

Wilson Area School District Planned Course Guide

Title of planned course: Home Repair and Maintenance

Subject Area: Tech Ed

Grade Level: 9-12

Course Description: Provides basic information needed to understand and use tools, fasteners, and building materials to repair and maintain a house.

Time/Credit for this Course: 1.0 Full Year

Curriculum Writing Committee: Brian Meckley

**Wilson Area School District
Planned Course Materials**

Course Title: Home Repair and Maintenance

Textbook: Home Repair and Maintenance (title)
Goodhart Wilcos (publisher)
1996 (copyright date)
N/A (web address)

Supplemental Books: This Old House Magazine

Teacher Resources:

Home Depot Seminars
Bob Vila, com
This Old House.com
Youtube. Com
Home Depot.com
Lowe's. Com
Do It Yourself.com
Personal Experience
Community Organizations
Parents
Industry Professionals

Curriculum Map

August: Course Introduction, Home Safety

September: Course Introduction, Home Safety, First Aid Steps, Basic Hand/Power Tools, Lumber and Building Materials

October: Structural Parts of the House, Concrete, Masonry and Fireplace Maintenance, Electrical Distribution System, Insulation

November: Insulation, Interior Wall Coverings and Ceilings, Paints, Roof Covering and Gutter Repair

December: Roof Covering and Gutter Repair

January: Doors and Windows

February: Potable Water Systems, Waste Disposal Systems, Central Cleaning Systems

March: Heating/Cooling

April: Floor Coverings, Cabinets, Wood/Metal Finishes

May: Home Environmental Considerations, Home Energy Savings

June: Appliance Maintenance Electrical and Mechanical, Developing a Career Path in Home Repair and Maintenance

Curriculum Scope & Sequence

Planned Course: Home Repair and Maintenance

Unit: Home Safety and First Aid

Time frame: 1 week

State Standards

Anchor(s) or adopted anchor:

Essential content/objectives: At end of the unit, students will be able to:
Understand causes of accidents, how to prevent them, and what steps to take after a home-related accident

Core Activities: Students will complete/participate in the following: Lab time, internet video, computer usage, class discussion, project work, homework, co-operative work, research, critical thinking. Describe common myths about accidents, state what work habits promote safety, and list some safety aids everyone should have in their home. View in class videos on safety and recognizing dangerous situations.

Extensions: Use techniques learned in class to repair or maintain the home in which student lives. Also use these techniques for community service opportunities with Habitat for Humanity (etc.).

Remediation: Practice as needed, peer-tutoring, internet research

Instructional Methods: Demonstration, class discussion, group work, hands-on activities, guest speaker, videos

Materials & Resources: Safety equipment, textbook, internet video, safety audit handout, first aid checklist handout

Assessments: Teacher observation, class participation, written quiz, oral quiz, peer evaluation, project evaluation, written papers, manipulative exam, homework, skill checklist, drawings, debate, oral presentation, video-taped project work, journal entry

Curriculum Scope & Sequence

Planned Course: Home Repair and Maintenance

Unit: Basic Hand and Power Tools

Time frame: 1 week

State Standards

Anchor(s) or adopted anchor:

Essential content/objectives: At end of the unit, students will be able to: Understand how to use some of the basic hand and power tools needed to maintain a home. Also how to try and make good decisions when purchasing tools; recognize tools used for measuring, fastening, cutting, drilling, and other jobs; choose the proper tool for an application.

Core Activities: Students will complete/participate in the following: Lab time, internet video, computer usage, class discussion, project work, homework, co-operative work, research, critical thinking. Describe common myths about accidents, state what work habits promote safety, and list some safety aids everyone should have in their home. View in class videos on safety and recognizing dangerous situations. Students will learn to safely use and recognize basic hand and power tools used by home mechanic in class. In class quizzes / test on tool use. View safety videos on tool usage.

Extensions: Use techniques learned in class to repair or maintain the home in which student lives. Also use these techniques for community service opportunities with Habitat for Humanity (etc.).

Remediation: Practice as needed, peer-tutoring, internet research

Instructional Methods: Demonstration, class discussion, group work, hands-on activities, guest speaker, videos

Materials & Resources: Tools for demonstration, video, internet video, tool checklist handout, broken small appliances, scraps of brick, rubber, plastic, various metals, textbook

Assessments: Teacher observation, class participation, written quiz, oral quiz, peer evaluation, project evaluation, written papers, manipulative exam, homework, skill checklist, drawings, debate, oral presentation, video-taped project work, journal entry

Curriculum Scope & Sequence

Planned Course: Home Repair and Maintenance

Unit: Lumber and Building Materials

Time frame: 1-2 weeks

State Standards

Anchor(s) or adopted anchor:

Essential content/objectives: At end of the unit, students will be able to: Know the difference between lumber and laminate, understand what types of wood are used for building materials and plywood, understand plywood grade markings, and proper usage for different types of plywood and lumber, choose products based on cost and quality, list common hardwood and softwood species, describe several ways boards are cut from a log, list dressed sizes for the most common lumber

Core Activities: Students will complete/participate in the following: Lab time, internet video, computer usage, class discussion, project work, homework, co-operative work, research, critical thinking. Describe common myths about accidents, state what work habits promote safety, and list some safety aids everyone should have in their home. View in class videos on safety and recognizing dangerous situations. In class presentations on lumber and building materials. Homework from chapters in the book. Discussion on appropriate use of certain types of materials. Show Internet video on lumbering. Students will build a 2 x 4 “wall of knowledge” in class with a partner. Quiz on types of lumber / plywood.

Extensions: Use techniques learned in class to repair or maintain the home in which student lives. Also use these techniques for community service opportunities with Habitat for Humanity (etc.).

Remediation: Practice as needed, peer-tutoring, internet research

Instructional Methods: Demonstration, class discussion, group work, hands-on activities, guest speaker, videos

Materials & Resources: Wood and laminate samples, video, textbook

Assessments: Teacher observation, class participation, written quiz, oral quiz, peer evaluation, project evaluation, written papers, manipulative exam, homework, skill checklist, drawings, debate, oral presentation, video-taped project work, journal entry

Curriculum Scope & Sequence

Planned Course: Home Repair and Maintenance

Unit: Structural Parts of the House

Time frame: 1-2 weeks

State Standards

Anchor(s) or adopted anchor:

Essential content/objectives: At end of the unit, students will be able to: Know about the uniform construction code; know the four major structures for stability, how they work, and how to construct them properly; understand terms like stud, rafter, joist, foundation, subfloor; locate studs and other structure components when you need to do remodeling; recognize a job which is beyond your abilities

Core Activities: Students will complete/participate in the following: Lab time, internet video, computer usage, class discussion, project work, homework, co-operative work, research, critical thinking. Describe common myths about accidents, state what work habits promote safety, and list some safety aids everyone should have in their home. View in class videos on safety and recognizing dangerous situations. Homework from chapters in the book. Students will build “wall of knowledge” with a partner. Demonstration / discussion of framing and parts of the house. Demonstration / discussion of how to build “wall”. Quiz on framing and structure.

Extensions: Use techniques learned in class to repair or maintain the home in which student lives. Also use these techniques for community service opportunities with Habitat for Humanity (etc.).

Remediation: Practice as needed, peer-tutoring, internet research

Instructional Methods: Demonstration, class discussion, group work, hands-on activities, guest speaker, videos

Materials & Resources: Textbook sample materials, drawings, blueprints, graph paper, pencils, computers, video, internet video, construction tools, 2x4's, plywood, nails (16p), (8p)

Assessments: Teacher observation, class participation, written quiz, oral quiz, peer evaluation, project evaluation, written papers, manipulative exam, homework, skill checklist, drawings, debate, oral presentation, video-taped project work, journal entry

Curriculum Scope & Sequence

Planned Course: Home Repair and Maintenance

Unit: Concrete and Masonry and Fireplace Maintenance

Time frame: 1-2 weeks

State Standards

Anchor(s) or adopted anchor:

Essential content/objectives: At end of the unit, students will be able to: state components of concrete, describe how to mix concrete or mortar for common uses, compute amounts of concrete needed, install concrete and finish concrete, give steps for repairing holes and cracks in concrete and masonry, list steps for laying brick, describe chemical or physical cleaning methods, tell how to maintain fireplace and chimney units, prepare for working with stone

Core Activities: Students will complete/participate in the following: Lab time, internet video, computer usage, class discussion, project work, homework, co-operative work, research, critical thinking. Describe common myths about accidents, state what work habits promote safety, and list some safety aids everyone should have in their home. View in class videos on safety and recognizing dangerous situations. Homework from chapters in the book. Discussion of difference between concrete and mortar. Discuss different types of masonry and how to. Watch videos on concrete and masonry how to's. Quiz on masonry.

Extensions: Use techniques learned in class to repair or maintain the home in which student lives. Also use these techniques for community service opportunities with Habitat for Humanity (etc.).

Remediation: Practice as needed, peer-tutoring, internet research

Instructional Methods: Demonstration, class discussion, group work, hands-on activities, guest speaker, videos

Materials & Resources: Concrete, masonry tools, block, brick, stone, mortar, video, internet video, textbook, calculator, blank paper, pencils

Assessments: Teacher observation, class participation, written quiz, oral quiz, peer evaluation, project evaluation, written papers, manipulative exam, homework, skill checklist, drawings, debate, oral presentation, video-taped project work, journal entry

Curriculum Scope & Sequence

Planned Course: Home Repair and Maintenance

Unit: Electrical Distribution System

Time frame: 1 week

State Standards

Anchor(s) or adopted anchor:

Essential content/objectives: At end of the unit, students will be able to: Read a watt-hour meter; calculate current, voltage, resistance; choose proper wiring sizes; sketch common circuits and duplex outlets; determine the safety of a circuit; use a test light; use a V.O.M.; attach wires to screw terminals properly; use wire staples; demonstrate how to wire correct circuit

Core Activities: Students will complete/participate in the following: Lab time, internet video, computer usage, class discussion, project work, homework, co-operative work, research, critical thinking. Describe common myths about accidents, state what work habits promote safety, and list some safety aids everyone should have in their home. View in class videos on safety and recognizing dangerous situations. Homework from chapters in the book. Discussion and video on parts of electrical system in a home. Discussion of safety and when not to attempt it yourself. Students wire and outlet switch and light in their walls. Quiz on electricity / electrical systems.

Extensions: Use techniques learned in class to repair or maintain the home in which student lives. Also use these techniques for community service opportunities with Habitat for Humanity (etc.).

Remediation: Practice as needed, peer-tutoring, internet research

Instructional Methods: Demonstration, class discussion, group work, hands-on activities, guest speaker, videos

Materials & Resources: Textbook video, internet video, electrical boxes, wire, wire cutters, hammers, light bases, switches, outlets, wire staples, drills, drill bits, utility knife, wire strippers, 'wall of learning'

Assessments: Teacher observation, class participation, written quiz, oral quiz, peer evaluation, project evaluation, written papers, manipulative exam, homework, skill checklist, drawings, debate, oral presentation, video-taped project work, journal entry

Curriculum Scope & Sequence

Planned Course: Home Repair and Maintenance

Unit: Insulation

Time frame: 2-3 days

State Standards

Anchor(s) or adopted anchor:

Essential content/objectives: At end of the unit, students will be able to: List types of insulation; recall approximate R values for different types of insulation; identify uninsulated areas in a house; tell how wire mesh is used; state when staples are convenient; describe/show steps for insulating a garage, attic, or crawl space; list/show places to caulk; tell where a door area should be insulated

Core Activities: Students will complete/participate in the following: Lab time, internet video, computer usage, class discussion, project work, homework, co-operative work, research, critical thinking. Describe common myths about accidents, state what work habits promote safety, and list some safety aids everyone should have in their home. View in class videos on safety and recognizing dangerous situations. Homework from chapters in the book. Discuss different types of insulation and "r" values. Quiz on insulation. Students insulate their wall.

Extensions: Use techniques learned in class to repair or maintain the home in which student lives. Also use these techniques for community service opportunities with Habitat for Humanity (etc.).

Remediation: Practice as needed, peer-tutoring, internet research

Instructional Methods: Demonstration, class discussion, group work, hands-on activities, guest speaker, videos

Materials & Resources: Textbook, video, internet video, batt insulation, loose insulation, staple gun, utility knives, insulation cutter, gloves, long sleeve shirt, 'wall of learning'

Assessments: Teacher observation, class participation, written quiz, oral quiz, peer evaluation, project evaluation, written papers, manipulative exam, homework, skill checklist, drawings, debate, oral presentation, video-taped project work, journal entry

Curriculum Scope & Sequence

Planned Course: Home Repair and Maintenance

Unit: Interior Wall Coverings and Ceilings

Time frame: 3-4 weeks

State Standards

Anchor(s) or adopted anchor:

Essential content/objectives: At end of the unit, students will be able to: Recognize types of wall and ceiling materials, install and finish drywall, list/show steps for repairing holes or cracks in walls, tell/show how to install or fix ceramic tile, list ways to fasten wood paneling or gypsum board, describe how to install a suspended ceiling

Core Activities: Students will complete/participate in the following: Lab time, internet video, computer usage, class discussion, project work, homework, co-operative work, research, critical thinking. Describe common myths about accidents, state what work habits promote safety, and list some safety aids everyone should have in their home. View in class videos on safety and recognizing dangerous situations. Homework from chapter in the book. Show videos and discuss proper techniques for painting, tiling, wall papering, paneling, wanes coating, stucco, texture paint, 12" x 12" tile and drop ceilings. Quiz on interior wall coverings. Students will paint and partially tile their walls.

Extensions: Use techniques learned in class to repair or maintain the home in which student lives. Also use these techniques for community service opportunities with Habitat for Humanity (etc.).

Remediation: Practice as needed, peer-tutoring, internet research

Instructional Methods: Demonstration, class discussion, group work, hands-on activities, guest speaker, videos

Materials & Resources: Textbook, video, internet video, drywall, all drywall tools, spackle, screws, hammer, 'wall of learning,' newspaper, drywall corners, ceramic tile, tiling tools, cement board, tile glue, grout, sandpaper, rags

Assessments: Teacher observation, class participation, written quiz, oral quiz, peer evaluation, project evaluation, written papers, manipulative exam, homework, skill checklist, drawings, debate, oral presentation, video-taped project work, journal entry

Curriculum Scope & Sequence

Planned Course: Home Repair and Maintenance

Unit: Paints

Time frame: 2-3 days

State Standards

Anchor(s) or adopted anchor:

Essential content/objectives: At end of the unit, students will be able to: Give the purpose of flagging on a brush, choose the appropriate brush for latex or oil paint, choose rollers by thickness and type of material, list the order for painting parts of the house, tell how to think and remix paint, describe patterns for spray painting, plan both trim work and large surfaces, describe how humidity levels cause paint problems, prepare for painting

Core Activities: Students will complete/participate in the following: Lab time, internet video, computer usage, class discussion, project work, homework, co-operative work, research, critical thinking. Describe common myths about accidents, state what work habits promote safety, and list some safety aids everyone should have in their home. View in class videos on safety and recognizing dangerous situations. Homework from chapter in the book. Show videos and discuss proper techniques for painting, tiling, wall papering, paneling, wanes coating, stucco, texture paint, 12" x 12" tile and drop ceilings. Quiz on interior wall coverings. Students will paint and partially tile their walls.

Extensions: Use techniques learned in class to repair or maintain the home in which student lives. Also use these techniques for community service opportunities with Habitat for Humanity (etc.).

Remediation: Practice as needed, peer-tutoring, internet research

Instructional Methods: Demonstration, class discussion, group work, hands-on activities, guest speaker, videos

Materials & Resources: Textbook, video, internet video, tape, paint, rollers, brushes, color swatches, roller/can scraper, roller trays, "wall of learning," calculator, paper, pencils, tape measure

Assessments: Teacher observation, class participation, written quiz, oral quiz, peer evaluation, project evaluation, written papers, manipulative exam, homework, skill checklist, drawings, debate, oral presentation, video-taped project work, journal entry

Curriculum Scope & Sequence

Planned Course: Home Repair and Maintenance

Unit: Roof Covering and Gutter Repair

Time frame: 2 weeks

State Standards

Anchor(s) or adopted anchor:

Essential content/objectives: At end of the unit, students will be able to: List many types of roof covering materials, state which roof types should only be fixed by professionals, describe how to begin to apply rows of shingles, calculate roofing amounts, plan shingle and flash work, recall rules for cleaning and painting gutters.

Core Activities: Students will complete/participate in the following: Lab time, internet video, computer usage, class discussion, project work, homework, co-operative work, research, critical thinking. Describe common myths about accidents, state what work habits promote safety, and list some safety aids everyone should have in their home. View in class videos on safety and recognizing dangerous situations. Homework from chapter in the book. Discussions and videos on gutter / roof repair and maintenance. Quiz on roofing and gutter repair. Students will “roof” their walls.

Extensions: Use techniques learned in class to repair or maintain the home in which student lives. Also use these techniques for community service opportunities with Habitat for Humanity (etc.).

Remediation: Practice as needed, peer-tutoring, internet research

Instructional Methods: Demonstration, class discussion, group work, hands-on activities, guest speaker, videos

Materials & Resources: Textbook, videos, internet video, ‘wall of learning,’ shingles, roofing tools, calculator, paper, roofing felt, tape measure, drip edge

Assessments: Teacher observation, class participation, written quiz, oral quiz, peer evaluation, project evaluation, written papers, manipulative exam, homework, skill checklist, drawings, debate, oral presentation, video-taped project work, journal entry

Curriculum Scope & Sequence

Planned Course: Home Repair and Maintenance

Unit: Doors and Windows

Time frame: 2-3 weeks

State Standards

Anchor(s) or adopted anchor:

Essential content/objectives: At end of the unit, students will be able to: Identify hollow core and solid doors, decide how door hinges cause different binding problems, explain/show how to hang a new door, explain/show how to install a lock mechanism, list types of windows, explain/show how to install a window, state/show the procedures for reglazing windows, discuss/show screen repair steps

Core Activities: Students will complete/participate in the following: Lab time, internet video, computer usage, class discussion, project work, homework, cooperative work, research, critical thinking. Describe common myths about accidents, state what work habits promote safety, and list some safety aids everyone should have in their home. View in class videos on safety and recognizing dangerous situations. Homework from chapters in the book. Discussion / demonstration / video on proper window and door installation as well as screens and glass work. Students will install a door, cut mortises for hinges, change / install a deadbolt and knob, cut holes and install a new knob, cut holes and install a new knob, install a replacement window, replace / install screens and cut glass. Quiz on doors and windows.

Extensions: Use techniques learned in class to repair or maintain the home in which student lives. Also use these techniques for community service opportunities with Habitat for Humanity (etc.).

Remediation: Practice as needed, peer-tutoring, internet research

Instructional Methods: Demonstration, class discussion, group work, hands-on activities, guest speaker, videos

Materials & Resources: Textbook, video, internet video, locksets, doors, windows, framed wall, nails, screws, patterns for locksets, glass, screen, glazing compound, chisels, hammers, circular saw, square, pencil, screw gun, putty knife, utility knife, glass cutter, screen tool, drill, drill bits, jigsaw

Board Approved
October 2009

Assessments: Teacher observation, class participation, written quiz, oral quiz, peer evaluation, project evaluation, written papers, manipulative exam, homework, skill checklist, drawings, debate, oral presentation, video-taped project work, journal entry

CurriculumScope & Sequence

Planned Course: Home Repair and Maintenance

Unit: Potable Water Systems

Time frame: 1-2 weeks

State Standards

Anchor(s) or adopted anchor:

Essential content/objectives: At end of the unit, students will be able to: Choose/use kinds of pipe and fittings for a job, calculate lengths of pipe and fitting allowances, tell/show how to solder copper pipe, give the cause/solution to water hammer, repair leaks, discuss how to maintain a water softener, tell/show how to join plastic pipe

Core Activities: Students will complete/participate in the following: Lab time, internet video, computer usage, class discussion, project work, homework, co-operative work, research, critical thinking. Describe common myths about accidents, state what work habits promote safety, and list some safety aids everyone should have in their home. View in class videos on safety and recognizing dangerous situations. Homework from chapters in book. Discussion / demonstration on different kinds of pipe. PVC vs. copper vs. PEX. Discussion of water softeners and pump systems. Students will practice soldering copper and welding PVC piping.

Extensions: Use techniques learned in class to repair or maintain the home in which student lives. Also use these techniques for community service opportunities with Habitat for Humanity (etc.).

Remediation: Practice as needed, peer-tutoring, internet research

Instructional Methods: Demonstration, class discussion, group work, hands-on activities, guest speaker, videos

Materials & Resources:

Assessments: Teacher observation, class participation, written quiz, oral quiz, peer evaluation, project evaluation, written papers, manipulative exam, homework, skill checklist, drawings, debate, oral presentation, video-taped project work, journal entry

CurriculumScope & Sequence

Planned Course: Home Repair and Maintenance

Unit: Waste Disposal Systems

Time frame: 1-2 weeks

State Standards

Anchor(s) or adopted anchor:

Essential content/objectives: At end of the unit, students will be able to: Define terms used for drain, waste, and vent systems; explain purpose and operation of traps and vents; specify pipe slopes needed for waste flow; list the parts of the toilet flush system; solve problems with garbage disposals; tell/show how to install a sink and faucet

Core Activities: Students will complete/participate in the following: Lab time, internet video, computer usage, class discussion, project work, homework, co-operative work, research, critical thinking. Describe common myths about accidents, state what work habits promote safety, and list some safety aids everyone should have in their home. View in class videos on safety and recognizing dangerous situations. Homework from chapters in the book. Discussion of sewer vs. septic and how they work. Video / discussion on how to properly install waste pipes, toilets, sinks and tubs. Quiz on waste systems. Students will install fixtures in a sink and toilet.

Extensions: Use techniques learned in class to repair or maintain the home in which student lives. Also use these techniques for community service opportunities with Habitat for Humanity (etc.).

Remediation: Practice as needed, peer-tutoring, internet research

Instructional Methods: Demonstration, class discussion, group work, hands-on activities, guest speaker, videos

Materials & Resources:

Assessments: Teacher observation, class participation, written quiz, oral quiz, peer evaluation, project evaluation, written papers, manipulative exam, homework, skill checklist, drawings, debate, oral presentation, video-taped project work, journal entry

Curriculum Scope & Sequence

Planned Course: Home Repair and Maintenance

Unit: Central Cleaning Systems

Time frame: 2-3 days

State Standards

Anchor(s) or adopted anchor:

Essential content/objectives: At end of the unit, students will be able to: Plan the location of a central vac unit, explain air direction of 'wye' pipes, describe the operation of a CCU, list/show steps for removing clogs in the system

Core Activities: Students will complete/participate in the following: Lab time, internet video, computer usage, class discussion, project work, homework, co-operative work, research, critical thinking. Describe common myths about accidents, state what work habits promote safety, and list some safety aids everyone should have in their home. View in class videos on safety and recognizing dangerous situations. Homework from chapters in book. Discussion / video of installation and maintenance. Quiz on CCS.

Extensions: Use techniques learned in class to repair or maintain the home in which student lives. Also use these techniques for community service opportunities with Habitat for Humanity (etc.).

Remediation: Practice as needed, peer-tutoring, internet research

Instructional Methods: Demonstration, class discussion, group work, hands-on activities, guest speaker, videos

Materials & Resources:

Assessments: Teacher observation, class participation, written quiz, oral quiz, peer evaluation, project evaluation, written papers, manipulative exam, homework, skill checklist, drawings, debate, oral presentation, video-taped project work, journal entry

Curriculum Scope & Sequence

Planned Course: Home Repair and Maintenance

Unit: Heating and Cooling

Time frame: 1-2 weeks

State Standards

Anchor(s) or adopted anchor:

Essential content/objectives: At end of the unit, students will be able to: Bleed air from a radiator, adjust the air ratio for a gas burner, replace air and fuel filters and clean the electric ignition for an oil burner, state the requirements for wood stove clearances, reduce oxides in solar collectors

Core Activities: Students will complete/participate in the following: Lab time, internet video, computer usage, class discussion, project work, homework, co-operative work, research, critical thinking. Describe common myths about accidents, state what work habits promote safety, and list some safety aids everyone should have in their home. View in class videos on safety and recognizing dangerous situations. Homework from chapter in book. Discussion / video on proper duct installation and size. How air moves. Discussion on different types of furnace, boiler, air handling unit, wood stove etc. Quiz on heating and cooling.

Extensions: Use techniques learned in class to repair or maintain the home in which student lives. Also use these techniques for community service opportunities with Habitat for Humanity (etc.).

Remediation: Practice as needed, peer-tutoring, internet research

Instructional Methods: Demonstration, class discussion, group work, hands-on activities, guest speaker, videos

Materials & Resources:

Assessments: Teacher observation, class participation, written quiz, oral quiz, peer evaluation, project evaluation, written papers, manipulative exam, homework, skill checklist, drawings, debate, oral presentation, video-taped project work, journal entry

Curriculum Scope & Sequence

Planned Course: Home Repair and Maintenance

Unit: Floor Coverings

Time frame: 1-2 weeks

State Standards

Anchor(s) or adopted anchor:

Essential content/objectives: At end of the unit, students will be able to: List the layers of underlayment required for each type of floor, describe the precision and smoothness under a floor material, list/show common ways to stop floor leaks, recall/show a method to fix a sagging floor, describe/show how to install different types of flooring material

Core Activities: Students will complete/participate in the following: Lab time, internet video, computer usage, class discussion, project work, homework, co-operative work, research, critical thinking. Describe common myths about accidents, state what work habits promote safety, and list some safety aids everyone should have in their home. View in class videos on safety and recognizing dangerous situations. Homework from chapters in book. Discussion / video on repair and installation of ceramic tile, vinyl, wood floors and carpentry. Quiz on flooring. Students will install tile and wood flooring on project floor surface.

Extensions: Use techniques learned in class to repair or maintain the home in which student lives. Also use these techniques for community service opportunities with Habitat for Humanity (etc.).

Remediation: Practice as needed, peer-tutoring, internet research

Instructional Methods: Demonstration, class discussion, group work, hands-on activities, guest speaker, videos

Materials & Resources:

Assessments: Teacher observation, class participation, written quiz, oral quiz, peer evaluation, project evaluation, written papers, manipulative exam, homework, skill checklist, drawings, debate, oral presentation, video-taped project work, journal entry

Curriculum Scope & Sequence

Planned Course: Home Repair and Maintenance

Unit: Cabinetry

Time frame: 1-2 weeks

State Standards

Anchor(s) or adopted anchor:

Essential content/objectives: At end of the unit, students will be able to: Recognize cabinet styles; tell/demonstrate how to install plastic laminate; list purposes of different style hinges, catches, and drawer guides; install hinges, catches, drawer guides; recall steps for frame repair of cabinetry; design efficient kitchens; install basic cabinetry

Core Activities: Students will complete/participate in the following: Lab time, internet video, computer usage, class discussion, project work, homework, co-operative work, research, critical thinking. Describe common myths about accidents, state what work habits promote safety, and list some safety aids everyone should have in their home. View in class videos on safety and recognizing dangerous situations. Homework from chapters in book. Discussion on cabinet arrangements, simple repairs, installation and adjustments. Video on cabinet installation. Quiz on cabinetry.

Extensions: Use techniques learned in class to repair or maintain the home in which student lives. Also use these techniques for community service opportunities with Habitat for Humanity (etc.).

Remediation: Practice as needed, peer-tutoring, internet research

Instructional Methods: Demonstration, class discussion, group work, hands-on activities, guest speaker, videos

Materials & Resources:

Assessments: Teacher observation, class participation, written quiz, oral quiz, peer evaluation, project evaluation, written papers, manipulative exam, homework, skill checklist, drawings, debate, oral presentation, video-taped project work, journal entry

Curriculum Scope & Sequence

Planned Course: Home Repair and Maintenance

Unit: Wood/Metal Finishes

Time frame 1 week

State Standards

Anchor(s) or adopted anchor:

Essential content/objectives: At end of the unit, students will be able to:
Describe types and grades of abrasives; describe if a wood species can be stained or bleached; discuss/show steps for wood filling; describe types of wood coating; list/show steps for fixing spots, stains, and scratches

Core Activities: Students will complete/participate in the following: Lab time, internet video, computer usage, class discussion, project work, homework, co-operative work, research, critical thinking. Describe common myths about accidents, state what work habits promote safety, and list some safety aids everyone should have in their home. View in class videos on safety and recognizing dangerous situations. Homework from chapters in book. Discuss different types of wood / metal finishes and how to do and maintain including stain, paint, lacquer, patina and sand blasting. Quiz on wood / metal finishes.

Extensions: Use techniques learned in class to repair or maintain the home in which student lives. Also use these techniques for community service opportunities with Habitat for Humanity (etc.).

Remediation: Practice as needed, peer-tutoring, internet research

Instructional Methods: Demonstration, class discussion, group work, hands-on activities, guest speaker, videos

Materials & Resources:

Assessments: Teacher observation, class participation, written quiz, oral quiz, peer evaluation, project evaluation, written papers, manipulative exam, homework, skill checklist, drawings, debate, oral presentation, video-taped project work, journal entry

Curriculum Scope & Sequence

Planned Course: Home Repair and Maintenance

Unit: Home Environmental Considerations

Time frame: 1 week

State Standards

Anchor(s) or adopted anchor:

Essential content/objectives: At end of the unit, students will be able to: Define relative humidity, describe a bypass type humidifier, describe how a dehumidifier can ice up, specify a location for an electronic air filter, tell how an electronic air cleaner works, tell how to clean an electronic grid cell

Core Activities: Students will complete/participate in the following: Lab time, internet video, computer usage, class discussion, project work, homework, co-operative work, research, critical thinking. Describe common myths about accidents, state what work habits promote safety, and list some safety aids everyone should have in their home. View in class videos on safety and recognizing dangerous situations. Homework from chapters in book. Discussion / demonstration of humidifiers, air purifiers, dehumidifiers and filtering systems. Quiz on home environment.

Extensions: Use techniques learned in class to repair or maintain the home in which student lives. Also use these techniques for community service opportunities with Habitat for Humanity (etc.).

Remediation: Practice as needed, peer-tutoring, internet research

Instructional Methods: Demonstration, class discussion, group work, hands-on activities, guest speaker, videos

Materials & Resources:

Assessments: Teacher observation, class participation, written quiz, oral quiz, peer evaluation, project evaluation, written papers, manipulative exam, homework, skill checklist, drawings, debate, oral presentation, video-taped project work, journal entry

Curriculum Scope & Sequence

Planned Course: Home Repair and Maintenance

Unit: Home Energy Savings

Time frame: 1 week

State Standards

Anchor(s) or adopted anchor:

Essential content/objectives: At end of the unit, students will be able to: List: better ways to use water utilities; better ways to use appliances; problems with lamps, fireplaces, and attic fans; use a splice to mount sheets in window frames; describe materials used for an inside storm window

Core Activities: Students will complete/participate in the following: Lab time, internet video, computer usage, class discussion, project work, homework, co-operative work, research, critical thinking. Describe common myths about accidents, state what work habits promote safety, and list some safety aids everyone should have in their home. View in class videos on safety and recognizing dangerous situations. Homework from chapters in book. Discussion on insulation and weather stripping to tie in with earlier unit on insulation.

Extensions: Use techniques learned in class to repair or maintain the home in which student lives. Also use these techniques for community service opportunities with Habitat for Humanity (etc.).

Remediation: Practice as needed, peer-tutoring, internet research

Instructional Methods: Demonstration, class discussion, group work, hands-on activities, guest speaker, videos

Materials & Resources:

Assessments: Teacher observation, class participation, written quiz, oral quiz, peer evaluation, project evaluation, written papers, manipulative exam, homework, skill checklist, drawings, debate, oral presentation, video-taped project work, journal entry

Curriculum Scope & Sequence

Planned Course: Home Repair and Maintenance

Unit: Appliance Maintenance, Electrical and Mechanical

Time frame: 2-3 weeks

State Standards

Anchor(s) or adopted anchor:

Essential content/objectives: At end of the unit, students will be able to: Decide whether a problem is mechanical or electrical, recognize when a belt is too loose or tight, repair a dishwasher door seal, design a labeling system for wires before you remove them, recognize poor refrigerator performance due to dirty coils, find and read an appliance data plate, repair lamps and electrical cords, clean the commutator of a motor, use soldering equipment

Core Activities: Students will complete/participate in the following: Lab time, internet video, computer usage, class discussion, project work, homework, cooperative work, research, critical thinking. Describe common myths about accidents, state what work habits promote safety, and list some safety aids everyone should have in their home. View in class videos on safety and recognizing dangerous situations. Homework from chapters in book. Discuss / video on proper maintenance and repair of major appliances including when to call a repair person. Quiz on appliance maintenance. Students will take apart and examine some appliance. (base on availability)

Extensions: Use techniques learned in class to repair or maintain the home in which student lives. Also use these techniques for community service opportunities with Habitat for Humanity (etc.).

Remediation: Practice as needed, peer-tutoring, internet research

Instructional Methods: Demonstration, class discussion, group work, hands-on activities, guest speaker, videos

Materials & Resources:

Assessments: Teacher observation, class participation, written quiz, oral quiz, peer evaluation, project evaluation, written papers, manipulative exam, homework, skill checklist, drawings, debate, oral presentation, video-taped project work, journal entry

Curriculum Scope & Sequence

Planned Course: Home Repair and Maintenance

Unit: Developing a Career Path in Home Repair and Maintenance

Time frame: 1-2 weeks

State Standards

Anchor(s) or adopted anchor:

Essential content/objectives: At end of the unit, students will be able to: List careers related to home repair and maintenance, define the term career, describe how technology has changed career opportunities, prepare and plan for selecting a career

Core Activities: Students will complete/participate in the following: Lab time, internet video, computer usage, class discussion, project work, homework, co-operative work, research, critical thinking. Describe common myths about accidents, state what work habits promote safety, and list some safety aids everyone should have in their home. View in class videos on safety and recognizing dangerous situations. Discussion of careers in home repair. Students will pick a job and do a maximum 3 page report on salary, job requirements and education required etc.

Extensions: Use techniques learned in class to repair or maintain the home in which student lives. Also use these techniques for community service opportunities with Habitat for Humanity (etc.).

Remediation: Practice as needed, peer-tutoring, internet research

Instructional Methods: Demonstration, class discussion, group work, hands-on activities, guest speaker, videos

Materials & Resources:

Assessments: Teacher observation, class participation, written quiz, oral quiz, peer evaluation, project evaluation, written papers, manipulative exam, homework, skill checklist, drawings, debate, oral presentation, video-taped project work, journal entry