Problem №22
«Montgolfiere»

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Condition of this problem

To heat air for a simple hot air balloon, one can even use a heater. Build such a buoyant. Explain the results for your experiments and determine important parameters.
Equipment

We used scissors, threads, boiler, 0.5L bottle, adhesive tape
Goals and tasks

Goals:
1. Construct the model of air balloon
2. Determine important parameters

Tasks:
1. Construct the model
2. Find parameters
3. Make conclusions
Floating conditions

$$F_p \geq mg$$
We used the following formula

\[ F_p = \rho g g V_o \]
Parameters that affect the flight

- Mass of air balloon
- Volume of balloon
  - The elasticity of the shell of the ball
- Density of environment
Conclusions

1. We constructed the model of air balloon
2. We determined important parameters
3. We explained the results