

SALMONIDS IN THE CLASSROOM: SALMON DISSECTION

STEP 11



BRAIN

- Like all chordates, salmon have a brain at the end of their spinal cord where the nervous system transmits the information they receive about their environment.



1. Begin by cutting through the salmon's head behind the gill covers.



2. Hold the head by the nose and place the back of the head on a cutting surface.



3. Remove a very thin slice (1/3 cm) from the top of the head. Thin slices will prevent damage to the soft brain tissue.



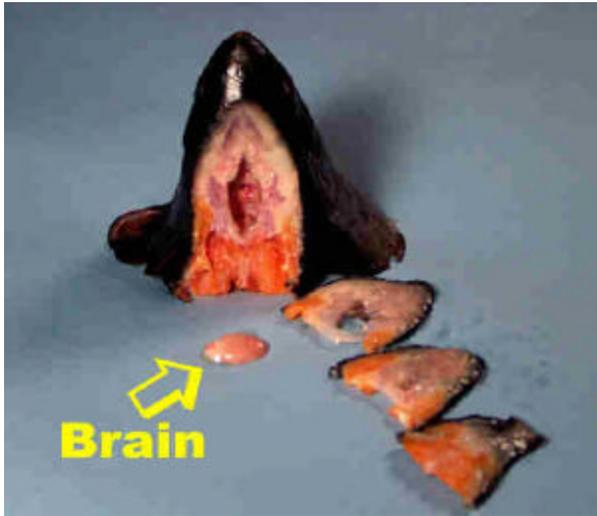
4. Remove a second 1/3 cm slice. The opening to the brain is surrounded by cartilage.



5. Remove a third 1/3 cm slice. There are three pea-shaped sections.



6. Use the tip of the knife to gently probe and scrape out the brain. Tilt the head up side down and continue to scrape until removed.



- The salmon brain. The forebrain controls the salmon's sense of smell. The midbrain controls vision, learning and responses to stimuli. The hindbrain coordinates movement, muscles and balance.
- Compare the size of the salmon's eye to the size of their brain. Compare a human eye (the size of a golf ball) to the size of our brain. Salmon rely on their senses and an inborn knowledge called instinct to help them survive.