Science Fair 2026 Project
Presentation Sections

Introduction

Students are asked to complete tests at all times of the day, but is this really fair? We wanted to create a test to determine if the time of day effects test results.

Question/Problem

How does the the time of day affect how well students do on a test?

Predictions

If we test how the time of day effects students' test scores, then students will test better at the end of the day.

Variables

Independent Variable: (What you change)

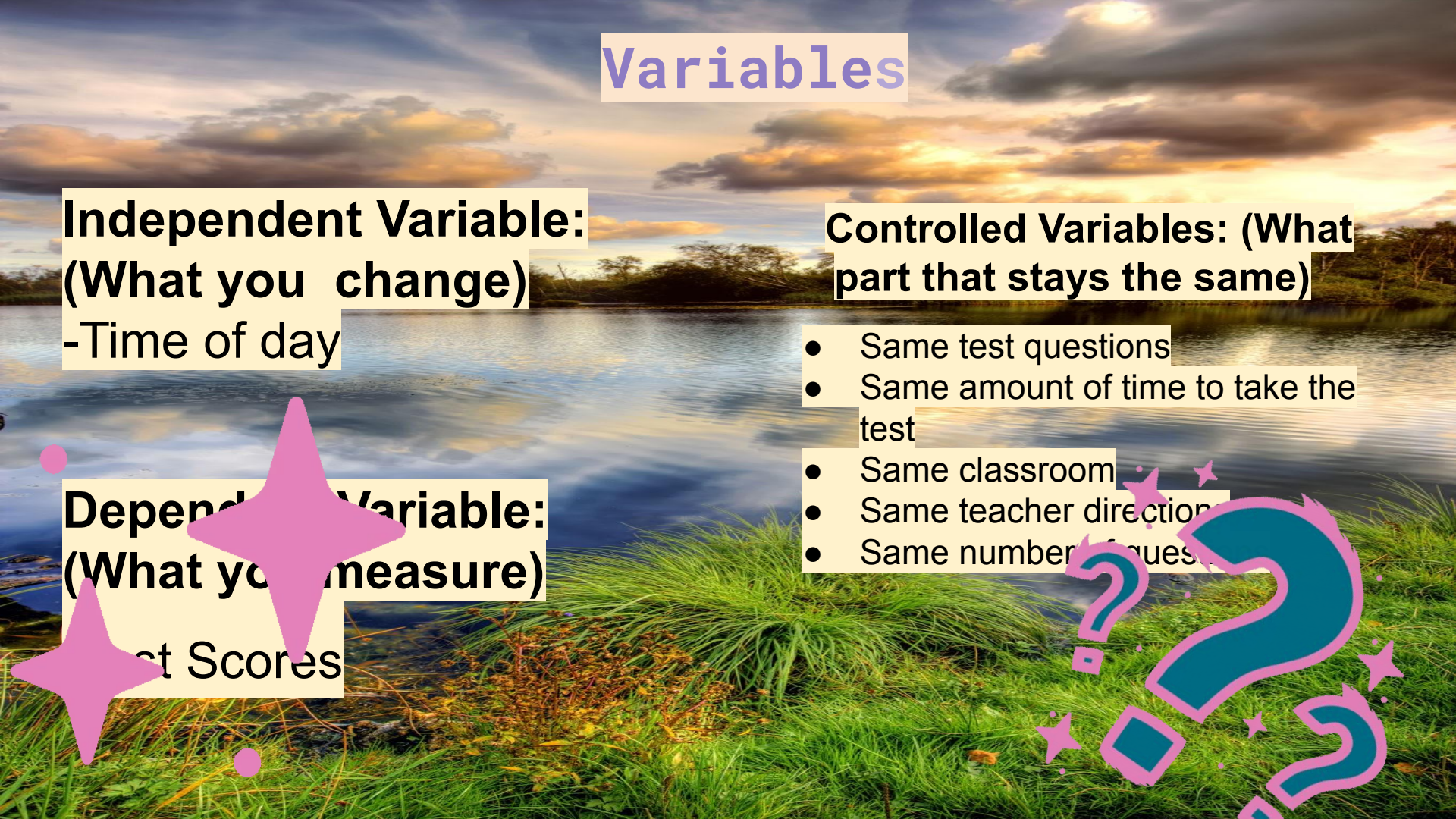
-Time of day

Depend Variable: (What yo measure)

t Scores

Controlled Variables: (What part that stays the same)

- Same test questions
- Same amount of time to take the test
- Same classroom
- Same teacher direction
- Same number of ques



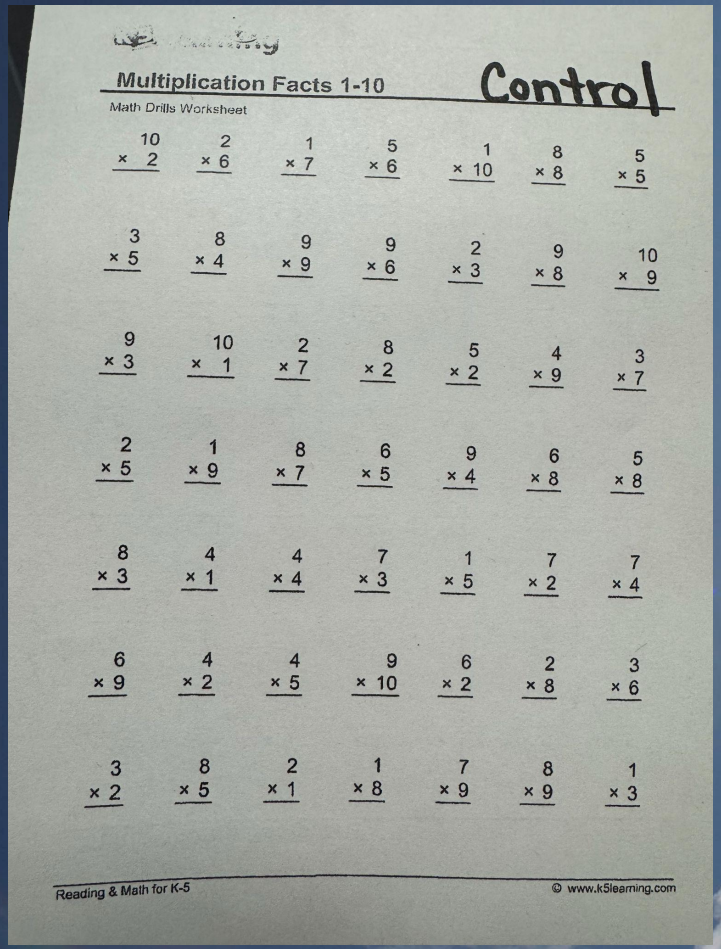
Materials

1. Multiplication test
2. Pencil
3. Timer
4. Score sheet

Procedures

1. Use a different homeroom to complete the experiment so results are not biased.
2. Choose one day to give the test in the morning.
3. Give the test to the same group of students.
4. Students will have 2 minutes to correctly answer questions.
5. Collect and score the tests.
6. Record the data in the data table.
7. The next day, test the students with the same test at the end of the day.
8. Students will have 2 minutes to correctly answer questions.
9. Collect and score the tests.
10. Record the data in the data table.
11. Compare the results from the morning to the afternoon scores.
12. Create a graph.

Tests



Multiplication Facts 1-10 Control

Math Drills Worksheet

10 × 2	2 × 6	1 × 7	5 × 6	1 × 10	8 × 8	5 × 5
3 × 5	8 × 4	9 × 9	9 × 6	2 × 3	9 × 8	10 × 9
9 × 3	10 × 1	2 × 7	8 × 2	5 × 2	4 × 9	3 × 7
2 × 5	1 × 9	8 × 7	6 × 5	9 × 4	6 × 8	5 × 8
8 × 3	4 × 1	4 × 4	7 × 3	1 × 5	7 × 2	7 × 4
6 × 9	4 × 2	4 × 5	9 × 10	6 × 2	2 × 8	3 × 6
3 × 2	8 × 5	2 × 1	1 × 8	7 × 9	8 × 9	1 × 3

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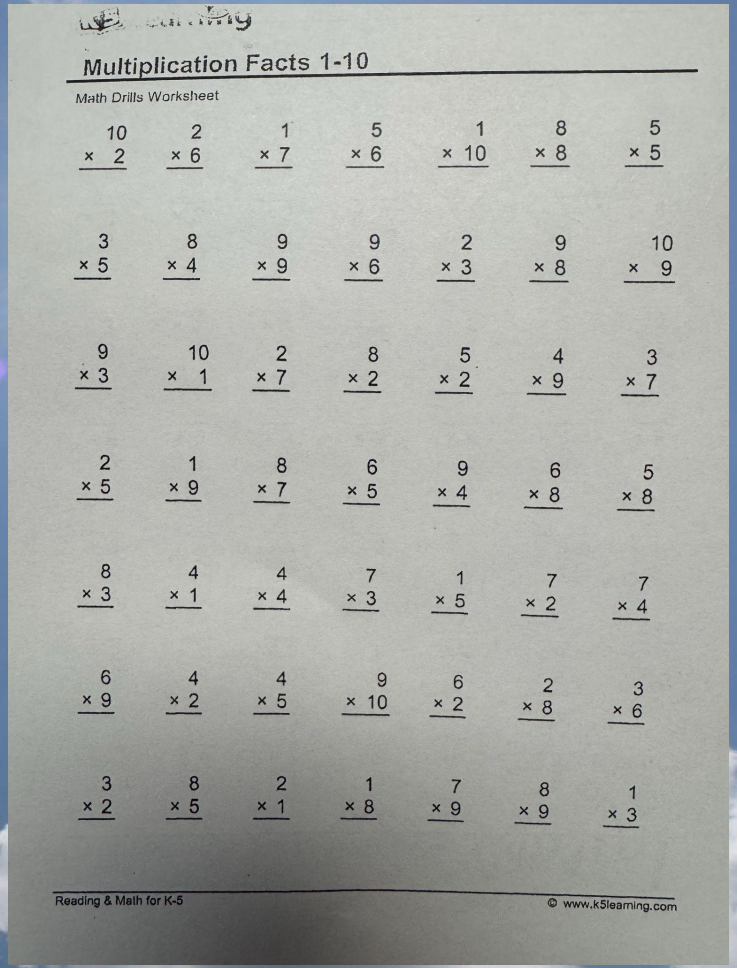

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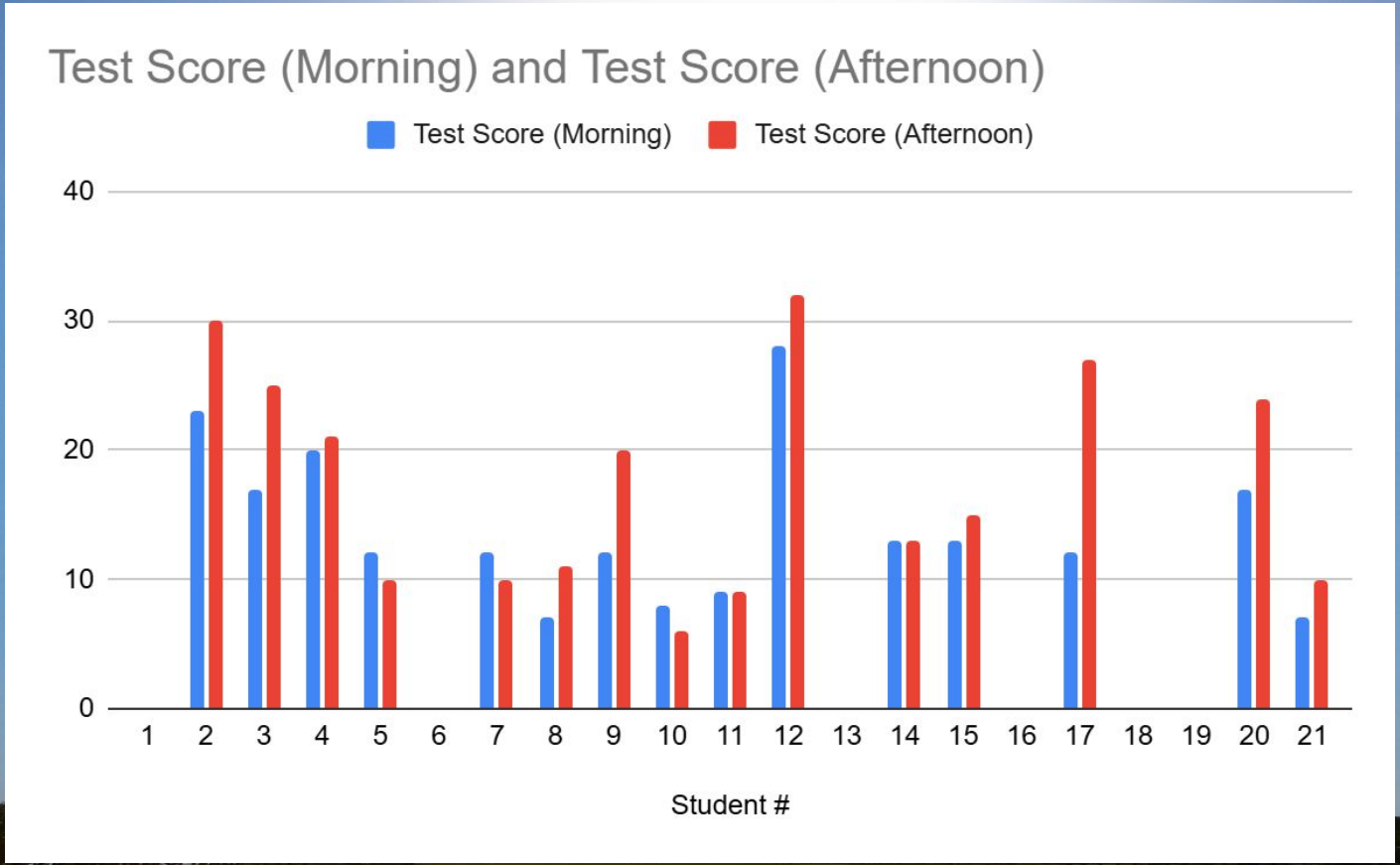
Results and Data Visualization

Student #	Test Score (Morning)	Test Score (Afternoon)	Difference
1	-	-	
2	23	30	7
3	17	25	7
4	20	21	1
5	12	10	-2
6	-	-	
7	12	10	2
8	7	11	4
9	12	20	8
10	8	6	-2
11	9	9	0
12	28	32	4
13	-	-	
14	13	13	0
15	13	15	2
16	-	-	
17	12	27	15
18	-	-	
19	-	-	
20	17	24	8
21	7	10	3

Results and Data Visualization



Discussion and Interpretation

The data shows that students scored higher on the test in the afternoon. This might be due to the fact that when students are tested in the morning their brains might not be fully awake yet in order to quickly and accurately respond to questions.

It is better to do the test in the afternoon because in the morning you are tired and in the afternoon you have more energy.

Implications and Ideas for Further Research

If we were to conduct this experiment again, we would include more students in the trials. We could also test more times in the day.

References

- “Why It’s Best to Take Tests Early in the Day.” *Harvard Business School*, 24 Feb. 2016, www.library.hbs.edu/working-knowledge/why-it-s-best-to-take-tests-early-in-the-day.
- *Online reading and math for kids | K5 Learning*. (2014). K5learning.com; K5 Learning. http://www.k5learning.com