



## JUNK BOX SORTING

This activity has been adapted from a lesson by Prof. Joan McDuff, Queen's University, Kingston, Ontario.

### GOALS OF THIS ACTIVITY:

This activity will help to introduce students to the concepts of sorting and classification.

### MATERIALS YOU WILL NEED:

- A variety of objects ("junk") that students can practice sorting such as buttons, shells, bread tags, keys, nuts and bolts, pencils, coins, bottle caps, etc.
- Paper and markers

### INSTRUCTIONS:

- Model different ways that you can sort materials to your class. Begin by asking students what similarities they notice about the materials. Start creating piles with the classification rules that your students come up with. For example, if you are sorting buttons, you could create piles based on colour or size. After the junk is sorted, make sure you label each group.
- After demonstrating to students how they can sort and classify objects, place students in groups of 4-5 and give each group a box of junk. Have one student in each group take a handful of junk out of the box that their group will create sorting rules for. Groups will try to find unusual ways to sort their objects in 5 or 6 different ways.
  - Each time a group agrees on a way to describe the categories they created, they will write each category on a separate piece of paper.
- After students have their sorting categories written down, they will shuffle their papers and pick out two of them. Students will then try to sort their objects into these two categories.
- This activity can be extended by having groups leave their sorted piles of junk on their tables. Groups will then cover up the paper with their categories written on them. Students will walk around the classroom with their group members to look at the piles that other groups created and try to guess what categories they used to sort their boxes. Once groups have agreed on how they think the material was sorted, they can check their guess by uncovering the group's paper where the category was written.