

The Nitrogen Cycle: Setting Up Your New Aquarium

The nitrogen cycle is the natural process by which beneficial bacteria break down and remove harmful fish waste from the aquarium. A new aquarium contains little to no beneficial bacteria, and the process of growing these bacteria is called “cycling” the aquarium. Once a waste source like live fish, fish food, or pure ammonia is added to the aquarium, the bacteria colonies which consume this waste start to grow. This results in first an ammonia spike, then a nitrite spike, then finally a rise in nitrate.

	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
Week 1	<p>SETUP DAY Fully set up tank, including ammonia source</p> <p>Prime® 5 mL / 50 gallons for every 1 mg/L of ammonia</p> <p>Stability® 5 mL / 20 gallons</p>	<p>Stability® 5 mL / 20 gallons</p>	<p>Prime® 5 mL / 50 gallons for every 1 mg/L of ammonia</p> <p>Stability® 5 mL / 20 gallons</p>	<p>Stability® 5 mL / 20 gallons</p>	<p>Prime® 5 mL / 50 gallons for every 1 mg/L of ammonia</p> <p>Stability® 5 mL / 20 gallons</p>	<p>Stability® 5 mL / 20 gallons</p>	<p>Prime® 5 mL / 50 gallons for every 1 mg/L of ammonia</p> <p>Stability® 5 mL / 20 gallons</p>
Week 2	<p>Stability® 5 mL / 20 gallons</p>	<p>Prime® 5 mL / 50 gallons for every 1 mg/L of ammonia or 2 mg/L of nitrite</p>	<p>Prime® 5 mL / 50 gallons for every 1 mg/L of ammonia or 2 mg/L of nitrite</p>	<p>Prime® 5 mL / 50 gallons for every 1 mg/L of ammonia or 2 mg/L of nitrite</p>	<p>Prime® 5 mL / 50 gallons for every 1 mg/L of ammonia or 2 mg/L of nitrite</p>	<p>Prime® 5 mL / 50 gallons for every 1 mg/L of ammonia or 2 mg/L of nitrite</p>	<p>Prime® 5 mL / 50 gallons for every 1 mg/L of ammonia or 2 mg/L of nitrite</p>
Week 3	<p>Prime® 5 mL / 50 gallons for every 1 mg/L of ammonia or 2 mg/L of nitrite</p>	<p>Prime® 5 mL / 50 gallons for every 1 mg/L of ammonia or 2 mg/L of nitrite</p>	<p>Prime® 5 mL / 50 gallons for every 1 mg/L of ammonia or 2 mg/L of nitrite</p>	<p>Prime® 5 mL / 50 gallons for every 1 mg/L of ammonia or 2 mg/L of nitrite</p>	<p>Prime® 5 mL / 50 gallons for every 1 mg/L of ammonia or 2 mg/L of nitrite</p>	<p>Prime® 5 mL / 50 gallons for every 1 mg/L of ammonia or 2 mg/L of nitrite</p>	<p>Prime® 5 mL / 50 gallons for every 1 mg/L of ammonia or 2 mg/L of nitrite</p>
Week 4	<p>Prime® 5 mL / 50 gallons for every 2 mg/L of nitrite</p>	<p>Prime® 5 mL / 50 gallons for every 2 mg/L of nitrite</p>	<p>Prime® 5 mL / 50 gallons for every 2 mg/L of nitrite</p>	<p>Prime® 5 mL / 50 gallons for every 2 mg/L of nitrite</p>	<p>Prime® 5 mL / 50 gallons for every 2 mg/L of nitrite</p>	<p>Prime® 5 mL / 50 gallons for every 2 mg/L of nitrite</p>	<p>Prime® 5 mL / 50 gallons for every 2 mg/L of nitrite</p>
Week 5	<p>Prime® 5 mL / 50 gallons for every 2 mg/L of nitrite</p>	<p>Prime® 5 mL / 50 gallons for every 2 mg/L of nitrite</p>	<p>Prime® 5 mL / 50 gallons for every 2 mg/L of nitrite</p>	<p>Prime® 5 mL / 50 gallons for every 2 mg/L of nitrite</p>	<p>Prime® 5 mL / 50 gallons for every 2 mg/L of nitrite</p>	<p>Prime® 5 mL / 50 gallons for every 2 mg/L of nitrite</p>	<p>Water Change 25-30% water change</p>

Note: This schedule represents just one possible cycling schedule

Cycling times can vary widely in duration and appearance - do not be surprised if a cycle lasts longer or is not as well-defined as the one shown, and variance from this schedule does not necessarily represent a problem with the cycling process. A tank is considered “cycled” when there are no persistent ammonia or nitrite readings despite regular additions of an ammonia source.