





Here we go! The creation of a mechanically controlled car

Test your car

TEAM B7			
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1. ORIENTATION

1.1. Research questions:

- What will be the average speed of the mechanically controlled car?
- Which changing of parameters has the best result (fastest speed)?

1.2. Hypothesis

(here you only have to make a hypothesis about question 2)

Sweden: (no changes made)

Belgium: We think that our tests with the thick rubber band will be better.

2. PREPARATION

On the other document (twinspace) you see the sketches and propulsion of the car.

2.1. Parameter that will be changed:

(here you describe what you will change to the car)

Sweden: (no changes made)

Belgium: We changed the rubber band between our iron bow. First, we tried with a thick one. Then we tried with two smaller ones.

2.2. Method:

- 2.2.1. Let your car drive and measure the distance that is possible.
- 2.2.2. Now, for the experiment, choose a distance that is shorter then the maximum distance. Make a sign on the floor on that distance.
- 2.2.3. Let the car drive and measure the time.
- 2.2.4. Calculate the average speed.
- 2.2.5. Repeat this three times.
- 2.2.6. Now, change a parameter and repeat the whole experiment.

3. DATA ANALYSIS and DISCUSSION

3.1. Observations and Measurements:

DISTANCE (m)	TIME (s)	AVERAGE SPEED
		(m/s)
1	2,26	2,26 m/s
1	1,99	1,99 m/s
1	1,13	1,13 m/s
	DISTANCE (m) 1 1	1 2,26 1 1,99

Changing of a parameter: (describe what you change)

	DISTANCE (m)	TIME (s)	AVERAGE SPEED (m/s)
1	1	0,86	0,86 m/s
2	1	0,99	0,99 m/s
3	1	0,79	0,79 m/s

	DISTANCE (m)	TIME (s)	AVERAGE SPEED (m/s)
1	2.01	3	0.87
2	1.36	2	0.68
3	1.26	2	0.63

4. REFLECTION

4.1.Conclusion: (here you discuss when the car drives fastest with or without changing)

Belgium: The car goes the fastest with the two smaller rubber bands. So it drives faster with the changing.

4.2. Comparison of the results of the different countries: The Belgian car drives faster than the Swedish car.