

## PIPES, TUBES, AND TUBING

### 11.1. Vocabulary

*Ex. 1. Match the words to their definitions.*

1. tubing	a. the measurement of the outer width of a circular object
2. ductile	b. capable of being stretched or bent without breaking
3. abs pipe	c. a pipe with small holes or perforations along its length
4. PVC pipe	d. a cylindrical hollow object used for conveying liquids or gases
5. pipe	e. a long, round hollow object used for transporting fluids or gases
6. schedule	f. a type of plastic pipe made from CPVC material
7. PEX tubing	g. the approximate or designated size of a pipe or tube
8. nominal diameter	h. a flexible or rigid cylindrical conduit used for conveying fluids or gases
9. tube	i. a type of plastic pipe made from PVC material
10. perforated pipe	j. thickness of the wall of the pipe
11. outside diameter (OD)	k. a type of tubing made from

	cross-linked polyethylene material
12. inside diameter (ID)	l. the measurement of the inner width of a circular object
13. PE tubing	m. a type of plastic pipe made from ABS material
14. CPVC pipe	n. a type of tubing made from polyethylene material

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

1. Номинальный диаметр трубы 2 дюйма.
2. Я купил перфорированную трубу для системы орошения сада.
3. Внешний диаметр трубки составляет 5 сантиметров.
4. Трубопровод используется для транспортировки жидкостей на заводе.
5. Пожалуйста, передайте мне эту трубку, мне нужно ее разрезать.
6. Нам нужно заменить трубу АБС в ванной.
7. Внутренний диаметр трубы слишком мал, чтобы кабель мог пройти через нее.
8. Сантехник проложил новую трубу на кухне.
9. Трубы из ХПВХ обычно используются в системах горячего водоснабжения.
10. Я предпочитаю использовать трубы РЕХ для своих сантехнических проектов.
11. Трубы ПВХ легкие и простые в монтаже.
12. Полиэтиленовые трубки гибки и устойчивы к химическим веществам.
13. Этот материал пластичен и легко поддается формованию.
14. Проверьте расписание, чтобы узнать, когда начнется следующее занятие.

## 11.2. Reading

*Ex. 1. Read the text.*

### **The Difference Between Pipes, Tubes, and Tubing**

Pipes, tubes, and tubing used in plumbing are all similar because they carry water. But there is a difference between them.

A pipe is a tube that has a certain size and schedule. The size of a pipe is its inside diameter (ID). The schedule is the thickness of the wall. Most pipes that you can buy at a store are made of metal or plastic. Metal pipes usually have threads (screwed ends) so that you can join them together with fittings. Some common types of pipe are:

- ABS pipe: these black pipes are made of ABS plastic.
- CPVC pipe: these white pipes are made of chlorinated polyvinyl chloride (CPVC).
- ductile iron pipe: this type of cast iron is very strong and flexible.
- PVC pipe: these white pipes are made of polyvinyl chloride (PVC).
- steel pipe: these gray pipes are made of steel.

Tubing is a long, thin, hollow cylinder. It usually does not have threads. You cannot join two pieces of tubing together without a fitting. Some common types of tubing are:

- copper tubing: this orange-brown tubing is made of copper.
- PEX tubing: this red or blue tubing is made of cross-linked polyethylene (PEX). You can bend it and use fittings to join it.
- PE tubing: this black tubing is made of polyethylene (PE). It is often used for underground water supply lines.
- stainless steel tubing: this silver-colored tubing is made of stainless steel.

Tubing is also used for things like air conditioning and heating systems.

A tube is a long, thin, hollow cylinder that is usually round. It is often made of metal. Tubes do not have standard sizes like pipes and tubing do. Some common types of tube are:

- aluminum tubing: this silver-colored tubing is made of aluminum.

- brass tubing: this yellow tubing is made of brass.
- steel tube: this gray tube is made of steel.

**Ex. 2.** *Answer the questions.*

1. What is the difference between a pipe, tubing, and a tube?
2. How is the size of a pipe determined?
3. What is the schedule of a pipe?
4. What are some common types of pipes made of metal?
5. Why do metal pipes usually have threads?
6. Can you join two pieces of tubing together without a fitting? Why or why not?
7. What are some common types of tubing made of?
8. What are some common uses for tubing besides plumbing?
9. Are tubes standardized in terms of size like pipes and tubing?
10. What are some common types of tubes made of?

### **11.3. Writing**

**Ex. 1.** *Imagine you are writing an email to your friend who is renovating their bathroom. Share your knowledge about different types of pipes and tubing used in plumbing. Give them advice on which type of pipe or tubing they should use and why.*