

# DIY Home Repair Essentials — Workbook

This workbook turns the course into action. You will assemble your toolkit, map your home's shut-offs, and practice each core repair on real surfaces — walls, plumbing, paint, and carpentry. Work through one section per module, keep your filled-in worksheets, and use the templates to track materials, costs, and your maintenance schedule.

## Your Toolkit, Materials, and Working Safely

Build your starter kit, learn your materials, and document every shut-off in your home before you need it.

### Checklist: Assemble Your Starter Toolkit

- 16 oz claw hammer purchased
- 25 ft tape measure with 1-inch blade
- Multi-bit screwdriver (Phillips and flathead)
- Cordless drill/driver with bit set
- Retractable utility knife and spare blades
- 9-inch torpedo level
- 8-inch adjustable wrench and slip-joint pliers
- Stud finder
- 1.5-inch and 4-inch putty knives
- Caulk gun and paintable silicone caulk
- Work light or headlamp
- Safety glasses and nitrile gloves
- Painter's tape, drop cloth, sanding sponge
- Assorted anchors, screws, and picture hooks
- Toolbox or tote to store everything

### Worksheet: Home Shut-Off Map

Walk your home and locate each shut-off. Record where it is and how to operate it, then take a photo on your phone for quick reference in an emergency.

Main water shut-off location

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Main water shut-off — how to close (lever or wheel direction)

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Electrical panel location

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Main breaker labeled? (yes/no)

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Gas meter shut-off location (if applicable)

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Toilet supply valve(s) location

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Kitchen sink supply valve location

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Water heater shut-off location

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### Exercise: Run the DIY-versus-Pro Decision

List three repairs your home currently needs. For each, decide whether it is DIY-friendly, DIY-with-caution, or call-a-pro using the course rule (risk of flooding, fire, electrocution, or structural failure).

- Repair 1 — what is it, and what could go wrong if done incorrectly?

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- Repair 2 — which category does it fall into and why?

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- Repair 3 — what would make you stop and call a licensed pro?

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- Which tool or test (e.g., voltage tester, shut-off valve) would you use before starting the safest of the three?

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## Walls and Ceilings: Patching and Prep

Practice the full range of drywall repair, from a single nail hole to a fist-sized patch, then prep a real surface for paint.

### Checklist: Drywall Patch Quality Check

- Hole cut into a clean geometric shape (for larger patches)
- Correct filler chosen: spackling for small, joint compound for large
- First coat pressed fully into the hole or crack
- Tape embedded over recurring cracks or seams
- Each coat feathered wider than the last
- Sanded smooth with 150 then 220 grit
- Surface wiped free of dust
- Patch spot-primed before painting

### Exercise: Three-Hole Practice Run

On a scrap of drywall or a hidden wall area, create and repair three sizes of damage to build muscle memory. Note drying times and how many coats each needed.

- Nail hole — how long did the spackling take to dry, and how many coats?

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- Golf-ball hole with mesh patch — was a third coat needed to hide the edges?

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- Fist-sized hole with a wood-backed plug — how did you secure the backer strip?

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- After sanding and raking light across each patch, which one is invisible and which needs another pass?

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### Worksheet: Paint-Prep Walkthrough Log

Before painting a room, complete each prep step and record what you found and did. Use raking light to inspect.

Room being prepped

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Walls washed? cleaner used

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Number of dents/holes found under raking light

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Filler used and number of patches

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Stain-blocking primer needed? where

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Glossy areas needing bonding primer

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Gaps caulked (trim/baseboard) — yes/no

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Switch plates and covers removed — yes/no

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## Plumbing: Stopping Common Leaks

Diagnose and fix the three leaks homeowners face most, using only basic tools and inexpensive parts.

### Exercise: Toilet Dye Test and Diagnosis

Run the food-coloring dye test on each toilet in your home and determine the failing part before buying anything.

- Did color appear in the bowl after 15 minutes? (flapper) or did it keep refilling? (fill valve)
  - What is the brand or model of the toilet, and which universal kit fits it?
  - How much slack did you leave in the flapper chain?
  - Where is the water-level line inside the tank, and did you set the float to it?
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### Worksheet: Faucet and Under-Sink Leak Tracker

For each leaking fixture, identify the type and the failing part, then record the fix and the part you bought. Fixture and location

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Faucet type (compression / cartridge / ball / ceramic-disc)

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Leak source (washer / O-ring / cartridge / slip joint / supply line / P-trap)

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Replacement part and cost

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Plumber's grease or PTFE tape applied? — yes/no

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Shut-off valves closed before work — yes/no

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Leak confirmed gone after 1-minute run — yes/no

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### Checklist: Leak-Fix Safety and Cleanup

- Local shut-off valves closed before starting
- Faucet opened to release pressure
- Drain plugged so small parts cannot fall in
- Bucket or towel placed to catch trapped water
- Slip-joint nuts hand-tightened plus only a quarter turn
- Rubber washers inspected and replaced if cracked
- All joints felt for moisture after a full minute of running water
- Work area dried and rechecked the next day

## Painting and Basic Carpentry

Apply professional painting technique and build core carpentry skills — measuring, cutting square, fastening, and hanging things that hold.

### Checklist: Professional Painting Sequence

- Correct sheen chosen for the space (eggshell/satin walls, semi-gloss trim)
- Roller nap matched to wall texture (3/8 inch smooth, 1/2 inch textured)
- Paint stirred, not shaken; multiple cans boxed together
- Edges cut in with a 2.5-inch angled brush, one wall at a time
- Field rolled in a W shape and filled while wet
- Wet edge maintained across each section
- Two coats applied with proper recoat time between
- Painter's tape removed while final coat slightly wet

### Exercise: Square-Cut and Fastener Practice

On scrap lumber, practice marking and cutting square, then driving screws cleanly. Build confidence before a real project.

- Using a speed square, scribe and cut a board — is the cut a true 90 degrees against the square?  
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- Did you cut on the waste side of the line and leave the mark visible?  
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- Drive a screw near a board end with and without a pilot hole — which split?  
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- Which driver bit gave a clean drive with no stripping?  
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### Worksheet: Hanging Plan: Anchor and Load

Before hanging any item, plan the fastening. Weigh or estimate the load, locate studs, and choose the right anchor.

Item to hang and estimated loaded weight  
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Stud finder reading — stud center marked? (yes/no)  
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Anchor type chosen (plastic / self-drilling / toggle / wood screw to stud)  
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Anchor weight rating vs. item weight  
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Level checked before final tightening — yes/no  
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Hold tested gently before full weight — yes/no  
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## Your Action Plan

1. Assemble the 15-item starter toolkit and store it in one labeled tote
2. Locate, label, and photograph every shut-off in your home this week
3. Practice all three drywall patch sizes on scrap or a hidden area until one is invisible
4. Run the dye test on every toilet and replace any leaking flapper or fill valve
5. Identify your faucet types and fix or stock the matching washer or cartridge
6. Trace and tighten any under-sink leaks, replacing worn washers and braided supply lines
7. Fully prep one room (wash, fill, sand, prime) before painting it with the cut-in-then-roll method
8. Practice square cuts and pilot-holed screws on scrap lumber before a real carpentry job
9. Re-anchor at least one heavy item into a stud or toggle using the hanging plan
10. Set a recurring annual reminder to exercise shut-off valves and re-stock consumables









