DE BRON VRIJE ASO.SCHOOL	eTwinning	HAGALIDSKOLAN
Here we go! The creation of a mechanically controlled car		
Test your car		

TEAM B4	
Pupils Belgium	Pupils Sweden
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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 the vehicle will ride 50 centimeters far and that he will do it in 5 seconds.

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 amound of rubber bands from two to one. This causes the car to ride 1.50 m instead of 75 cm

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	1.50	1.65	0.91
2	1.00	2.85	0.35
3	1.00	2.45	0.41

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

	DISTANCE (m)	TIME (s)	AVERAGE SPEED (m/s)
1	1.50	2.34	0.64
2	1.50	2.03	0.74
3	1.50	1.80	0.83

	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: the car drives faster with two rubber bands because the amount of rubber bands determines the propulsion

4.2. Comparison of the results of the different countries: we can't compare