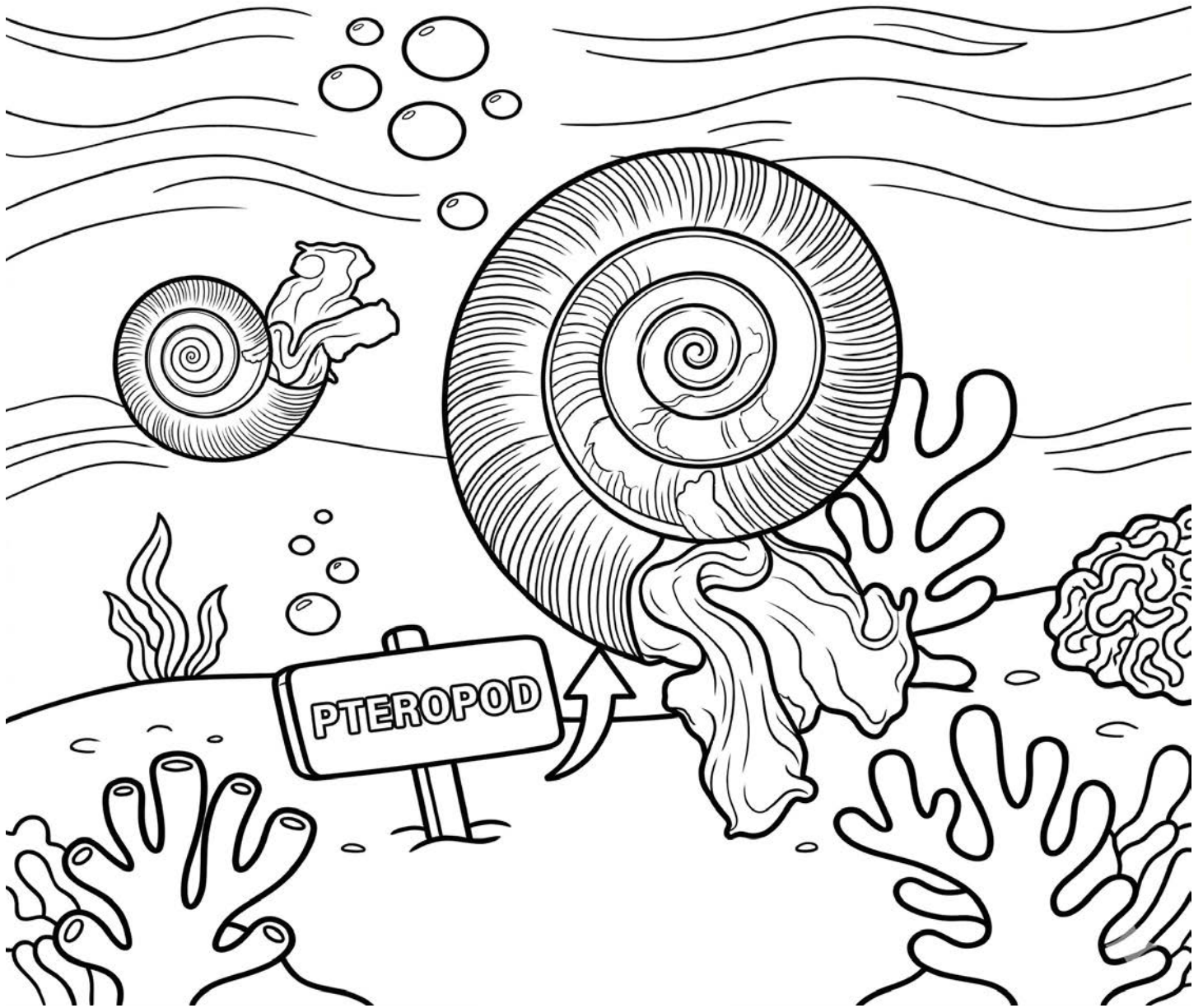


# MEET THE PTEROPOD



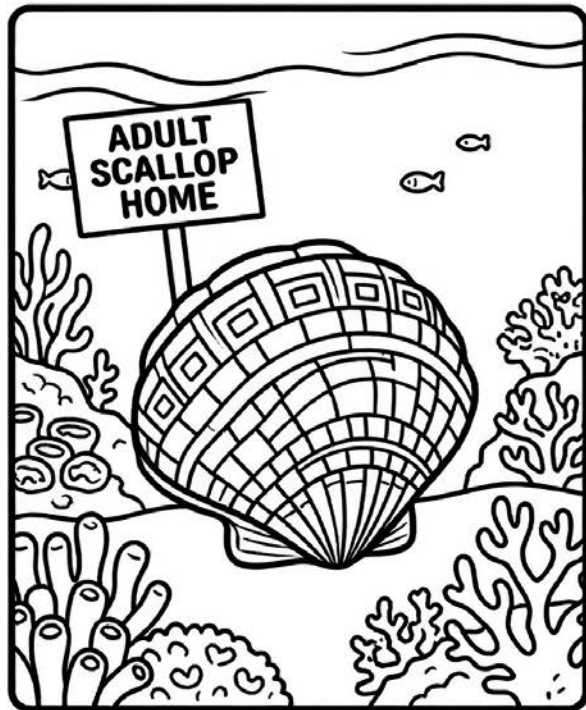
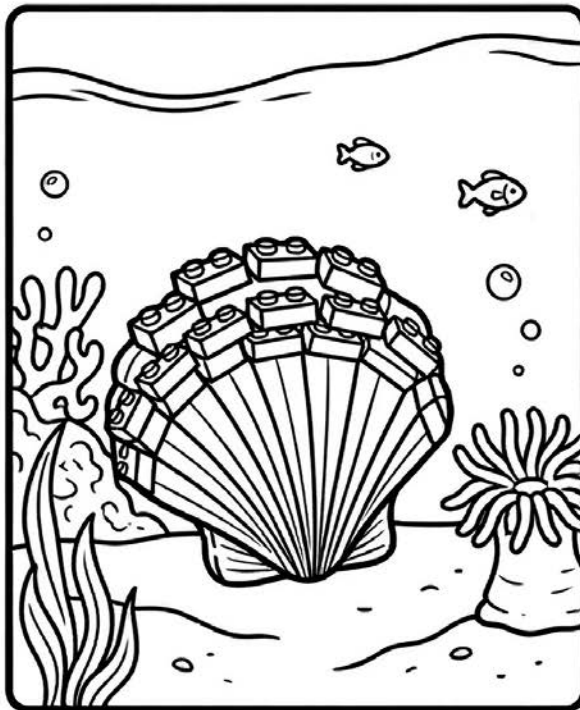
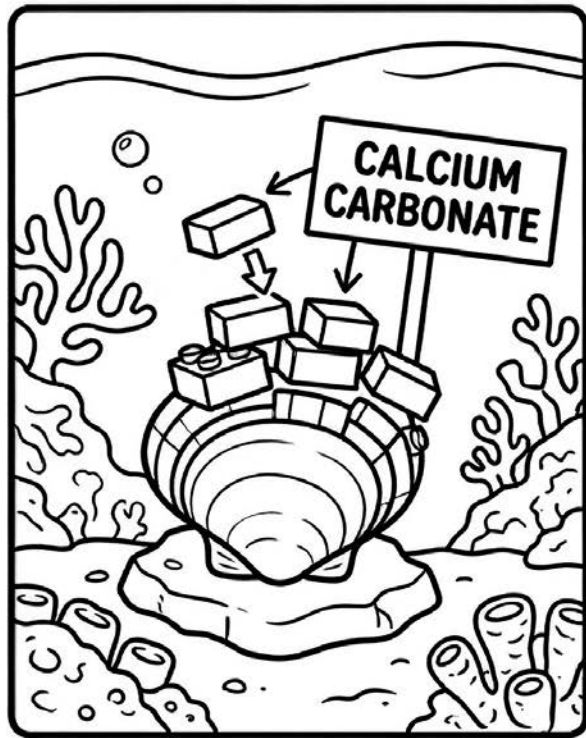
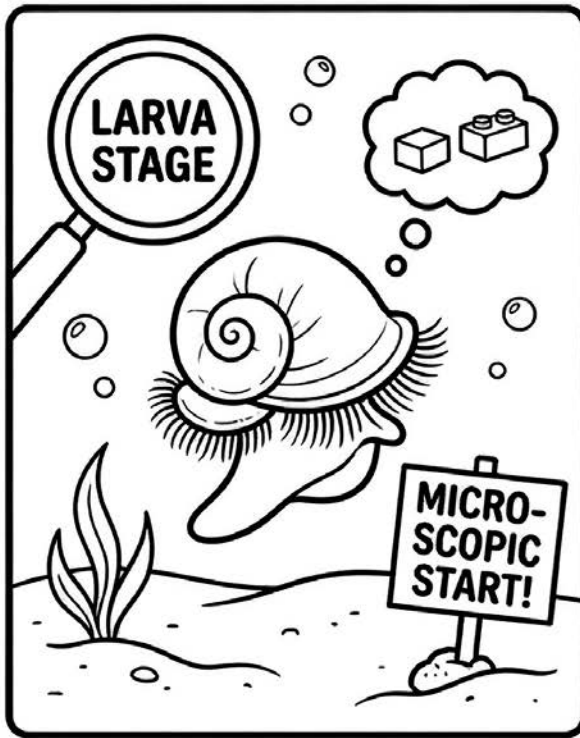
AI (Google Gemini) was used for the initial creation for this product. NOAA staff reviewed, modified, and produced the final product.



**Pteropods are our  
ocean's tiny superfood.**



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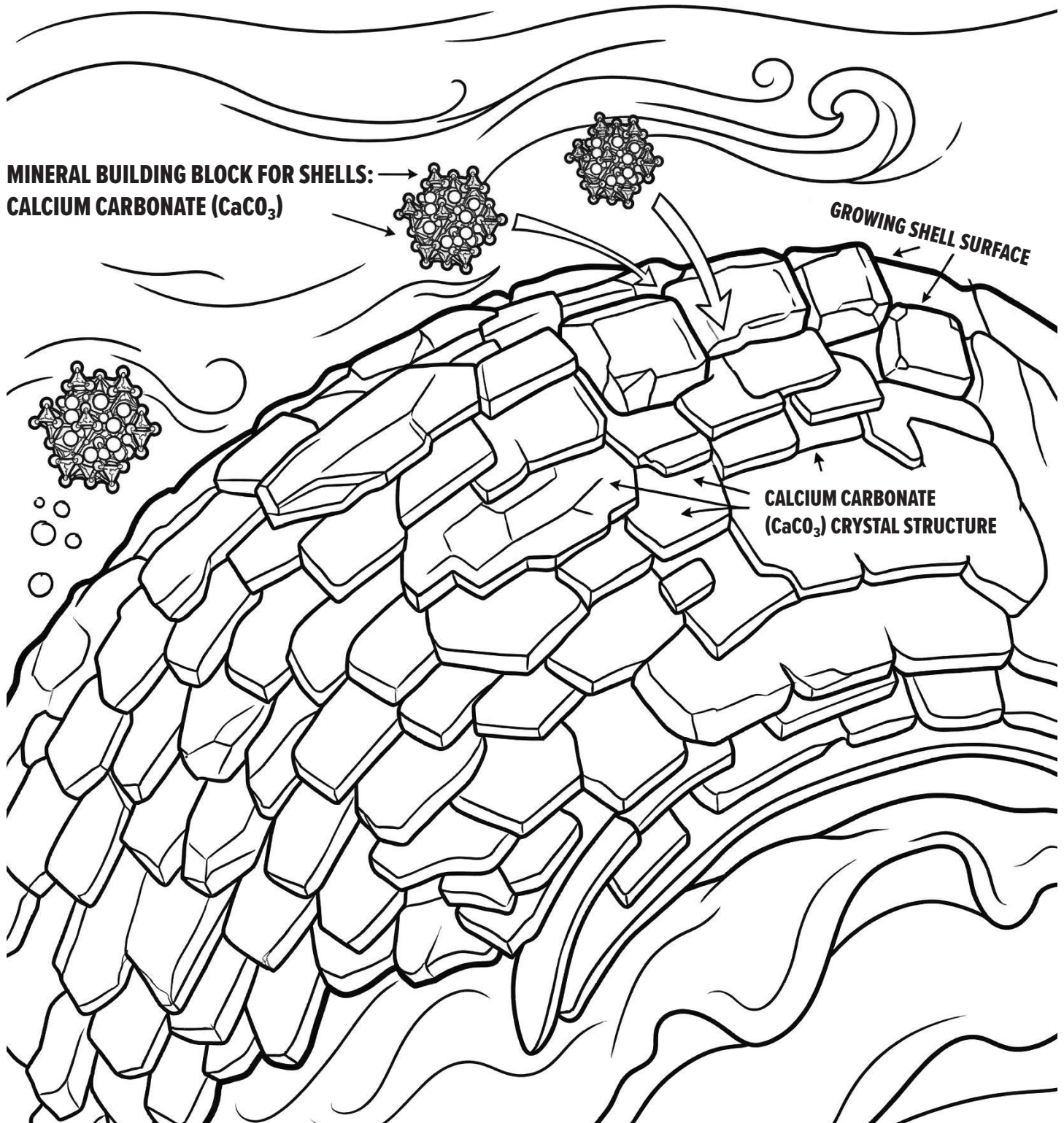


**Shellfish rely on calcium carbonate as building blocks for their shells to grow.**



AI (Google Gemini) was used for the initial creation for this product. NOAA staff reviewed, modified, and produced the final product.

# Shellfish use calcium carbonate to build their shells.



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# THE PTEROPOD (SEA BUTTERFLY) LIFE CHALLENGE

## HEALTHY OCEAN

MINERAL BUILDING BLOCK FOR SHELLS:  
CALCIUM CARBONATE  
(CaCO<sub>3</sub>)

CALCIUM CARBONATE  
(CaCO<sub>3</sub>) BUILDING BLOCKS



## ACIDIFIED OCEAN

Growing shell surface

Distressed and pitted shell surface

ACID (H<sup>+</sup>) CAPTURES CARBONATE

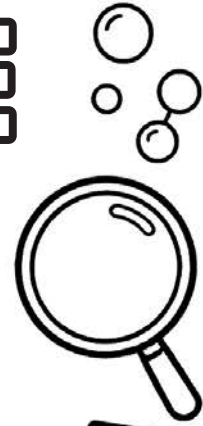


High CO<sub>2</sub> makes water more acidic. The acid captures the few building blocks, making shells weak and damaged.

**COLOR & LEARN:** Pteropods are tiny sea snails that are very sensitive to

increased acidity. Corrosive waters can make it harder for them to build their shells.

# EXPLORE THE pH SCALE!



**Stomach  
Acid**



**Lemon  
Juice**



**Vinegar**



**Soda**



**Tomato**



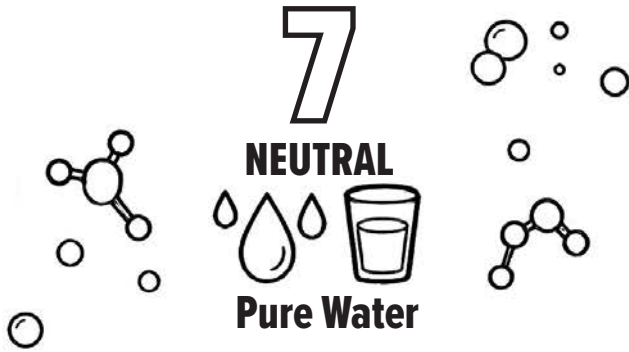
**Coffee**



**Milk**



**0**  
**ACIDIC**



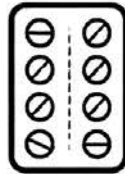
**14**  
**ALKALINE/  
BASIC**



**Blood**



**Baking  
Soda**



**Antacids**



**Ammonia**



**Soap**



**Bleach**



**Drain  
Cleaner**

