Title: Saturn V Coordinates

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Subject(s): Mathematics, Science

Topic(s): Rockets, Plotting Coordinates, Graphing, Space Travel

Grade/Level: 5-8

Summary of Activity:
Students draw a picture of a Saturn V rocket using graph coordinates.

Objective:
By the end of this activity, students will be able to plot coordinates on graph paper.

Time Allotment: 20-30 minutes

Procedures/Instructions:
See Student Worksheet.

Instructional Materials:
Student Worksheets and grid paper

Additional Resources (Web Links, File Attachments):
Apollo-Saturn
http://www.apollosaturn.com/

National Science or Mathematics Standards:
Mathematics

Algebra Standard
Instructional programs from pre-kindergarten through grade 12 should enable all students to—

- Use mathematical models to represent and understand quantitative relationships

In grades 3-5 all students should—

- Model problem situations with objects and use representations such as graphs, tables, and equations to draw conclusions.

Instructional programs from pre-kindergarten through grade 12 should enable all students to—

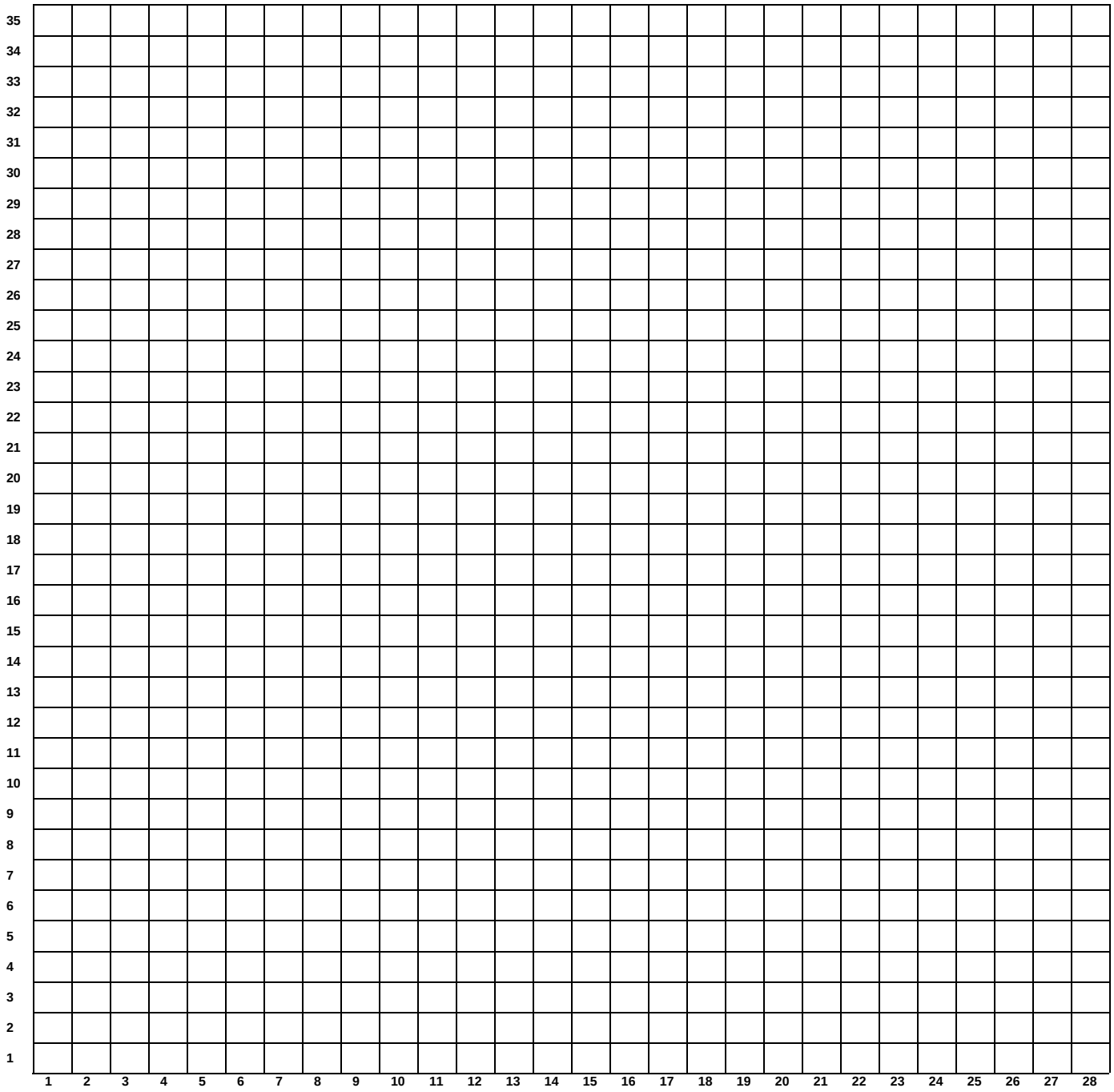
- Understand patterns, relations, and functions

In grades 6-8 all students should—

- Represent, analyze, and generalize a variety of patterns with tables, graphs, words, and, when possible, symbolic rules.

Assessment Plan:

Teachers can assess student understanding based on their completed picture.



The name of this vehicle is:_____.

ANSWER THE FOLLOWING QUESTION…

What vehicle stands 363 feet tall, can carry 50 tons of payload into orbit and was used during the Apollo missions? To see what the vehicle looks like, follow the instructions below, then do some research to find the actual name of this spacecraft.

Place a ◢ in the box at the following coordinates:			
8,3	10,2	11,25	10,5
9,4	13,2	16,2	
Place a ◣ in the box at the following coordinates:			
17,5	11,2	18,4	14,2
19,3	17,2	16,25	
Place a ／ across the box at the following coordinates:			
12,32	13,33		
Place a ＼ across the box at the following coordinates:			
15,32	14,33		
Fill in ■ the entire box at the following coordinates:			
11,5	13,5	15,5	11,10
11,4	13,4	15,4	11,9
11,3	13,3	15,3	11,8
12,5	14,5	16,5	12,10
12,4	14,4	16,4	12,9
12,3	14,3	16,3	12,8
13,10	14,10	15,10	16,10
13,9	14,9	15,9	16,9
13,8	14,8	15,8	16,8
11,15	12,15	13,15	14,15
11,16	12,16	13,16	14,16
11,17	12,17	13,17	14,17
15,15	16,15	11,24	14,24
15,16	16,16	12,24	15,24
15,17	16,17	13,24	16,24
12,25	15,25	14,29	10,1
13,25	12,29	15,29	11,1
14,25	13,29	17,1	13,1
14,1	16,1	9,3	10,4
17,4	17,3	10,3	18.3

Darken the **left** line on the boxes at the following coordinates:			
11,23	11,19	12,28	14,34
11,22	11,18	12,27	14,35
11,21	11,7	12,26	12,30
11,20	11,6	12,31	11,11
11,12	11,13	11,14	
Darken the right line on the boxes at the following coordinates:			
16,7	16,12	16,21	15,30
16,6	16,11	16,20	15,31
16,14	16,23	16,19	15,28
16,13	16,22	16,18	15,27
15,26			

Finally, place the following into the boxes at the locations given:

 13,22

 13,21

 14,20

 13,20

 14,22

 14,21