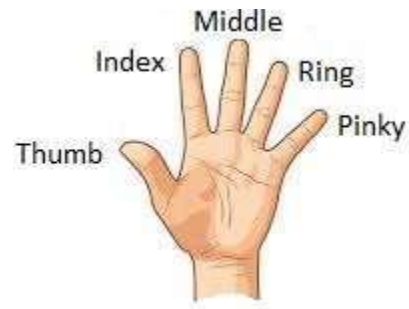


Measurements and body proportions


Student's name.....

Date

You can measure many objects and distances without any measuring devices, just by using your hands, fingers, feet and steps if you know your body data. Thus, the first stage of our task is to measure your body parts and memorize some data.



You will need: a measuring tape, a pen, and a device to search the Internet.

Do you know that each of your fingers have his own name? 

1. **Hand width.** The average width of an adult's hand is about 10 cm. Measure the width of your hand in centimeters.

The width of my hand is..... cm.

2. **The distance between an adult's thumb and middle finger** is called a sprint. The sprint is 17.78 centimeters. Measure the distance of your hand from the middle finger to the thumb.

The distance between my thumb and middle finger is cm.

3. **The distance between the thumb and the index finger.** This distance is on average 2 cm shorter than the distance between the middle finger and the thumb.

The distance between my thumb and the index finger is cm.

4. **The distance between the index and the middle fingers.** The distance between extended the index to the middle finger is about 5cm on an average adult.

The distance between my thumb and my index finger is.....cm.

5. **Length of index finger.** It is helpful to know the length of your index finger. It is usually 9 or 10 cm long.

The length of my index finger is..... cm.

6. **The distance between the outstretched arm and the shoulder of the other arm.** It is believed that the distance of a person of average height between the big finger of an outstretched hand and the shoulder of the opposite hand is on average 1m.

The distance between my outstretched arm and the shoulder of the other my opposite arm is..... cm.

Choose and remember a few dimensions of your body. And now measure some items from your environment using your hands:

1. = cm

2. = cm

3. = cm

The research is not over yet. Test these hypotheses.

First hypothesis:

The length of a person's foot is equal to the distance from his elbow to his wrist.

Is it right for me?

- The length of my foot:..... cm

- The distance from my elbow to the wrist: cm
- The absolute error: cm
- Is the hypothesis right? Explain why?

.....

Second hypothesis:

The length of the legs is equal to the distance from the chin to the top of the forehead multiplied by 4.5.

Is it right for me?

- The length of my leg cm.
- The distance from my chin to the top of my forehead:cm.
- Calculated the length of my legcm.
- The absolute error:cm.
- Is the hypothesis right? Explain why?

.....

Third hypothesis:

The height of a person is equal to the distance between the tips of the middle fingers of the outstretched hands.

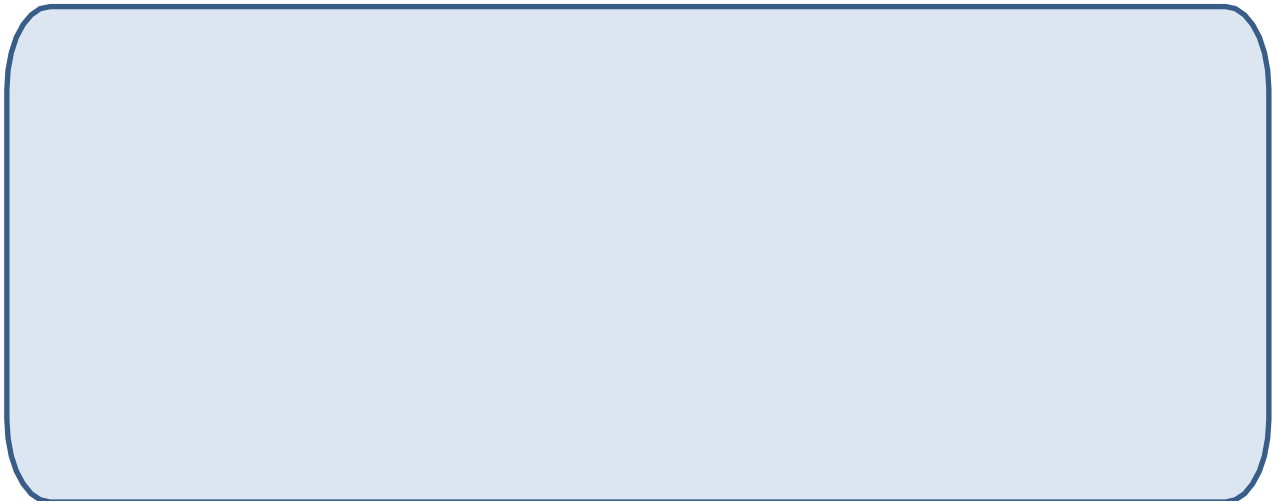
Is it right for me?

- My heightcm.
- The distance between the tips of my middle fingers of my outstretched hands: cm.
- Absolute error: cm.
- Is the hypothesis right? Explain why?
.....
.....

Check the human gold ratio you will find on the links below:

- <https://www.oprah.com/oprahshow/measuring-facial-perfection-the-golden-ratio>
- <https://www.goldennumber.net/face/>

Write, please, what did you chose to measure”:



Is it right for me?

-cm
-cm.
- Absolute error:cm
- Is the hypothesis right? Explain why?
-
-

What new did you learn?

-
-