DE BRON VRIJE ASO.SCHOOL	eTwinning	H HAGALIDSKOLAN

Here we go! The creation of a mechanically controlled car
Test your car

TEAM A5	
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 the biggest balloon will make the car 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: we will chance the balloon first a small one and then a bigger one.

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	0.870	2.08	0.42
2	0.870	1.75	0.50
3	0.870	1.33	0.65

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

	DISTANCE (m)	TIME (s)	AVERAGE SPEED (m/s)
1	0.870	2.05	0.42
2	0.870	1.63	0.53
3	0.870	1.58	0.55

	DISTANCE (m)	TIME (s)	AVERAGE SPEED (m/s)
1	0.56	1.4	0.4
2	1.13	2.1	0.53
3	1.43	1.83	1.27

4. REFLECTION

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

Belgium: The car without the changes drives faster than the car with the changes. So our hypothesis was wrong.

4.2. Comparison of the results of the different countries:

The cars drive (the first two times) with the same speed except the last time.