- identify the different packaging materials and their specific uses
- understand the recycling process for a variety of packaging materials
- reinforce the 3R hierarchy using concrete examples

IRP outcomes

It is expected that students will:

[SS] Gather information from a variety of sources (4-5)

[SS] Explain why sustainability is important (5)

[PP] Apply problem-solving models to a variety of situations (4)

[PP] Identify and apply the steps in decision-making processes (5)

[SC] Determine how personal choices and actions have environmental consequences (4)

[LA] Write clear, focused personal writing for a range of purposes and audiences that demonstrates connections to personal experiences, ideas and opinions (4-5)

[LA] Create meaningful visual representations that communicate personal response, information, and ideas relevant to the topic (4-5)

Closed Loop Recycling (4-5)

Intro: Packaging is as varied as the product it contains. Packaging is the material used to market, transport, contain, protect, or convey information about a product or commodity. Packaging can be made from a wide range of materials such as glass, metal, paper, plastic or wood, in various combinations and in a wide range of forms. Closed loop recycling refers to the process of recycling a product and then purchasing a similar product made with recycled materials and continuing the cycle. When recycled content products or packaging are continually purchased, a market for the materials collected in the blue box and blue bag recycling programs is established. Each purchase has a positive impact. Recycling is not simply the process of putting the materials in the blue box every two weeks, it also includes the purchase of products or packaging made with recycled materials.

Materials:

- tag paper (cut into approx. 4 cm x 6 cm pieces)
- fine tip black pens
- colouring felts or pencil crayons

Activity: Begin with a discussion on the various types of packaging available, the advantages and disadvantages of each type and the different uses for packaging. Ask partnered students to select one type of packaging (glass,mixed materials, plastic, natural, paper, aluminum, tin, other metals) that they will research. Have the students research whether the material is recyclable in the curbside program or through another program in the region:

- **recyclinginbc.ca** Multi-Material BC residential program
- **www.crd.bc.ca/recycling** CRD Blue Box collection
- **www.myrecyclopedia.ca** CRD Recycling Directory

The fact sheets at the start of the Recycle chapter may also be useful.

Did you know?

May 19, 2014, Multi-Material BC (MMBC), became responsible for residential recycling programs in many areas across BC. The CRD continues to provide collection services to capital regional residents now financed by industry through MMBC.

Did you know?

The Capital Regional District offers 3R field trips and school programs for Grades K-12.

Register your class for an interactive workshop and/or tour of the Hartland landfill and recycling facility.

www.crd.bc.ca/teacher

With the information they discover, students will create a promotional card to inform the general public of a specific type of packaging and how that particular material is recycled.

The promotional card should be double-sided with the front including an eye-catching title indicating the type of packaging material featured with a slogan, phrase or illustration. The other side should illustratively depict the recycling process, identify the stages and include any relevant facts.

Students can find more packaging information on these websites:

- **www.rcbc.ca/resources/faqs**
  Recycling Council of BC
- **www.recycle-steel.org**
  Steel Recycling Institute
- **www.glassworks.org/kidsnet/kto5/default.html**
  Glass Works includes information on how glass is recycled, what glass is made of and some interesting glass facts.
- **www.gpi.org**
  Glass Packaging Institute
- **www.corrugated.org**
  Corrugated Packaging Council
- **www.plastics.ca**
  Canadian Plastics Industry Association
- **www.handsonplastics.com**
  American Plastics Council

Conclusion/Discussion: Discuss what the students discovered about the recycling process. What did they find most surprising? List benefits of recycling. Discuss the facilities, transportation, people power and equipment required for recycling. Compare the requirements for recycling to that of reducing and reusing.

Extension: ■ Discuss the closed loop concept. What is the last step in the recycling process (buying products with recycled content)? What impact does leaving out the last step have on the entire recycling process? Give examples of products that you've purchased when you've "closed the loop". ■ Register for a 3R field trip or school program. Build on students' learning and inspire their environmental inquiries and motivation to take action to reduce waste by discovering what is in our garbage and how it is managed at Hartland landfill and recycling facility. **www.crd.bc.ca/teacher**