Overall Expectation(s): 3. Demonstrate an understanding of different types of systems and the factors that contribute to their safe and efficient operation. (8s20); 2. Investigate a working system and the ways in which components of the system contribute to its desired function (8s19).

Materials:
- Sample Manuals
Description: This subtask will involve students in discussing the directions and written messages to consumers that are contained on a number of products. Students will examine a passage from a manual and discuss its clarity, thoroughness and general "user-friendliness". Students will write the directions in their own words. For an independent assignment, students will analyze a technical manual at home and prepare a written report regarding its clarity, thoroughness and general "user-friendliness".

1. As a motivating experience, share and discuss with your group some of the “off the wall” things that are written in product manuals. Some examples include:
   - On Sears hairdryer: Do not use while sleeping.
   - On a bag of Fritos: You could be a winner! No purchase necessary. Details inside.
   - On a bar of Dial soap: Directions: Use like regular soap.
   - On some Swanson frozen dinners: Serving suggestion: Defrost.
   - On a hotel provided shower cap in a box: Fits one head.
   - On Tesco’s Tiramisu dessert: (printed on bottom of the box) Do not turn upside down.
   - On Marks & Spencer Bread Pudding: Product will be hot after heating.
   - On packaging for a Rowenta iron: Do not iron clothes on body.
   - On Boot’s Children’s cough medicine: Do not drive car or operate machinery.
   - On Nytol sleep aid: Warning: may cause drowsiness.
   - On a string of Chinese-made Christmas lights: For indoor or outdoor use only.
   - On a Japanese food processor: Not to be used for the other use.
   - On a Swedish chain saw: Do not attempt to stop chain with your hands.
   - On a child’s Superman costume: Wearing of this garment does not enable you to fly.

2. From the discussion, you should consider that that manuals can get so technical that it becomes difficult to understand them. For example:
   
   “If the w=on parameter is specified and the off parameter (different from the w=off parameter) is not, EMM386 enables Weitek coprocessor support. The high memory area (HMA) must be available to enable Weitek coprocessor support.”

3. As a group, examine a portion of a manual for a VCR. Discuss the writing style in terms of clarity, thoroughness and general "user-friendliness". As a whole group, complete the following chart on the chart paper.

   Analysis of the VCR Manual

   Category Comments
   - Clarity
     i.
     ii.
     iii.
     iv.
   - Thoroughness
     i.
     ii.
     iii.
     iv.
   - User-Friendliness
     i.
     ii.
     iii.
     iv.

4. Independent Assignment. Students may choose a product manual to analyze according to clarity, thoroughness and user friendliness. Or they may write a brief critique based on the information in the “Analysis of the VCR Manual” chart, which was compiled as a class activity.