## ELEMENTARY science project: Heavy Backpacks

Background: Doctors say it isn't healthy for students to carry more than ten percent of their weight in their backpacks.
Question: Are the students in your school carrying too much weight in their backpacks?
Hypothesis: Students are/are not carrying too much weight in their backpacks.
Materials: Weight scale

## Procedure:

1. Make a chart with the names of all the students in your class, as shown in the diagram below.
2. Weigh all of the students in your class and calculate ten percent of their weight. Record this on the chart.
3. Weigh all of the backpacks before the students go home every day for a week. Record the weights on the chart.
4. Circle the backpacks that are overweight.

Analysis and Conclusion: How many students in the class carry overweight backpacks?
Are heavy backpacks a problem in your class?
Discuss with the class ways to remedy the problem.

| Student Name | Weight (lbs.) | $10 \%$ of Weight | M | Weight of Backpacks |  |  | F |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | T | W | T |  |
| Sarah | 80 | 8 | (10) | 7 | (12) | 8 | (9) |
| Jorge | 100 | 10 | 5 | 6 | (12) | 5 | 9 |
| May | 65 | 6.5 | (10) | (9) | (12) | (9) | (10) |
|  |  |  |  |  |  |  |  |
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