

PROPERTIES AND DIMENSIONS

10.1. Vocabulary

Ex. 1. Match the words to their Russian equivalents.

1. durability	a. толщина
2. width	b. высота
3. strength	c. жесткий
4. height	d. ширина
5. depth	e. гибкий
6. flexible	f. вес
7. length	g. глубина
8. rigid	h. длина
9. weight	i. сила
10. thickness	j. выносливость

Ex. 2. Translate the sentences from Russian into English. Use the target vocabulary.

1. Бумага, которую я купил, имеет толщину 0,1 миллиметра.
2. Этот пластиковый контейнер известен своей долговечностью.
3. Дерево возле моего дома достигает высоты 10 метров.
4. Ковровая дорожка, которую я только что купил, имеет длину 8 футов.
5. Он измерил глубину озера и обнаружил, что она составляет 20 метров.
6. Коридор узкий, шириной всего 2 метра.
7. Деревянная доска была жесткой и не прогибалась под давлением.
8. Я с трудом поднимал тяжелую коробку из-за ее веса.

10.2. Reading

Ex. 1. Read the text.

Plumbers and pipefitters need to know the dimensions of pipes when they buy them. They also need to know the size of the holes in walls, floors, etc. where the pipes will go. This information is usually given in terms of the diameter (the distance across the middle of a circle) and the length (the distance between two ends). The following are some other important measurements for plumbers and pipefitters.

Depth: the distance from the top to the bottom of something

The depth of a sink should be about 20 cm.

Durability: how long something lasts

Copper pipes are known for their durability.

Flexible: able to bend without breaking

Plastic pipes are flexible and easy to work with.

Height: how tall something is

The height of a toilet should be about 40 cm.

Rigid: unable to bend or move easily

Steel pipes are strong and rigid.

Strength: how strong something is

Steel pipes are known for their strength.

Thickness: the distance between the top and the bottom surfaces of an object

The thickness of a pipe should be about 5 mm.

Weight: how heavy something is

Aluminum pipes are light in weight.

Width: how wide something is

The width of a bathtub should be about 70 cm.

Pipe sizes are often given in inches. For example, a 1/2-inch pipe is one that has a diameter of 1/2 inch. Pipe sizes can also be given in millimeters. For example, a 15-mm pipe is one that has a diameter of 15 mm.

Sometimes, you may need to convert from one system of measurement to another. To do this, you can use the following formulas:

$$1 \text{ inch} = 25.4 \text{ mm}$$

$$1 \text{ foot} = 12 \text{ inches} = 0.3048 \text{ meters}$$

$$1 \text{ yard} = 3 \text{ feet} = 0.9144 \text{ meters}$$

$$1 \text{ meter} = 1000 \text{ millimeters}$$

$$1 \text{ mile} = 5280 \text{ feet} = 1609.34 \text{ meters}$$

Ex. 2. *Which title fits best?*

1. Understanding Pipe Dimensions for Plumbers and Pipefitters
2. How Heavy Should a Bathtub Be?
3. The Importance of Material Durability in Plumbing

Ex. 3. *Answer the questions.*

1. What are some important measurements for plumbers and pipefitters?
2. How is depth defined in the context of plumbing?
3. Which type of pipes are known for their durability?
4. Why are plastic pipes preferred by plumbers and pipefitters?
5. How is height measured in plumbing?
6. Which type of pipes are strong and rigid?
7. What does thickness refer to when it comes to pipes?
8. Which type of pipes are light in weight?
9. How is width measured in plumbing?
10. How can you convert from inches to millimeters?

10.3. Communication

Ex. 1. Make sentences using the following words:

1. long/flexible
2. durability/important
3. width/flow
4. rigid/flexible
5. strength/impressive
6. height/plumbing/fixture
7. thickness/durability
8. weight/hold/plumbing
9. depth/trench/crucial
10. length/measured/accurately