



In the Elements Exposition, you'll discover how the wind, sun, water and Earth can be of use for our lives and experience their strengths.



1. ENERGY TRANSFORMATIONS

Where does the energy expended while pedalling on a bicycle originate from?

- We have it within ourselves from birth
- Chemical transformations in our muscles
- We receive it directly from the sun
- From the food we eat

2.

SOLAR COOKER

Colour the place in the parabola where you feel the highest temperature on your hand.



3.

EARTHQUAKE SIMULATOR

What value on the Richter scale represents an earthquake that is able to destroy non-solidly constructed buildings?

4.

FIERY TORNADO

Warm air rises, and if it travels through a tube the so called chimney effect occurs. Select situations in which the chimney effect is undesirable:

- a Fire Tornado display
- b Fire in a high-rise
- c Fire burning in a stove





5. SOLAR AIR SHOW

Why do model aircraft fly below the ceiling if we illuminate them with a spotlight?

- a The light cone hits the plane and pushes it away so that the plane starts moving.
- b The photovoltaic cell transforms the energy of the light into electric energy, which rotates the propeller.
- c The planes have light sensors that start the petrol engine and begins to rotate the propeller.

6. BUBBLE BLOWER

Can you make a non-spherical bubble?

a yes, the triangle is the easiest

b no, it's not possible

c more attempts are necessary

7.

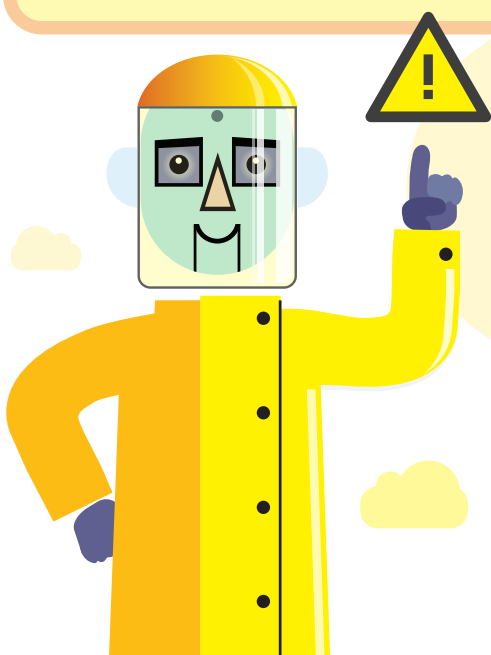
WINDSTORM

On the Beaufort scale of wind speed, there is one level above a storm. What is its name?

8.

PUMPED-STORAGE POWER PLANT MODEL

Connect situations in a pumped-storage power plant that belong together:



During a surplus of electricity in the network

water is pumped from the bottom reservoir up to the top one.

During a shortage of electricity in the network

water flows from the top reservoir down to the bottom one.

