



## Challenge 1

Dear Partners, Teachers, Children,

This is the first box with a challenge for the STEAMcontest in Poland from 5/05/2020 till 9/05/2020.

In the box you can find all materials to make a 'ballooncar powered by air'.

### Mission

Make a car that can move on its own without pushing it.

Use the material for this in the box and the cardboard itself. Discuss in group how you can approach this.

Did this work out? Then make a sketch of the construction as it moves.

There are some possible problems to solve:

- \* Friction: At the wheels the stick is not allowed to be attached to the cardboard. Otherwise the wheels cannot turn. How can that be solved?
- \* Action response: The direction in which the car is driving is opposite to the direction of the air escaping from the balloon.
- \* Resistance: If the balloon is not attached, it can fly in all directions.

There are some criteria during the challenge in Polen:

- In Poland you receive the same new box, you may only use the material from the box during the contest.
- You can use scissors and a cutting knife if needed.
- The time for building your ballooncar is limited to 45 minutes.
- A maximum of only 2 children are allowed to prepare the car for the start.

Make a working design ballooncar with own color, art and construction when finished in the classroom and upload a video on the twinspace of the project 'steamwithSTEAM' by 24 April 2020 at the latest.

SUCCESS