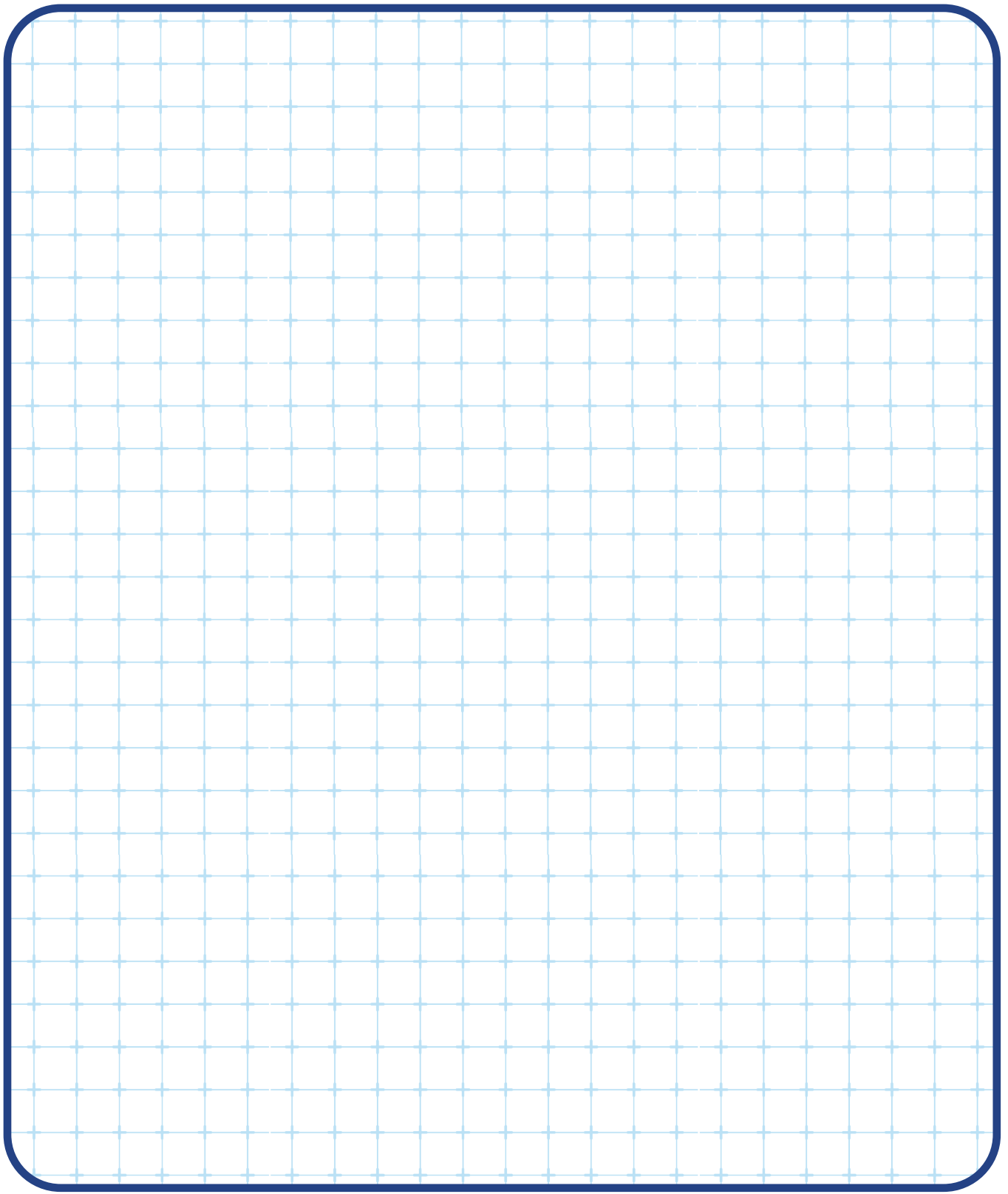
Experiment with
your design!

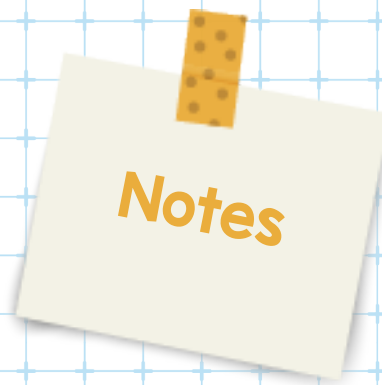
5 Did your new design work better or did it do worse? Why?

A large rectangular area with a dark blue border and rounded corners, containing horizontal light blue lines for writing.



6 If you had to make a new anchor what would it look like? Draw below.





#SeaworthySTEM

Anchors Aweigh! Engineering Notebook



Seaworthy STEM™ in a Box Series

