





Here we go! The creation of a mechanically controlled car

Test your car

TEAM A4			
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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: With the little wheel it will turns faster

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: The front wheels, we gonna change. We have large ones and little 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	1,000	1.97	0.51
2	1,000	1.51	0.66
3	1,000	1.87	0.53

Changing of a parameter: (describe what you change)

	DISTANCE (m)	TIME (s)	AVERAGE SPEED (m/s)
1	1,000	2.14	0.41
2	1,000	1.97	0.51
3	1,000	2.22	0.45

	DISTANCE (m)	TIME (s)	AVERAGE SPEED
			(m/s)
1			
2			
3			

4. REFLECTION

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

Belgium: Without changing, the car drives the fastest because the wheels are smaller which is useful but it's not a big difference with the big wheels.

4.2. Comparison of the results of the different countries:

Belgium: We can't compare because we don't have the Swedish results