

SCIENCE 4 ACTIVITY

FORCES AND MOVEMENT

Measuring Distance and Time

Name: _____

Grade & Section: _____

Date: _____

Score: _____

ROLL AND MEASURE!

How far does the toy car travel?

START ON RAMP

BOTTOM OF RAMP

STOPPING POINT

Distance traveled on the floor

MATERIALS:



Toy car



Measuring tape



Masking tape



Cardboard ramp



Books



KEEP IT FAIR: Use the same car, ramp height, starting point, and floor.

LET'S TRY!

- 1 Build a low ramp and mark a starting point.
- 2 Release the car. Do not push.
- 3 Mark where the front wheels stop.
- 4 Measure from the bottom of the ramp to the mark.
- 5 Record the distance in centimeters.
- 6 Repeat for three trials.

RECORD YOUR RESULTS

Trial	Distance (cm)
1	
2	
3	



THINK: Which trial traveled farthest?
Which traveled the shortest distance?

LIVEWORKSHEETS

SCIENCE 4 • ACTIVITY 2 • DISTANCE

FOLLOW THE PATH!

Which path is longer?



LET'S TRY!

- 1 Choose a ruler or measuring tape.
- 2 Move the car along Path A.
- 3 Measure Path A from start to finish.
- 4 Move the car along both sections of Path B.
- 5 Measure both sections and add their lengths.
- 6 Repeat the measurements three times.

MATERIALS:



Toy car



Masking tape



Ruler or measuring tape

RECORD YOUR RESULTS

Trial	Path A (cm)	B: Section 1 (cm)	B: Section 2 (cm)	Path B Total (cm)
1				
2				
3				



MEASURE CAREFULLY:

Begin at zero. Measure every section.



THINK:

Which path is longer?

Are the measurements the same?

LIVEWORKSHEETS

TIME MY WALK!

How long does a 5-meter walk take?

TIMER

WALKER

RECORDER



RECORD YOUR RESULTS

Trial	Distance (m)	Walking Time (s)
1	5	
2	5	
3	5	

LET'S TRY!

- 1 Mark a straight 5-meter path.
- 2 Choose a walker, timer, and recorder.
- 3 Say "Go!" Start timing as the walker begins.
- 4 Stop when the first foot reaches **FINISH**.
- 5 Record the time to the nearest second.
- 6 Repeat three times with the same walker.

MATERIALS:

Stopwatch or tablet timer • Measuring tape • Masking tape



KEEP IT FAIR:

Use the same path and timing rules.



WALK ONLY.

Keep the path clear.



THINK:

Which trial took the least time?

LIVEWORKSHEETS

HOW LONG DOES IT SPIN?

Measure how long a spinning top moves.

- 1 Place a tray on a stable, flat surface.
- 2 Choose a spinner, timer, and recorder.
- 3 Spin the top. Start timing when it is released.
- 4 Stop timing when the top stops moving.
- 5 Record the time to the nearest second.
- 6 Repeat for three trials.

MATERIALS:



Spinning top • Stopwatch or tablet timer • Flat tray

RECORD YOUR RESULTS

Trial	Spinning Time (s)
1	
2	
3	

SPINNER

TIMER

RECORDER



KEEP IT FAIR: Use the same top, surface, and spinner. Try to spin it the same way.



THINK: Which trial lasted longest? Why might the times differ?

Repeat. Record. Compare!

LIVEWORKSHEETS