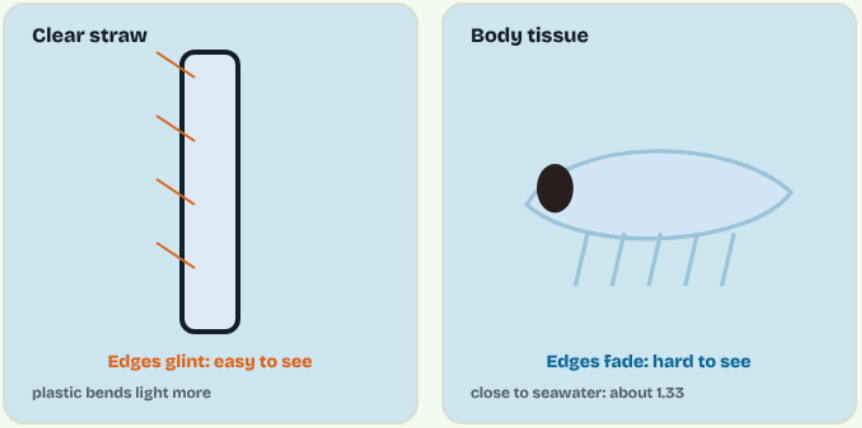
That is why

How do see-through animals vanish in the sea?

Their bodies bend light almost exactly like seawater, and some wear tiny coatings that stop telltale reflections.

A Match the water, lose the edges

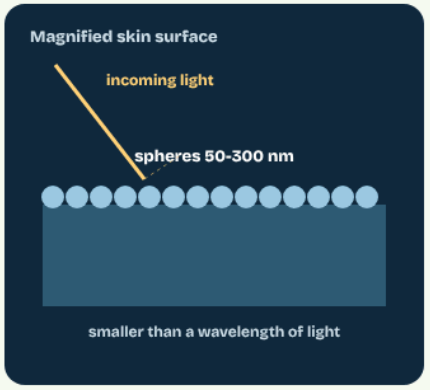


The rule

Light reflects wherever two materials with different refractive indices meet. A body that bends light like seawater (about 1.33) leaves almost no edges.

The ice cube in water: its edges show only where it bends light differently.

B An anti-glare coat



1 Up to 250x less glare

Reflections cut by as much as 250 times.

2 Living coat?

The spheres appear to be bacteria.

C What can't hide

1 Searchlights

Predators like dragonfish shine light that makes a clear body flash.

2 Eyes

To see, an eye must absorb light, so it stays dark.

3 Dinner

Food in the gut shows as a dark shape.

Transparency is mostly a trait of open-water animals, and very rare on land.

Bend light like water, kill the glare, and the body disappears.

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