

How Much Water Can Abe Hold

Teacher Notes

1. Each student pair will need a penny, eye dropper or pipette, paper towel.
 - a. Using a "Quick Poll" have each student guess how many drops of water will fit on the face of a penny.
 - b. Show poll results and have students create a Stem and Leaf plot of the guesses
 - c. Have students do the experiment (#3 on worksheet)
 - d. Load Activity Center settings: drop.act - File - Load - Load Activity settings - start activity
 - e. When all students have gathered their actual drops, use Activity Center to collect estimated drops (edrop) list and actual drops (adrop) list.
2. When students log into Navigator send:
 - a. Edrop & Adrop Lists (Will be under "collect" folder in class)

3. Working with the lists:

- a. Put "Adrop" and "Edrop" into list screen

1. SetUpEditor

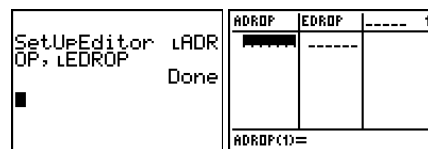
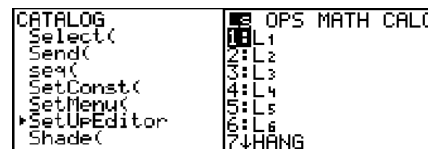
-In "Home" screen

-[2nd][PRGM] - arrow down to SetUpEditor

-[2nd][LIST] - Arrow down to Adrop [ENTER]

-comma (next to #4)

-[2nd][LIST] - Arrow down to Edrop [ENTER]



OR

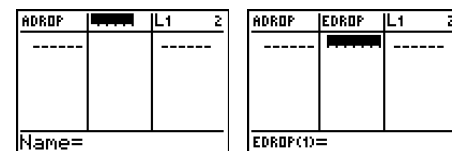
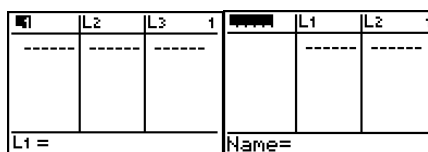
2. List Screen

-[LIST] - arrow up to name

-[2nd][DEL] - to insert a new list

-[2nd][LIST] - Arrow down to Adrop [ENTER][ENTER]

-Repeat steps 2 & 3 to get Edrop



- b. Arrange "Adrop" list from smallest to largest
(Remember Edrop must tag along)

-Go to Home screen

- $\boxed{2nd}$ \boxed{LIST} OPS - choose 1: SORTA(

-Put in Adrop,Edrop lists as before

```
Ls  $\boxed{OPS}$  MATH CALC
1:SortA(
2:SortD(
3:ClrList
4:dim(
5:List(
6:Select(
7:seq(
```

```
SortA(LADROP,LED
ROP)
```

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

4. Have students do #4 & #5 on the worksheet

a. Do a quick poll for Median

b. Do a quick poll for Quartile 1

c. Do a quick poll for Quartile 3

d. Discuss results to make sure all students are finding them correctly

5. Create a Box & Whisker plot

a. $\boxed{2nd}$ $\boxed{Y=}$ (plot) - #1

b. Plot ON – choose the box & whisker graph – put ADROP in XLIST

c. Repeat to put EDROP in plot 2

d. Do ZOOM Stat

How Much Water Can Abe Hold?

1. Guess how many drops of water will fit on the face of a penny: _____
2. Create a Stem and Leaf plot of the classes guess.
3. ***Experiment:*** Using an eye dropper count how many drops of water will fit on the FACE of a penny. (Note: The drop that overflows the penny is not counted.)
4. Create a Stem & Leaf plot of the class' actual data.
5. Find the following:
 - a. Median _____
 - b. Quartile 1 _____
 - c. Quartile 3 _____
6. Create a Box a Whisker plot.