

**Illuminations Rescue Mission Game**

**Developed by:** Linda Fenton

**Discipline / Subject:** Science

**Topic:** Aviation

**Grade Level:** 3, 4, 5

**Resources / References / Materials Teacher Needs:**  
  
<http://illuminations.nctm.org/LessonDetail.aspx?ID=L296>

**Lesson Summary:**  
Students will learn about the movement of the forces of flight using spinners and a grid in game form

**Standard's Addressed: (Local, State, or National)**

**NCTM Standards and Expectations**

*Data Analysis & Probability 3-5*

1. Collect data using observations, surveys, and experiments.
2. Recognize the differences in representing categorical and numerical data.

*Geometry 3-5*

1. Make and use coordinate systems to specify locations and to describe paths.

**Learning Objectives:**

1. Learn the terms drag, lift, weight and thrust in game form.
2. 4 forces of flight.

**Method of assessment for learning**

Teacher observation  
Game board

**Procedural Activities**

1. Review the 4 Forces of Flight: drag, lift, weight and thrust.
2. There will also need to be a discussion on Ordered Pairs. Example – (1,5)
3. Pass out game board grid and spinners – see attached – copied from Illuminations website. (Or use the attached game board for rescuing dogs.)
4. Follow the rules of the game as explained in the website.
5. After a few moves by students discuss strategies.

**Materials Students Need:****Game board grid****Spinners****Technology Utilized to Enhance Learning:****Website:**<http://illuminations.nctm.org/LessonDetail.aspx?ID=L296>**Can follow up with online game Gravity Launch. (For older students)**[http://sciencenetlinks.com/media/filer/2011/10/13/gravity\\_launch26.swf](http://sciencenetlinks.com/media/filer/2011/10/13/gravity_launch26.swf)**Other Information:**

**This is a great lesson for the forces of flight from the Illuminations website. The attached activity sheets are copied directly from the site.**

**To accommodate the Iditarod I created a second grid called “Rescue the Dog”.**

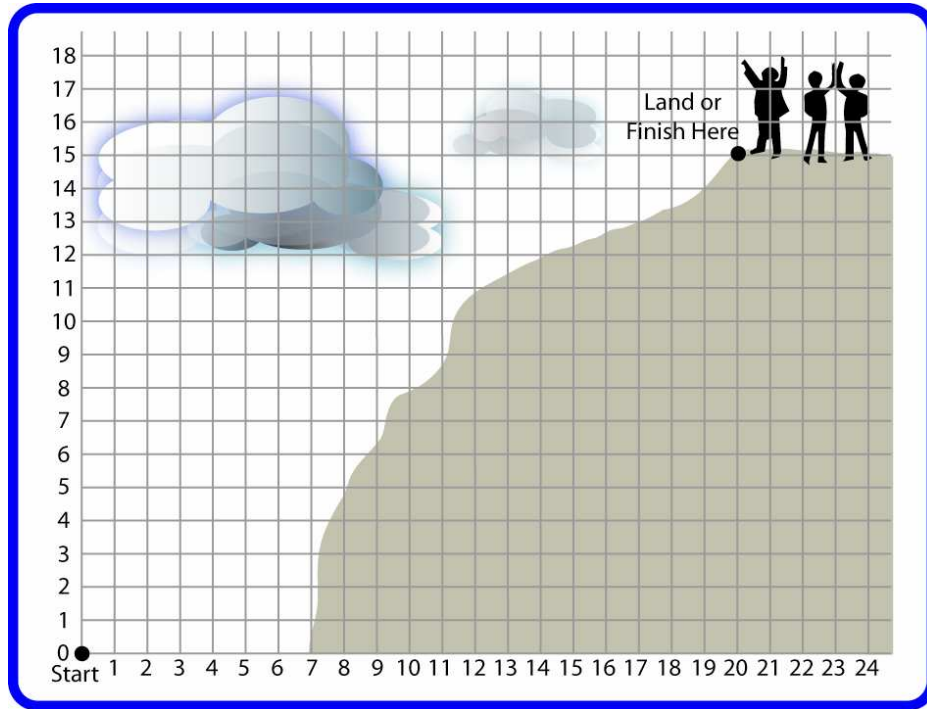
**Modifications for Special Learners/ Enrichment Opportunities:**

**Students can work as teams to rescue the dogs.**

# Rescue Mission Grid

NAME \_\_\_\_\_

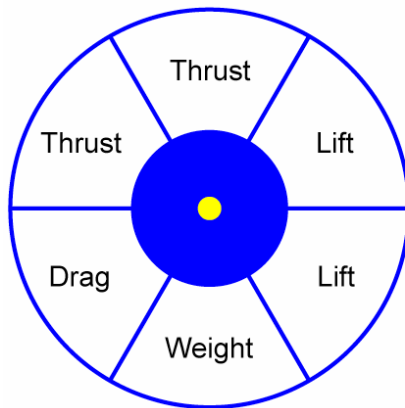
Use the following Grid for the Rescue Mission Game.



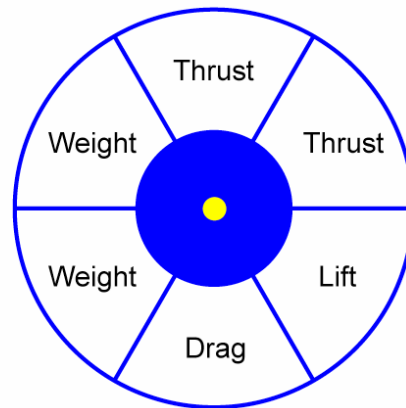
## Spinners

Use the following spinners as you play the Rescue Mission Game.

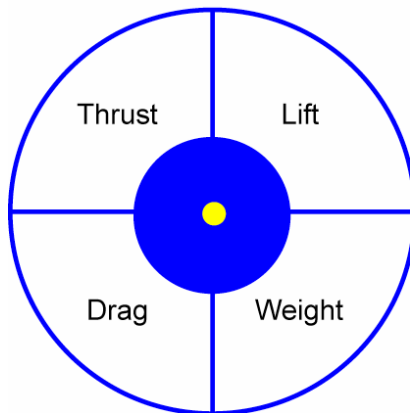
SPINNER A



SPINNER B



SPINNER C



SPINNER D

