

Sailing Ship Investigation

Name:
Date:
Science/Math
Lab Sheet

Materials:

Straws (3)
Masking Tape
Scissors
Basic Hull
Cay
Paper
Craft Sticks

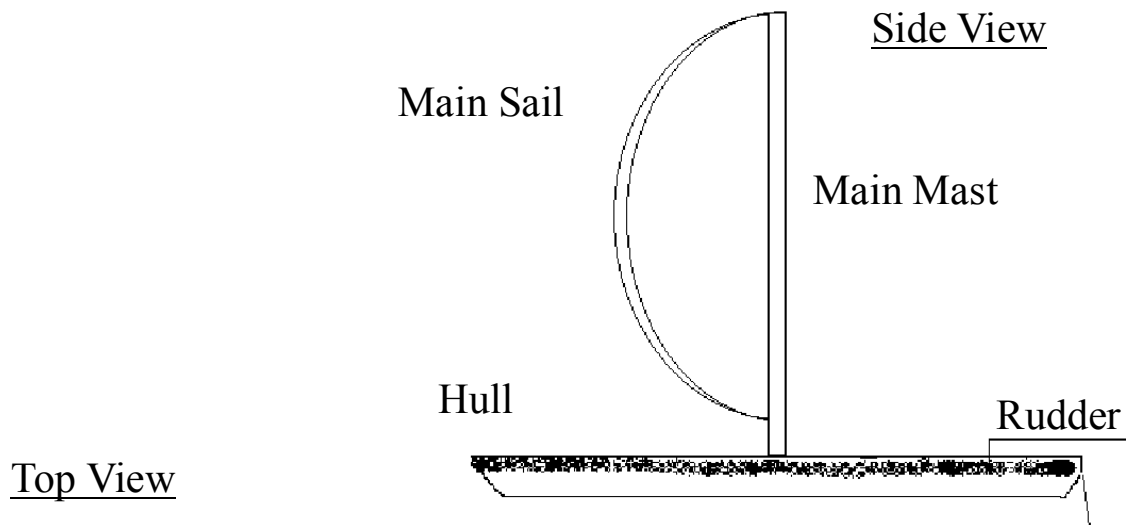
Question:

How could you design a sailing ship that will travel fast and navigate obstacles?

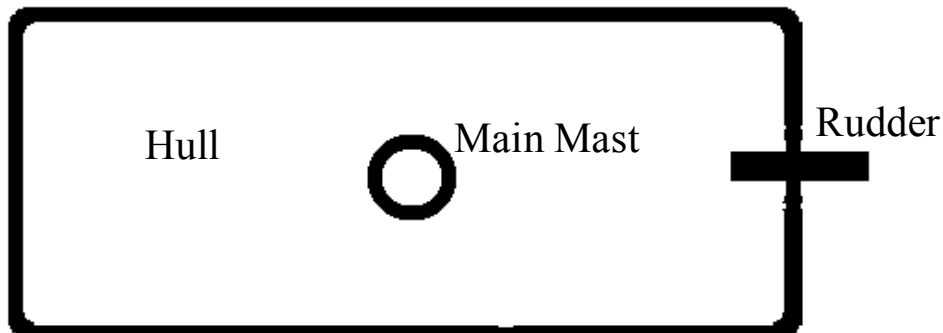
Background:

What do we know already? (problem solving strategies)

The Possible Design:



Top View



Racing Conditions:

1. Must travel the whole length of the track.
2. You can not touch the ship after the timer is set.
3. Nothing else can be used except for what is on the material list.

Data Table:



Attempt #1

Notes:

Sketch sailing ship:

Empty Time: _____ Loaded Time: _____

Attempt #2

Notes:

Sketch sailing ship:

Empty Time: _____ Loaded Time: _____

Attempt #3

Notes:

Sketch sailing ship:

Empty Time: _____ Loaded Time: _____

Classroom Data: (Write in each student's best empty time and loaded time)

Student Empty Time

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

Calculate Average Time Empty:

1. Total Time: (add data together) _____
2. Number that reported data: _____
3. Divide step 1 by step 2: _____

Student Loaded Time

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

Calculate Average Time Loaded:

1. Total Time: (add data together) _____
2. Number that reported data: _____
3. Divide step 1 by step 2: _____

Compare the two answers and explain why the numbers came out to be the way they did.

Conclusion: (explain why your hypotheses was correct or not correct and if you were to make one more sail boat what would you change or not change.)

**Building a Sail Boat!
R.A.F.T.S. Prompt**

- R= Role (Writing an article for Scholastic News)**
- A= Audeience (Other fifth grade students)**
- F= Format (Expository Essay)**
- T= Topic (Designing and building a successful sailboat)**
- S= Sequence (using sequence words to create flow in your essay)**

Possible New Design

You have been selected to write an article for a special issue of Scholastic News Magazine that will focus on using hands-on science investigations to get students excited about learning. You have been asked to write an article on building sailboats in the classroom and why it is important for students to do activities like this in the classroom. The article must sequence using transition words such as first, next, and then. The chief editor for Scholastic News will review the articles before they go into print and if yours is acceptable you will receive a notice that you will receive a bonus.

Writing Focus:

1. Your article must stay on topic.
2. Your article must show evidence of sequencing.
3. Your article must contain information about building the sailboat and why it is important for students to do activities like this in the classroom.

Complete article on a separate sheet of paper.