Grade 9 Science

Unit 4: Reproduction

Reproduction is an essential biological mechanism for the continuity and diversity of species. Students should be provided with opportunities to explore the fundamental processes of reproduction. As well, heredity and the transmission of traits from one living generation to the next will be examined. The ability of scientists and technologists to manipulate, alter and substitute genetic material in a variety of cells has increased greatly in recent years. Students will have the opportunity to investigate and debate the current developments and uses of gene manipulation and therapy. An STSE "Science - Technology - Society - Environment" approach to this unit should provide the framework around which an investigation into the every-expanding world of genetics and gene manipulation. At this level, only an introductory and elementary introduction to the science of genetics is expected.

Specific Curriculum Outcomes

There are no SCO's that are directly connected to aquaculture, as this unit is only covering human reproduction. But we can also include reproduction of aquaculture species, salmon and mussels.

This can be done using the General Aquaculture presentation to get an introduction to the life cycles of the 2 species. Use the following resources to arrange in order the life cycles and label each stage for the 2 species, on a large table or on the floor.

- Life cycle game pictures
- Life cycle game labels

Using the general aquaculture presentation mussel and salmon life cycle sections learn about the different species and production cycles.

As an overall activity not pertaining to any SCO if tools are available:

- Mussel Meat Yield activity (important for the mussel aquaculture industry)
- Mussel dissection activity
- Salmon dissection activity
- Mussel and salmon life cycle card games