VOCATIONAL:

HOME INDUSTRY

T.E.K.S. 119.25 (C.2) The student identified and safely uses tools and equipment.

Area: Home Industry

OBJECTIVE	TEACHING ACTIVITIES
1. Student will identify tools used In the home, school and community, and describe the function of each.	1. Have a display of tools, so that the students can view and touch them. Include school supplies, kitchen utensils, carpentry tools, etc. Ask the students to identify tools used in the home and school and tell how each is used. 2. Cut out pictures of tools used in the home, school and community and make a collage. 3. Play the "I Am a Tool" guessing game. Describe the work performed by a tool ("I pound on objects and send nails deep into wood."). and have the students guess what the tools are. 4. Make tool flashcards by cutting 3" x 6" tagboard cards and putting a picture of a tool on each card. Have the students choose a card and demonstrate using the tool. The other students should guess what tool card was chosen. 5. Visit a variety of community work sites. Take pictures of tools used to perform different jobs (or clip pictures from trade magazines and pamphlets from area businesses). The pictures might include: a. Wrench b. Typewriter c. Hand cart d. Photocopier e. Wheel barrow f. Cash register g. Stepladder h. Grocery cart i. Calculator j. Floor waxer k. Paint brush l. Shovel m. Produce scales n. Conveyor belt o. Fork lift Display the pictures and have the students to identify each one. Ask the students to divide the pictures into categories such as tools used in construction, tools used in an office, tools used in custodial work, etc.

Area: Home Industry

OBJECTIVE	TEACHING ACTIVITIES
	(Continued)
	Focus on one category at a time. Name each tool and its function.
	6. Discuss with the students the tools they use at home and in school. Some examples are: fork, spoon, pencil, scissors, broom, dust cloth, comb, toothbrush, crayons. Tell the students that today they are to imagine that they will be baking an apple pie. Explain that step one is to pick the apples. Ask what tools might needed (ladder, pail). Next, explain that the apples will need to be carried home and prepared for the pie. Ask what tools will be needed (wagon, knife). Step three will be preparation of the dough. Discuss the tools needed (rolling pin, spoon, sifter, measuring cup). Ask what will be done after the pie has baked and what tools will be needed (knife, fork). Explain that tools make it easier to do jobs and that workers use many different types of tools.
	Adaptations:
	Community Based Instruction can be planned to visit the apple orchard so that the students can pick apples and use them in a cooking project (applesauce, pie, turnovers).

RESOURCES/MATERIALS

Items as specified in activities

T.E.K.S. 119.25 (C.2) The student identifies and safely uses tools and equipment.

Area: Home Industry

	OBJECTIVE		TEACHING ACTIVITIES
2.	Student will pick up and hold simple tools.	1.	Place a screwdriver, hammer, wrench and pair of pliers on a table. Demonstrate how to hold the various tools. Have the students pick up the tools, handle appropriately and put them down gently so as not to scar surfaces.
		2.	Have screws, nails, bolts, etc. available so the students are able to associate tools with their uses.

RESOURCES/MATERIALS

Items as specified in activities

T.E.K.S. 119.25 (C.2) The student identifies and safely uses tools and equipment.

Area: Home Industry

	OBJECTIVE		TEACHING ACTIVITIES
3.	Student will identify and demonstrate the proper use of basic household tools.	1.	Gather at least one household tool for each student in the class. Establish a separate work station for each tool. This will give each student an opportunity to manipulate every tool collected. One station could consist of a can opener next to several cans. The task is to correctly open the cans using the tool. (Students can also remove bottoms of empty cans.) Another work station might contain a bowl of nuts and a nutcracker. The task is to crack the nut sufficiently to remove the meat.
		2.	Arrange activities (arts and crafts projects for gifts or for sale, meal/snack preparation, school yard maintenance, etc.) on a regular basis throughout the year to provide the students the opportunity to use basic tools.

RESOURCES/MATERIALS

Variety of household tools

T.E.K.S. 119.25 (C.2) The student identifies and safely uses tools and equipment.

Area: Home Industry

OBJECTIVE	TEACHING ACTIVITIES
4. Student will plug in and unplug appliances.	1. Discuss the steps involved in safely plugging in and unplugging appliances: a. Grasp the plug by the solid area, rather than the prongs or cord. b. Insert the plug before turning on the appliance. c. Keep fingers away from the socket. d. Use socket guards in empty electrical sockets. 2. Assign jobs to the students within the learning area. As one of their jobs, make the students responsible for unplugging the record player and tape recorder each afternoon just before dismissal. Expect the students to plug in the equipment the next morning so that it is ready for the day's use. Rotate the jobs so that each student has a turn at each job. 3. Show the students an electric pencil sharpener. Point out the various parts and instruct the students to plug in the appliance prior to inserting the pencil. Have the students practice the entire process. 4. Locate and differentiate between two- and three-pronged plugs. (A three-pronged plug may be found on grounding plugs used fpr heavy equipment such as dishwashers, clothes washers, clothes dryers, and air conditioners.) Locate wall outlets and differentiate between the slots. Explain that prongs on a plug fit into the slots or openings in the electrical outlet.

RESOURCES/MATERIALS

Variety of appliances with electrical plugs

T.E.K.S. 122.62 (C.1) The student utilizes the decision-making process to enhance the quality of life.

Area: Home Industry

OBJECTIVE	TEACHING ACTIVITIES
5. Student will use light switches and switches that turn appliances and conveniences on and off.	1. Show the students a variety of lamps with various types on on-off switches. Include a regular turning type of switch, one that is shaped like a key, a push-button, such as that on most fluorescent lamps, and a switch that is pushed in one direction to turn the light on and in the opposite direction to turn the light off. Demonstrate each type of switch. Have the students to practice using the various types of switches. 2. Take the students to any place in the building with carpeting. Have the students to turn the vacuum cleaner on, vacuum the carpet, and turn the vacuum cleaner off. 3. Bring a few flashlights into the classroom or learning area. Show them to the students and point out the various parts of the flashlight: the body, the switch, and the lens. (Plastic flashlights are best because they are light-weight, easy to handle, and unbreakable.) Demonstrate turning a flashlight on and off. Do this a number of times, telling the students what is expected. Have the students to practice turning the flashlight on and off. 4. Give the students opportunities to turn on electric fan on and off again. 5. Give students a variety of remote controls to use to turn TV's, VCR's, and stereos on and off. 6. Use a variety of musical toys, video games, and talking toys to demonstrate ways to turn on and off, using different switches and buttons. Give the students time to play with the toys.

RESOURCES/MATERIALS

Variety of lamps
Vacuum cleaner
Flashlights
Electric fan

T.E.K.S. 122.82 (C.3) The student recommends practices that will create a safe, secure, well-maintained home.

Area: Home Industry

OBJECTIVE	TEACHING ACTIVITIES
6. Student will lock and unlock catches, locks, and chains on doors.	1. Construct a locking board. Secure a variety of locks, chains, and catches on a heavy piece of wood. Have the students to practice locking and unlocking the various locks, chains, and catches on the board. Find the same type of locks on doors and point them out after the student has had an opportunity to practice. 2. Take the students to a door with a lock that locks and unlocks with a key. Show the students the key and point out the section of the key that is inserted into the keyhole and turn it until the door locks. Have the students to practice locking and unlocking the door. 3. Take the students to a window with a lock on it. Instruct a student to close the window tightly and to lock and unlock the window. Allow another student to assist, if necessary. 4. Take the students to a door with a safety chain. a. Point out the chain and a slot into which the chain slides. b. Have each student grasp the chain with a thumb and forefinger. c. Place the end of the chain into the wide end of the slot. d. Slide the chain down or across to secure it. 5. Take the students to an aluminum storm door or screen door. Point out the small button or catch that locks and unlocks the storm/screen door. (It is usually located directly below the doorknob or handle.) Demonstrate locking and unlocking the door. Have the students practice locking and unlocking the door. 6. Instruct the students in the use of combination locks for bikes and lockers. Give them opportunities to practice until they feel comfortable. 7. Encourage the parents to provide opportunities for the students to practice with various types of locks in their homes.

RESOURCES/MATERIALS

Variety of locks, chains, and catches

T.E.K.S. 122.62 (C.1) The student utilizes the decision-making process to enhance the quality of life.

Area: Home Industry

OBJECTIVE	TEACHING ACTIVITIES
7. Student will set clocks.	1. Bring a number of alarm clocks into the classroom or learning area. Show the students how to set the time of day and alarm. 2. Set the alarm clocks for different times (lunch, physical education, bus, bathroom, and recess), so that they will go off at the appropriate times, and remind the students to begin the next class or activity. 3. Show the students a selection of clocks – some electric and some battery operated. Ask them which ones run by electricity and which ones need batteries. 4. Encourage the parents to provide alarm clocks for the students to use to wake themselves up for school and to give them the opportunity to set the clock, providing assistance when necessary.

RESOURCES/MATERIALS

Alarm clocks

T.E.K.S. 119.25 (C.6) The student performs basic carpentry skills.

Area: Home Industry

OBJECTIVE	TEACHING ACTIVITIES
8. Student will sort nails or bolts.	1. Provide 20 nails in one, two, three and four inch lengths and four boxes. 2. Pour the nails onto a flat surface and spread them apart. 3. Instruct the students to pick up one nail and to locate another nail that is the same length. 4. Have the students compare the two nails by placing them side-by-side. 5. If the nails are the same length, place one in a box. 6. Repeat the process until all nails of the same length are identified. 7. Repeat steps 3 through 6 for the second, third and fourth size of nails.

RESOURCES/MATERIALS

Assorted nails

T.E.K.S. 119.25 (C.6) The student performs basic carpentry skills.

Area: Home Industry

OBJECTIVE	TEACHING ACTIVITIES
9. Student will use sandpaper.	1. Show the students an 8 _" x 11" inch piece of medium sandpaper. Have them touch the sandpaper and to feel how rough it is . Rub the sandpaper in a back and forth motion over a piece of wood. Show the students the sawdust that has been created and ask them to feel the wood where it has been sanded to see if it is smooth. 2. Instruct the students in the following processes: a. Set up soft pine boards in vises or, if the boards are large enough, lay them on the table. b. Give the students a piece of medium sandpaper and fold it to hand size, or put it on a sanding block. c. Have the students place the rough side down on the board. d. With a back-and-forth motion, guide the students' hands until sawdust begins to appear. e. Have the students continue sanding until the surface is smooth. f. Turn the wood so that another area to be sanded faces up. g. Repeat the process until all sides are smooth, refolding the sandpaper as needed. 3. Wrap a piece of fine sandpaper around a board 1" wide by 4" long. Place a large board in front of each student and demonstrate the back-and-forth motion of sanding. Point out that the board inside the sandpaper makes sanding easier. Have the students to sand the board.

RESOURCES/MATERIALS

Sandpaper
Wood

T.E.K.S. 119.26 (C.7) The student repairs and maintains the interior and exterior of a residential structure.

Area: Home Industry

OBJECTIVE		TEACHING ACTIVITIES	
10.	Student will use paint and a paintbrush.	1. 2. 3.	Have the students paint a birdhouse. Each student should have appropriate clothing and supplies. Demonstrate appropriate protective techniques (drop cloth), clean-up activities (turpentine and rags), and methods for selecting a paint brush appropriate for the job to be done.

RESOURCES/MATERIALS

Paint supplies
Paint clothing

T.E.K.S. 119.25 (C.2) The student identifies and safely uses tools and equipment.

Area: Home Industry

OBJECTIVE	TEACHING ACTIVITIES
11. Student will use a hammer.	1. Demonstrate for students how to hold a hammer by placing a hand at the end of the hammer handle and grasping it tightly. Place several sizes of hammers (8, 12, and 16 ounce) on a table in front of the students. Have them pick up each of the hammers and then to put each one down. Give the students a hammer with which they feel comfortable. Gently move the hammer up and down over the board in imitation of the hammering motion. 2. For the students who have difficulty controlling the hammer, have them grasp the hammer at its handle with one hand. Have them push with their other hand from the top of the hammerhead down until their hand slides somewhere on the handle where it is more comfortable so that they can control it better. 3. Begin skill development by having the students practice hammering large nails with large heads into single boards. Gradually decrease the size of the nails. The nail head should be flush with the wood surface. 4. Demonstrate hammering two boards together and have the students practice the following process: a. Stack two boards, one on top of the other, so that all edges match. b. Pick up a nail with the non-dominant hand and position the sharp end on the board. c. Grasp the shaft of the hammer with the dominant hand and position the blunt end on the head of the nail. d. Raise the hammer and bring it down on the nail head with a striking force until the nail is set. e. Hold the aligned boards together with the free hand. f. Continue hammering until the nail head is even with the board surface. g. Nails should be inserted on each end and in the middle.

Area: Home Industry

OBJECTIVE	TEACHING ACTIVITIES
	(Continued)
	5. Once the students are familiar with the tasks of hammering nails, have them construct a simple item.

RESOURCES/MATERIALS

Several sizes of hammers and nails
Boards

T.E.K.S. 119.25 (C.6) The student performs basic carpentry skills..

Area: Home Industry

OBJECTIVE	TEACHING ACTIVITIES
12. Student will bolt wood together.	Model and then guide the students in the following processes: 1. Place wood pieces and a bolt and nut on top of the work station. 2. Have the students pick up one piece of wood with the left hand, one with the right hand, and align the drilled bolt holes, one on top of another. 3. Holding both pieces of wood in one hand, insert the bolt through the hole. 4. Hold the bolt with one finger and pick up the nut with the other hand. 5. Align the nut with the bolt and turn the nut on the bolt until finger tight.

RESOURCES/MATERIALS

Nuts and bolts
Drilled wood pieces

T.E.K.S. 119.25 (C.6) The student performs basic carpentry skills..

Area: Home Industry

OBJECTIVE	TEACHING ACTIVITIES
13. Student will use a screwdriver.	1. Demonstrate the use of a screwdriver by placing its blade in a screw that has been partially started and then turning it in a clockwise manner. Give students a screwdriver and have them practice. For those students who have difficulty keeping the screwdriver blade in the groove of the screw, use screwdrivers with grippers on the side. This attachment holds the blade to the screw, and can be found in all hardware stores. 2. Obtain large screws and place several of them into previously drilled holes in a soft pine board. Have the students: a. Place the flat, pointed end of the screwdriver into the slot on the head of the screw. b. Turn the screw in clockwise manner with the screwdriver and continue the motion until the screw is completely into the board. 3. Decrease the screw size and have the students use a screwdriver to turn screws into various types of material. Give the students a piece of balsa wood with a screw started in it and tell them to turn the screw completely. The students should have little trouble because balsa wood is an extremely light wood and accepts screws easily. 4. Show the students a Phillips-head screwdriver. Point out that it is not like a regular screwdriver because it has a blade in the form of an "X". Place a large Phillips-head screw into a soft pine board and have the students turn the screw into the board. If the students experience difficulty, substitute a screwdriver with a screw-holding attachment on it.

RESOURCES/MATERIALS

Variety of different screwdrivers and screws
Variety of woods
Vice
Easy Woodstuff for Kids, by David Thompson

VOCATIONAL:

HOME INDUSTRY

T.E.K.S. 119.3 (2) The student identifies and safely uses hand and power tools.

Area: Home Industry

OBJECTIVE	TEACHING ACTIVITIES
1. Student will match a list of tasks to the tools and materials necessary for each.	1. Have the students list common chores that need specific tools to be successfully completed. These might include washing the car; changing a tire; making a hamburger; hanging a picture; repairing a leaking faucet; washing windows; or doing the laundry. 2. Describe each task on the front of a 4" x 6" card. Be sure that there is at least one task for every two students. 3. Distribute one task card to each pair of students. Have them list all of the tools necessary to do that job on the back of the card. (If spelling is difficult, encourage the students to show pictures of the necessary utensils. Catalogs and newspaper inserts are good sources of pictures.) 4. Have one pair of students in demonstrating the task on their card. Challenge the class to name all of the implements they have used. Repeat the activity until all assigned jobs have been demonstrated and analyzed.

RESOURCES/MATERIALS

Items as specified in activities

T.E.K.S. 119.3 (2) The student identifies and safely uses hand and power tools.

Area: Home Industry

OBJECTIVE	TEACHING ACTIVITIES
2. Student will use a screwdriver.	1. Demonstrate the use of a screwdriver by placing its blade in a screw that has been partially started and then turning it in a clockwise manner. Give students a screwdriver and have them practice. For those students who have difficulty keeping the screwdriver blade in the groove of the screw, use screwdrivers with grippers on the side. This attachment holds the blade to the screw and can be found in all hardware stores. 2. Obtain large screws and place several of them into previously drilled holes in a soft pine board. Instruct the students: a. Place the flat, pointed end of the screwdriver into the slot on the head of the screw. b. Turn the screw in clockwise manner with the screwdriver and continue the motion until the screw is completely into the board. 3. Decrease the screw size and have the students use a screwdriver to turn screws into various types of material. Give the students piece of balsa wood with a screw started in it and have them turn the screw completely. The students should have little trouble because balsa wood is an extremely light wood and accepts screws easily. 4. Instruct the students in the process of starting a screw by using a hammer and nail. Have the students practice with pine, white wood, mahogany and then oak. 5. Show the students a Phillips-head screw-driver. Point out that it is not like a regular screwdriver because it has a blade in the form of an “X”. Place a large Phillips-head screw into a soft pine board and have the students turn the screw into the board. If the students experience difficulty, substitute a screwdriver with a screw-holding attachment on it.

Area: Home Industry

OBJECTIVE	TEACHING ACTIVITIES
	(Continued)
	6. Give each of the students a metal plate with matching screws started in it and a jeweler's screwdriver, and ask them to turn the screws into the plate. Point out that it is important that they do not mark or mar the surface of these fine screws, so it is necessary to turn the screwdriver slowly. Have the students practice.
	7. Place several different sized screwdrivers on a table near the students. Obtain boards an inch thick by three inches wide, and eight inches long. Drill four holes at equal intervals into each board. Place four different size screws in the holes and point out that each one requires a different sized screwdriver.
	ADAPTATION:
	Use a vice to position a board so that the angle of the board can be adjusted. This will modify the complexity of the task.

RESOURCES/MATERIALS

Variety of different screwdrivers and screws
Variety of wood
Vice
Easy Woodstuff for Kids, by David Thompson

T.E.K.S. 119.3 (2) The student identifies and safely uses hand and power tools.

Area: Home Industry

OBJECTIVE	TEACHING ACTIVITIES
3. Student will loosen or take out screws.	1. Begin by having the students practice screwing and unscrewing jar lids and/or removing a nut from a bolt to practice clockwise and counter-clockwise movements. 2. Place boards in front of the students with the heads of screws facing up. Have the students place the flat, pointed end of a screwdriver into the groove of the screw while holding the board steady with the non-dominant hand. 2. Turn the screw counter-clockwise to loosen it and continue turning it until the screw is free. 3. Remove the screw by hand when it is loose enough to do so.

RESOURCES/MATERIALS

Screwdrivers
Screws
Boards

T.E.K.S. 119.3 (2) The student identifies and safely uses hand and power tools.

Area: Home Industry

OBJECTIVE	TEACHING ACTIVITIES
4. Student will remove a nail.	Demonstrate the following steps: 1. Place a board with a nail on the work surface. 2. Pick up and hold the hammer so that the head of the hammer is pointing down toward the nail and the prong side is facing the hail. 3. Align the middle of the prongs with the nail and slip the prongs around the nail as far as possible. 4. Hold the board steady with the other hand. 5. Pull the handle in the opposite direction of the nail, using sufficient force to remove it. 6. Remove the nail from the prongs of the hammer. *<u>NOTE:</u>* *When removing a long nail, it may be necessary to insert a small piece of wood between the hammer had and the board to prevent bending the nail.* *<u>ADAPTATION:</u>* *If the students have difficulty understanding the leverage principle necessary to remove the nail, have them practice:* *1. Removing a bottle cap with a bottle opener.* 2. *Removing the top from a paint can with a screwdriver.*

RESOURCES/MATERIALS

Board
Nails
Hammer
Bottle cap/opener
Paint can/screwdriver

T.E.K.S. 119.3 (2) The student identifies and safely uses hand and power tools.

Area: Home Industry

OBJECTIVE	TEACHING ACTIVITIES
5. Student will use a standard and an adjustable wrench.	1. Show the students a standard wrench and point out that each wrench has a specific opening that fits a specific nut. Demonstrate how the wrench fits a nut by placing it over the corresponding nut and tightening it. 2. Demonstrate the following process: a. Place a board with the nut side facing up on the work surface. b. Screw down the nut with the fingers as far as it will go easily. c. Align the head of the wrench with the nut and slide it around the nut. d. Turn the handle of the wrench in a clockwise direction. e. Hold the bottom side of the bolt with the hand, screwdriver, pliers or another wrench to keep the nut and bolt from turning as one unit. f. Continue to exert pressure until the nut is tight. 3. Show the students an adjustable wrench and point out the adjusting knob on its side. Assist each student in turning the knob. Point out that the jaw is either opening or closing as he/she performs this action. Have the students practice opening and closing the adjustable wrench. 4. Give the students an adjustable wrench and show them how to place the jaws of it on one of the nuts. If the jaws are open too far, have them turn the adjusting knob so that the jaws fit the nut and then tighten the nut. If the nut is too large for the wrench's jaws, have them adjust the knob in the reverse direction until the jaw opens widely and the nut fits in. Have the students to tighten the nut.

Area: Home Industry

OBJECTIVE	TEACHING ACTIVITIES
	(Continued)
	5. Select a piece of furniture that requires the tightening of nuts. Select the equipment in such a way that there are various shapes of nuts (hexagonal, square, machine-fine thread, or course thread). Have the students tighten all of the nuts with one adjustable wrench and point out to them that the wrench will have to be readjusted for each type of nut to be tightened. Have the students practice.
	6. To develop five-finger movement to adjust a wrench, have the students practice moving the hands and fingers on a wind-up clock.

RESOURCES/MATERIALS

Standard and adjustable wrenches
Nuts and bolts
Furniture with loose nuts

T.E.K.S. 119.3 (2) The student identifies and safely uses hand and power tools.

Area: Home Industry

OBJECTIVE	TEACHING ACTIVITIES
6. Student will use pliers.	1. Show the students a pair of slip joint pliers. Point out that the pliers are adjustable according to the way they are held and the way the slip joint opens. Demonstrate how to tighten a nut on a bolt with a pair of pliers. a. Secure the bolt with a pair of pliers, wrench or screwdriver in the non-dominant hand. b. With the pliers in the dominant hand, turn the nut in a clockwise manner. c. Make a half turn and readjust pliers. d. Continue the process until the nut is tight. 2. Find articles around the school or home that need tightening. Tighten them using an appropriate pair of pliers. 3. Set up several dowels on a board with each having a cotter pin at its end. Demonstrate to the students how to bend the cotter pin apart by spreading it with the pliers. Have the students repeat this activity with the remaining cotter pins and dowels. Point out cotter pins on bicycle wheels and other objects. 4. Show the students various types of electrical or jewelers pliers (needle nose, diagnosis, and side cutters). Construct a bolt board that requires the use of these particular types of pliers and have the students tighten the nuts on the corresponding bolts. When working with pliers such as those used in fine electrical work, be sure to emphasize to the students that they must be careful not to mar the surface of the bolt or damage the pliers.

RESOURCES/MATERIALS

Pliers
Bolts
Wrench and Screwdriver
Cotter pins
Dowels
Easy Woodstuff for Kids, by David Thompson

T.E.K.S. 119.3 (5) The student selects and applies paint and preservatives.

Area: Home Industry

OBJECTIVE	TEACHING ACTIVITIES
7. Student will stain wood.	Students should follow sequential steps listed: 1. Place the board and staining materials on several sheets of paper on the work surface. 2. Use a screwdriver to open the stain by inserting the flat, pointed end of the screwdriver under the edge of the lid of the can and twisting it. Repeat the process around the can until the lid is free. 3. Stir the stain with a paint stirrer until all the residue is mixed. 4. Dip the paintbrush in the stain and scrape the excess off on the side of the can. 5. Place the brush tip on the left top edge of the board and spread the stain along the surface, using short strokes until the top surface is covered. 6. Lay the brush on the newspaper and wait five minutes. 7. Fold cheesecloth or a soft, clean rag to hand size and wipe the excess stain off the board. 8. Repeat steps 4 through 7 until all sides of the board are stained. Set aside to dry completely. 9. When finished, replace the lid on the stain and wipe any stain from the outside of the can. 10. Pour turpentine into a can until one-third full 11. Place the brush in the can, swish it around and wipe it on the side of the can. 12. Wipe the brush on a rag. 13. Repeat steps 11 and 12 two more times and lay the brush aside to dry. 14. Read label for direction on disposal of used turpentine. 15. Have students practice staining wood projects that they have made.

RESOURCES/MATERIALS

Items as specified in activities

T.E.K.S. 119.3 52) The student selects and applies paint and preservatives.

Area: Home Industry

OBJECTIVE	TEACHING ACTIVITIES
8. Student will paint wood.	Instruct students in the following procedures: 1. Cover clothing with a work shirt or apron. 2. Place board/object to be painted and painting materials on newspaper covering the work surface. 3. Open the paint can by inserting the flat, pointed end of the screwdriver under the edge of the lid of the can and twisting. Repeat the process around the can until the lid is free. 4. Stir the paint with a paint stirrer until color and texture are uniform. 5. Dip the tip of the brush in the paint and scrape the excess on the side of the can. 6. Beginning on the left side of the flat surface, slowly spread paint along the surface, using short strokes until the top surface is covered completely. 7. Repeat steps 5 and 6 until all sides are painted. 8. Place lid on the paint can and use a rag to wipe paint from the outside of the paint can. 9. Fill another can one-third full with water or turpentine (depending on whether the paint is a latex or oil-based paint). 10. Put the brush in the can, swish it around and brush it on the inside of the can. 11. Wipe the brush on a rag and repeat the process two more times. 12. Lay the brush on a piece of newspaper to dry. 13. Throw away the rags and newspaper. <u>*NOTE:*</u> *Have students make projects/crafts that require painting or staining.*

RESOURCES/MATERIALS

Items as specified in activities

T.E.K.S. 119.2 (4) The student plans and constructs building and equipment.

Area: Home Industry

OBJECTIVE		TEACHING ACTIVITIES	
9.	Student will seek appropriate help for repairs to household appliances and accessories.	1.	Discuss with students that it is best to go to an adult for assistance (to a resident manager, a familiar neighbor, or parents). Have them practice explaining the problem or taking the adult to the problem.
		2.	Make a pictorial list (pictures from catalogs) of household appliances and accessories. Discuss with the students the possibility that they may break. Ask the students what they would do if the toaster, TV, toilet, or sink broke. During the discussion, mention that there are people called "repair persons" who can help. Stress that these people are specially trained to fix things.
		3.	Play a question-and-answer game while referring to the list made in Activity 2. Ask the students, "If your _____ broke, who would repair it?" _____. For example, ask about a broken television set (TV repair person), toaster (small appliance repair shop), or iron (small appliance repair shop), or clogged sink or toilet drains that overrun (plumber or apartment maintenance person/landlord).

RESOURCES/MATERIALS

Persons as suggested by need
Phone book
Pictures or list of household appliances and accessories

VOCATIONAL:

HOME INDUSTRY

T.E.K.S. 125.24 (C.5) The student applies the concepts and skills of the trade to simulated and actual work experience.

Area: Home Industry

OBJECTIVE	TEACHING ACTIVITIES
1. Student will saw a board.	1. Students should have an understanding of measurement – how to use a ruler, yardstick and/or tape measure. a. Practice using a ruler by having the students align it with the end of a piece of paper and marking a specific length in a few places and then connecting the marks with a solid line. b. Have the students cut along the pre-drawn line with scissors. 2. The same process can be applied to sawing a board: a. Place a ruler on top of a board and line up the edge of the ruler with the edge of the board at one end. b. Mark at the end of the ruler on the board in several places and then align the marks and connect them with a solid line. c. Place the board on a work surface with the marked end extending over the edge of the worktable. d. Grasp the saw in the preferred hand while holding the board down with the other hand. e. Align the teeth of the saw with the marks on the board. f. Pull the saw backward and then push it forward the repeat the process in the same position until the board is sawed through.

RESOURCES/MATERIALS

Ruler/yardstick/tape measure
Saw
Board
Work table

T.E.K.S. 125.24 (C.5) The student applies the concepts and skills of the trade to simulated and actual work experience.

Area: Home Industry

OBJECTIVE	TEACHING ACTIVITIES
2. Student will use hand drill and electrical drill.	1. Demonstrate the use of the hand drill. Be certain to point out how to hold the handle of the drill with one hand and that the drill is turned by the knob on its side with the other hand. Allow each student to practice with a drill. 2. Show the students an electric drill (a battery-powered one is preferred initially because safety hazards are minimal). Show the students how to press the trigger of the drill and point out how fast it is going. Point out the drill chuck and the key; open and close the drill jaws. Give the drill to the students and encourage them to imitate the actions. Practice opening and closing the jaws of the drill and starting and stopping it. For more advanced students, point out the little button next to the trigger, which keeps the drill running continuously. Supervise closely whenever the students are using electric tools. 3. Show the students a drill press. Point out the drill press wheel and turn it to adjust the height of the drill. Point out the on-off switch or treadle mechanism. 4. Using a hand drill, place a drill bit into the chuck of the drill and demonstrate to the students how to drill a hole in a soft pine board. Start a second hole, withdraw the drill bit and drill, and hand them to a student. Tell him/her to drill the hole all the way through as he/she has observed. Have the students practice drilling other holes. Repeat this activity with the electric drill and, when appropriate, the drill press. It is important that all activities are demonstrated first and closely supervised.

RESOURCES/MATERIALS

Hand drill
Electric drill (battery-powered)
Drill press
Pine board

T.E.K.S. 125.25 (C.3) The student knows the concepts and skills that form the core knowledge of painting and decorating.

Area: Home Industry

OBJECTIVE	TEACHING ACTIVITIES
3. Student will become familiar with different painting techniques.	Discussion, demonstration, practice should include: 1. Rollers: Pan or dip-type rollers are dipped in paint in a special pan and then rolled on the wall. To begin, roll the roller into the paint in the pan. Roll out the excess paint on the upper part of the pan. Always start painting by rolling upward. Work slowly and evenly. 2. Brushes: Always choose the widest brush practical for the job. Use a brush 3 to 6 inches wide for walls, ceilings, and floors. Use a trim or sash brush 1 to 3 inches wide for woodwork, trim and narrow table legs. Choose a flat varnish or enameling brush 1 to 3 inches wide for furniture and small, flat surfaces. To paint with a brush, dip the paint brush into the paint about half the length of the bristles. Do not allow the paint to run back into the heel of the brush because the paint hardens and is difficult to remove. Lightly wipe off excess paint against the side of the can. If the brush drips or splatters paint, there is too much paint on the brush. Dab the paint on in spots before beginning to stroke with the brush. Use long strokes to spread the paint smoothly over the surface. Alternate the direction of brush strokes, lifting the brush slightly at the end of each stroke. *<u>ADAPTATIONS:</u>* *1. Spray guns – Some guns have a container which is part of the gun and others have a separate paint tank. Paint flow is regulated by an adjustment screw on the gun. To paint with a spray gun, move the gun back and forth with even strokes, always holding the gun at right angels to the surface.* *2. Spray cans – Follow the procedures as indicated above.*

Area: Home Industry

OBJECTIVE	TEACHING ACTIVITIES
	(Continued)
	3. General painting rules include: a. Prepare for interior painting by removing all lightweight furniture. Cover the floor and the remaining furniture with drop cloths. If painting outside, cover shrubs and walkways with drop cloths. b. Prepare the surfaces to be painted. Fill cracks, nail holes, and depressions in the surface. Remove all loose and scaling paint. Sand the surface as needed. Remove all hardware that is not to be painted. Dust and vacuum the surface thoroughly. Wash the surface with a detergent solution. Use primers and sealers on new surfaces. c. Stir paint until the texture and color are uniform. d. Wipe up spills immediately. Place “Wet-Paint” signs near the wet paint. e. Clean painting tools before storing them. Use turpentine or mineral spirits to remove enamel and varnish, alcohol to remove shellac, lacquer thinner to remove lacquer, and water to remove water-based paint. Be sure that paint cans are tightly closed before storing them. Cover the can with a cloth to avoid spattering when you hammer the lid back on a paint can. Throw away paint rags and any rags used with brush cleaning.
RESOURCES/MATERIALS	3. Provide the students the opportunity to paint, utilizing the various techniques and materials.

T.E.K.S. 125.30 (C.2) The student relates core academic skills to the requirements of building maintenance.

Area: Home Industry

OBJECTIVE	TEACHING ACTIVITIES
4. Student will make minor household repairs.	1. Discuss with the students those occasions when screws and a screwdriver would be needed for home repairs (to tighten handles on cooking pots and to tighten screws on doorknobs or switch plates). 2. Discuss those occasions when hanging pictures, fastening loose floor molding, when nails are protruding, and securing parts of objects become necessary. 3. Demonstrate how to change a light bulb. Turn off the light switch, remove the old bulb, being careful not to break the glass, and replace the old bulb with the same size bulb. 4. Explain that when all of the lights go out in the house, or in a certain section of the house, that a circuit breaker has tripped. Explain the importance of knowing where the circuit box is located. The corrective process should include moving the main switch lever to “off”. Locate the specific switch that has tripped to the off position. Reposition to “on” and return the main switch lever to “on”. 5. Discuss the importance of and procedures for changing air conditioner/heating filters. 6. Discuss the process involved in hanging a curtain rod. 7. Demonstrate how to glue pieces of an object when broken.

RESOURCES/MATERIALS

Items as specified in activities

T.E.K.S. 123.15 (C.2) The student applies energy, power, and transportation technology to specific tasks.

Area: Home Industry

OBJECTIVE	TEACHING ACTIVITIES
5. Student will determine proper battery size for a battery-operated device and install the battery correctly.	1. Have the students create a list of battery-operated devices. 2. Explain the different sizes of batteries and show students a variety of batteries (A, AA, AAA, C, D). 3. Point out the positive end and negative end of each battery and show students how to tell the difference. 4. Demonstrate how batteries go into various devices. 5. Give each student a battery-operated device (flashlight, portable radio, etc.) without the batteries in it. Have the student pick the correct batteries from a pile of various sizes of batteries. Have the student install the batteries and see if the device works.

RESOURCES/MATERIALS

Batteries – A, AA, AAA, C, D
Battery operated devices, like a flashlight, children's toy, portable radio, clock