

What Is Urine?

By Jennifer Kenny

¹ What is urine? Urine is the fluid waste excreted by the kidneys. People often think of urine as "yucky" but in ancient times urine was sometimes used for washing, mouthwash, or drinking. Can you believe that?



² In actuality, urine is made of water and wastes. Ninety-six percent of it is water and four percent of it is waste such as urea and salts. Your urine is basically yellow in color because of bile pigments. Bile is produced by the liver to help in digestion. When it is done doing its job, the bile is broken down and that's where the pigments come from.

³ If you drink a great deal, the urine will be pale. If, on the other hand, you are sweating a lot or drinking too little, the urine will be darker in color. When you go to the bathroom for the first time in the morning, your urine is usually the darkest.

⁴ Fresh urine doesn't smell too awful. A baby's wet diaper or an unclean restroom can be really smelly, though. What you smell in those situations is ammonia. Ammonia is produced when bacteria breaks down urea. Ammonia wastes are produced by all cells. The liver puts together carbon dioxide and ammonia to make urea, which is not as toxic as ammonia.

⁵ Urea is small enough to pass into the glomerular filtrate and remains in the kidney tubules. Urine is then constantly being produced in the kidneys. The waste goes from the collecting tubules to the ureters to the bladder. The speed at which urine forms depends on how much water you drank, how much salt you've consumed, and how much you're sweating.

⁶ Micturition is the scientific name for urination. Your bladder swells like a balloon. Messages are sent to your spinal cord, which sends messages to your bladder. Your sphincter muscles relax and the bladder walls contract. Urine leaves your body through the urethra. A baby automatically urinates, but a young child learns control over this process. People can ignore the feeling to urinate for a bit, but even adults will feel pain if two cups of urine accumulate in the bladder.

⁷ Now, we may not use these wastes as ancient people did. However, doctors often use urine as a measure of good health. How exactly? Urine tests can check for diabetes, nutrients, types of cells, and bacteria. That's good to know.

Name _____

Science Pd: _____

What Is Urine?

<p>1. _____ is the liquid waste excreted by the kidneys.</p> <p><input type="radio"/> A Urine</p> <p><input type="radio"/> B Glomerular filtrate</p> <p><input type="radio"/> C Bile</p> <p><input type="radio"/> D Nephrons</p>	<p>2. Which did ancient people not use urine for?</p> <p><input type="radio"/> A Washing</p> <p><input type="radio"/> B Drinking</p> <p><input type="radio"/> C Mouthwash</p> <p><input type="radio"/> D Diabetic testing</p>
<p>3. Ninety-six percent of urine is made of wastes.</p> <p><input type="radio"/> A False</p> <p><input type="radio"/> B True</p>	<p>4. If you drink a great deal, your urine will most likely be _____.</p> <p><input type="radio"/> A Pure yellow</p> <p><input type="radio"/> B Pale</p> <p><input type="radio"/> C Dark</p>
<p>5. The smell of urine comes mainly from _____.</p> <p><input type="radio"/> A Water</p> <p><input type="radio"/> B Sugar</p> <p><input type="radio"/> C Ammonia</p>	<p>6. A baby's urination is involuntary.</p> <p><input type="radio"/> A False</p> <p><input type="radio"/> B True</p>
<p>7. The speed at which urine forms can depend on how much you are sweating.</p> <p><input type="radio"/> A False</p> <p><input type="radio"/> B True</p>	