

Below is a list of possible adaptation options to create your FrankenFish. Choose one adaptation from each category. Then, it's time to get creative and combine each adaptation to create your own unique fish. You can draw, paint, color, sculpt or make a mosaic. They world is your oyster, or should we say, your fish. Time to create a monster, I mean fish.

Body Shape	
Adaptation	Advantage
Torpedo-like Front Side	Fast-moving, streamlined for high-speed o swimming in currents
Flat-bellied Front Side	Feeds off or rests on the bottom
Flat from side to side (upright in the water) Front Side	Moves easily around rocks or weeds
Flat-lying on it's side on the bottom Front Side	Bottom dweller, blends in with the bottom.
Long and slender Front Side	Fast-moving in quick bursts, moves easily around rocks



Coloration	
Adaptation	Advantage
Mostly uniform, no markings	Swim in open water
Stripes- Vertical or horizontal	Hides in weeds for protection or to ambush prey
Mottled- irregular spots or speckles	Hides near rocks, sand or gravel near the bottom
Counter coloring- dark on the top and a light underside or belly	Less visible to predators from above or below

Position of mouth	
Adaptation	Advantage
Pointing upwards	Feeds on prey above or on the surface such as small fish or aquatic insects
Pointing straight ahead	Feeds throughout the water, food is in front
Pointing downward	Vacuums food off the bottom
Counter coloring- dark on the top and a light underside or belly	Less visible to predators from above or below



Teeth	
Adaptation	Advantage
Sharp, inside lips, pointing in	Predators; seize prey and swallow whole
Grinding teeth, far back on jaw	Herbivores (plant eaters) and shellfish eaters
Gill rakes (comb-like on gill arches)	Vacuums food off the bottom

Scales and Skin	
Adaptation	Advantage
Large scales	Used for protection on slower moving fish, adds weight and friction
Small scales	Faster moving fish. Small scales allow the fish to move more easily through the water.
No scales- rough skin	Scales replaced by tiny spins that feel similar to rough skin.
No scales- Smooth skin	Tough skin protected by extra slime. May indicate they live in habitats such as small holes or rocks for protection.



Fin S	Shape
Adaptation	Advantage
Caudal (tail fin)	
Crescent or deeply forked	Swims very fast or in strong currents
Somewhat forked	Swims at medium speeds
Rounded or Square	Swims slowly or short bursts
Dorsal (back fin)
Marina	Fast swimmer
	Medium swimmer
	Slow swimmer



Fin Shape	
Adaptation	Advantage
Pectoral (side fin)	
Pointed	Fast swimmer
Slightly rounded	Medium swimmer
Very rounded	Slow swimmer

Eye Size	
Adaptation	Advantage
Large eyes	Feeds by sights or lives on the edge of darkness; may be associated with fast swimmers
Medium eyes	Lives and feeds at the top pf the water column
Small eyes	Nocturnal, bottom, and cave dwelling fish, may have barbells to smell and taste, usually slow swimmers