12/01 Speed #4

Use your speed equation to answer the question. Show all steps. Feel free to use a calculator.

Bonnie rode her skateboard 195meters (m) in 30 seconds (s). Raul rode his unicycle 300m in 50s. Who traveled faster? How much faster?

On GOOS paper

1) Write equation
2) Substitute with units
3) Solve
4) Box answer with units

Learning Target: *I can accurately gather data to answer the investigation question.*

12/01 Speed #4

Bonnie rode her skateboard 195meters (m) in 30 seconds (s). Raul rode his unicycle 300m in 50s. Who traveled faster? How much faster?

Bonnie $S = \frac{d}{\Delta t}$

$S = \frac{195m}{30s}$

$S = 6.5m/s$

Raul $S = \frac{d}{\Delta t}$

$S = \frac{300m}{50s}$

$S = 6m/s$

Bonnie traveled 0.5m/s faster.

Learning Target: *I can accurately gather data to answer the investigation question.*

Speeds

1st ramp height

2nd ramp height

3rd Ramp Height

$S =$ ____ cm/s

Work Quietly!!!!!!!!!

Round to hundredths of a second (2 decimal places)

1) Write equation
2) Substitute with units
3) Solve
4) Box answer with units

Learning Target: *I can accurately gather data to answer the investigation question.*

12/01 Speed #4

Ramp and Car investigation

Question

Hypothesis

Variables

MV- Height of a ramp

RV- Speed of the car

CV- distance of 200 cm

Learning Target: *I can accurately gather data to answer the investigation question.*

12/01 Speed #4

Materials

Car
Measuring tape
# of books
Ramp
Timer
Tape to mark Xi and Xf
Passenger.

Diagram

You must show reference points and x_i and x_f

Procedures

Learning Target: *I can accurately gather data to answer the investigation question.*

11/30 Speed #4

Procedures

1. Place the ramp on 3 books. Make sure the end of the books match the end of the ramp.
2. Use the tape to mark Xi and Xf 200cm.
3. Place the ----on the back of the ramp.
4. Use the tape to mark Xi and Xf 200cm.
5. Release the car and at the same time start the timer.
6. Stop the timer when the car reaches the Xf.
7. Record the time interval in the data table.
8. Repeat steps 2-6 for 2 more trials.
9. Repeat steps 2-7 for _books and then _books.

ng Target: *I can plan an investigation to calculate the*
d of a moving object.

12/01 Speed #4

Data Table

# of Books	2 Books	3 Books	4 Books
Trial 1 (s)			
Trial 2(s)			
Trial 3 (s)			
Average (s)			

$av\ S = \frac{d}{t}$ $av\ S = \frac{d}{t}$ $av\ S = \frac{d}{t}$

Round to hundredths

Learning Target: *I can accurately gather data to answer the investigation question.*

Speeds

1st ramp height

$s = \frac{d}{avt}$

2nd ramp height

$s = \frac{d}{avt}$

3rd Ramp Height

$s = \frac{d}{avt}$

1) Write equation
2) Substitute with units
3) Solve
4) Box answer with units

Learning Target: *I can accurately gather data to answer the investigation question.*

12/01 Speed #4

Conclusion/Results

A **Answer the investigation question.**

P **Provide supporting high data**

P **provide supporting low data**

S **say how this data supports your conclusion. (the car went ____faster when the ramp was highest.)**

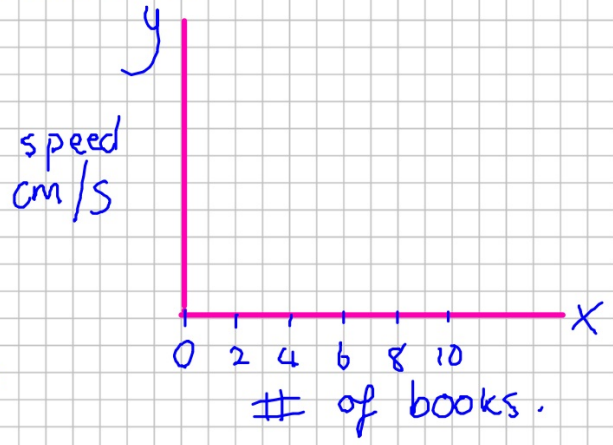
Learning Target: *I can accurately gather data to answer the investigation question.*

12/01 Speed #4

Line Graph on GRAPH paper

Graphing Reminders

1. Labeled MV on the horizontal x-axis with units
2. Labeled RV on the vertical y-axis with units
3. Intervals are equal
4. Graph has a title
5. Pencil and ruler are used
6. Accurately graph the data points



Learning Target: *I can accurately gather data to answer the investigation question.*

CLEAN UP

BUCKETS: At the back of the room with tape, measuring tape, timer cars

TEXT BOOKS: In neat piles on the shelf

CALCULATORS : Returned to me. I have 9

WHITE BOARD PENS: Return to bucket

SOFT TOYS: Return to my desk