

# THE WATER PURIFICATION PROCESS

**Directions:** Drag and drop the name of each step using the following words:

DISTRIBUTION

SEDIMENTATION

DISINFECTION

FILTRATION

PH ADJUSTMENT

COAGULATION AND FLOCCULATION

1. \_\_\_\_\_:

Water from its source, like rivers or lakes, contains particles and dirt. To remove these impurities, chemicals called coagulants are added to the water. Coagulants cause tiny particles to stick together, forming larger clumps called flocs.

2. \_\_\_\_\_:

After coagulation, the water is left to sit in a large tank. During this time, the heavy flocs settle to the bottom of the tank, forming a layer of sediment. This process is called sedimentation.

3. \_\_\_\_\_

The water passes through layers of sand, gravel, and charcoal to remove smaller particles, bacteria, and some chemicals that may still be present. This filtration process helps to make the water even cleaner.

4. \_\_\_\_\_:

Even after filtration, some harmful bacteria, viruses, and parasites may remain in the water. To kill these microorganisms and make the water safe to drink, disinfectants like chlorine or ozone are added. These disinfectants destroy any remaining pathogens.

5. \_\_\_\_\_:

Finally, the pH level of the water is adjusted to make sure it is neither too acidic nor too alkaline. This helps to ensure that the water is safe for consumption and doesn't corrode pipes or taste unpleasant.

6. \_\_\_\_\_:

Once the water has been purified and treated, it is pumped through pipes to homes, schools, and businesses for people to use for drinking, cooking, bathing, and other everyday activities.

By following these steps, water treatment plants can provide clean and safe drinking water to communities, helping to protect public health and ensure access to clean water for everyone.