How High Can You Jump!
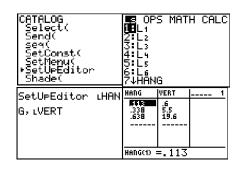## TEACHER NOTES

1. Set up the data gathering station before students come to class:
   a. Connect calculator, CBL & Light Probe
   b. Run "Jump" program
   c. Follow directions in program
   d. When all students have contributed their data, use Activity Center to collect "Hang" & "Vert" lists. (Load Activity Center settings: Vert Jump.act – File – Load – Load Activity settings)

2. When students log into Navigator send:
   a. Hang Time learn check
   b. Hang List(Will be under "collect" folder in class)
   c. Vert List(Will be under "collect" folder in class)

3. Working with the lists:
   a. Put "Hang" and "Vert" into list screen
      1. SetUpEditor
         -In "Home" screen
         -2nd PRGM - arrow down to SetUpEditor
         -2nd LIST - Arrow down to Hang ENTER
         -comma (next to #4)
         -2nd LIST - Arrow down to Vert ENTER

      OR

      2. List Screen
         -LIST - arrow up to name
         - 2nd DEL - to insert a new list
         - 2nd LIST - Arrow down to Hang ENTER ENTER
         -Repeat steps 2 & 3 to get "Vert"

   b. Arrange "Vert" list from smallest to largest (Remember Hang must tag along)
      -Go to Home screen
      - 2nd LIST OPS – choose 1: SORTA(
      -Put in Vert,Hang lists as before

   c. Do a Navigator Screen Capture to make sure everyone is on the same page.

4. Have students take the learn check "Hang Time"
   a. From Learn Check App
   b. From NavNet
5. Collect and Analyze Learn Check
   a. Open Class Analyze
   b. Choose Assignment (4th icon on tool bar) to open the learn check
   c. Will need to insert the correct answers for YOUR data in ITEM tab
   d. Collect Answer Files from Class (6th icon on tool bar)
   e. Run Slide Show (2nd for last icon on tool bar) and discuss
6. Create a Bar Graph
7. Create a Scatter Plot
8. Create a Best Fit Line (Manual)
   a. [2nd][LIST] arrow over to CALC
   b. Choose 3: Manual-fit
   c. Find a good starting point on left side press[ENTER] to set point
   d. Use arrows to create the best fit line and press [ENTER] on right side for an ending point, may still use arrows to adjust line
   e. When you have the line you want, copy the equation at the top and then press [ENTER] .

9. Activity Center
   a. Set up the activity center to:
      *Load List Hang & Vert
         -File – Load – Load List
         -Will find in Collect folder in class
      *Name Axises
   b. Graph-Equation Window and Set Window settings appropriate for your data
      *Configure Plot Hang as x-coor and Vert as y-coor
   c. Start Activity Center and have students contribute their manual lines

How High Can You Jump!

1. Arrange your list "Hang Time" in order from smallest to largest. (Remember to also move the "Vertical Jump" value that partners with each "Hang Time").

2. What is the **MINIMUM** (smallest) hang time? _____

3. What is the **MAXIMUM** (largest) hang time? _____

4. What is the **RANGE** of the hang time? _____

5. What is the **MEAN** hang time? _____

6. What is the **MEDIAN** hang time? _____

7. What is the **MODE** hang time? _____

8. What is the **MINIMUM** vertical jump? _____

9. What is the **MAXIMUM** vertical jump? _____

10. What is the **RANGE** of the vertical jump? _____

11. What is the **MEAN** vertical jump? _____

12. What is the **MEDIAN** vertical jump? _____

13. What is the **MODE** vertical jump? _____

14. What do you notice about the MEAN hang time and the MEAN vertical jump?

15. What do you notice about the MEDIAN hang time and the MEDIAN vertical jump?

16. What do you notice about the MODE hang time and the MODE vertical jump?

17. Construct a bar graph for the "Vertical Jump" list. (Hint: put heights is groups of whole numbers, example 3 to 4, 4 to 5, 5 to 6, etc.)

18. Construct a line graph using "Hang Time" as the x-coordinate (right movement) and "Vertical Jump" as the y-coordinate (up movement).

19. What conclusion can you draw from the line graph about hang time and vertical jump?

Person	Hang Time	Vertical Jump
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
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