

WORKSHEET

for elementary schools

Hello, I'm Aurel. This is a quiz assessing the knowledge you will or have already gained here. Aurelium is divided into 6 sections distinguished by colours. Look around the hall and find a map showing these sections. It will help you to navigate between the exhibits while looking for the correct answers.



1 Name at least 2 exhibits where your body (muscle power) is utilized as an energy source.

2 How is it possible that we have a working PERPETUUM MOBILE exhibit in Aurelium?

3 Which exhibit allows you to lift objects by a magnetic field?

In hydraulic press, your power is multiplied according to law.
 What is the practical application of this principle?
 Circle all the correct answers:

hydraulic press

pump

hydraulic jack

5 Name 2 types of piston combustion engines.

4

6 What unit is colour temperature measured in?

 The orange light is

warm


cool


8 PYTHAGORAS THEOREM POSTULATES:
 In a right-angled triangle, the square of the hypotenuse side (the longest side) is


$> = <$

to the sum of squares of the two other sides.
 Circle the correct answer.

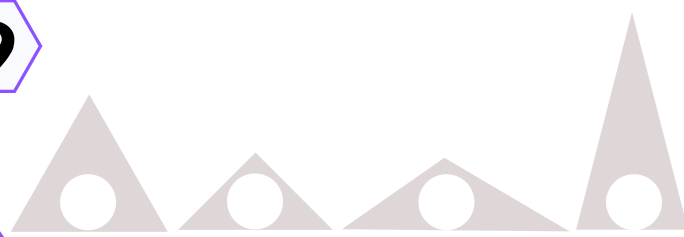
7 Which exhibits demonstrate energy harvesting from sustainable sources?







9 On a scale of 1 - 4 (where 1 = easiest and 4 = most difficult) rate how difficult it is to lift the cones.



10 Which property of liquids affects the shape of ascending bubbles in the glass barrel?




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How it is going?
Did you find all the exhibits?
My tip:
You can find some information on the information panels



11 One of the oldest known water pumps is:
..... screw.
Name other ways where this principle can be utilized:

12 Thermovision allows you to determine the temperature of a room or any object. You can also measure the temperature of your body or clothes.
Write the corresponding displayed colour of the following objects:

13 Choose the correct answer:
The Bridge Tension


SHOW DOESN'T SHOW

our actual weight. Explain why:


14 Which material is 5 times stronger compared to steel of the same weight?

16 We use decibels [dB] to measure sound intensity.
Try to estimate the sound intensity of

a quiet room a noisy room.



..... dB



..... dB

15 And now a riddle: This material is modern. It is used in aviation, the automobile industry, sports and many other areas. It is a carbon composite.
What is the name of this material?

.....

18 People can hear sound frequencies between
..... to of these units

17 What units are used to measure sound frequency?


19 **Bonus question:**
Do you know which famous person is sitting next to Aurel Stodola on our photo wall banner?


The results based on your points:

19 - 16	You are a future scientist
15 - 11	You enjoy science, you are curious and like to learn
10 - 5	You don't quite get in now, but next time you'll surely improve
4 - 0	You may not be a future scientist but you are definitely talented in some other area



Take a picture and share

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 aurelium_zcv