
<p>Here we go! The creation of a mechanically controlled car</p>		
<p>Test your car</p>		

<h2>TEAM B1</h2>	
<p>Pupils Belgium</p>	<p>Pupils Sweden</p>
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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 when we put weights on the car it will be too heavy so it's going to slow down but maybe it will go faster because it has more grip on the ground because of the weight.

## 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're going to put weights on the car.

### 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 than 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	0.60	0.73	0.82
2	0.60	0.83	0.72
3	0.60	0.67	0.90

Changing of a parameter: *(describe what you change)*

	DISTANCE (m)	TIME (s)	AVERAGE SPEED (m/s)
1	0.60	1.84	0.32
2	0.60	1.71	0.35
3	0.60	1.12	0.54

	DISTANCE (m)	TIME (s)	AVERAGE SPEED (m/s)
1	0.4	1.07	0.38
2	0.9	1.64	0.55
3	1.17	2.26	0.25

#### 4. REFLECTION

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

Belgium: without the changing it goes faster than with the change so our hypothesis is mostly right.

**4.2. Comparison** of the results of the different countries:

The Belgian car is always faster than the Swedish car.