Show curriculum. Print it, follow along, and write in the notes boxes. You will remember more that way.

THE 30-DAY NUMBERS

Water	60 to 90 gallons per person
Food	90 meals per person (about 75,000 calories)
Medicine	30 days of every daily medication
Gas	Keep your car at least half full
CO detectors	One on every level and near every bed
Plan	A written plan for day 3

Part 1: What could take the grid down for 30 days

- Most outages are short. This guide is for the worst case.
- Three sizes:
  - **Regional.** A hurricane or ice storm takes out power across part of a state, or a few states. The most likely kind. Other states can send help.
  - **Multi-state.** A cyberattack, an attack on substations, or a solar storm hits several regions at once. Less help is available.
  - **National.** Most or all of the country at once. The least likely and the worst. Nobody is left to send help.
- Real examples: Winter Storm Fern (January) left over a million customers without power. After Hurricane Maria, Puerto Rico had one of the longest blackouts in US history.
- In the news now: cyberattacks on infrastructure, the war with Iran, and severe weather.
- **You do not need to know the cause.** The effect in your house is the same: no power, maybe no water, stores closed, no end date. Plan for the effect.
- **About EMP.** This guide assumes a cyberattack or an attack on the grid. An EMP (a nuclear burst high above the country) would be far worse. It could damage electronics across the board, including vehicles and the equipment needed to recover. It is not covered here.

Part 2: What 30 days would look like

A projection based on real blackouts and disasters.

What happens depends on how long people go without food, water, heat and medicine. The lights going out does not hurt anyone by itself. The things the power was running do.

Days 0 to 3: Quiet at first

- People tend to help each other. Phones die or stop working. Traffic lights go out. Gas pumps stop. ATMs and cards fail, so cash matters.
- Fridge food is safe about 4 hours. A full freezer is safe about 48 hours.
- Hospitals run on generators, for now.
- This is the part the government’s 3-day advice covers.

Days 3 to 7: It turns

- Stores run out of food. City water starts to fail, and high-rises lose water pressure.
- Backup generators run low on fuel. Roads jam. Gas is gone.

- People who did not prepare start showing up at the doors of people who did.
- In 1977, a 25-hour blackout in New York City led to over 1,700 stores looted or damaged and over 3,400 arrests. A week after Hurricane Helene, thousands in Asheville still had no running water.

Days 7 to 14: People start dying

- Most deaths are not from violence.
- About 2.7 million Medicare patients depend on electric medical equipment like oxygen concentrators and ventilators. Add dialysis patients, people on insulin and nursing homes.
- Toilets stop working. Sewage becomes a public health emergency. Dirty water causes diarrheal disease.
- Carbon monoxide and house fires from generators, grills, candles and heaters add to the toll.

Days 14 to 30: Dense areas turn dangerous

- Many dense cities will become war zones. The denser the city, the worse it gets.
- Think New York City: millions of people, many with no way out, very little food and water by day 7 to 10, sewage backing up, disease spreading, police and hospitals overwhelmed, and gangs that police normally hold back let loose.
- Cities empty out. Strangers show up in small towns, suburbs and on farms.
- Some neighborhoods organize, pool food and water, and set up watches. Others fall apart.
- If you have supplies, hunker down and stay quiet. Do not advertise.
- No one has modeled a month-long national blackout. Anyone giving you a precise number is guessing.

THE BOTTOM LINE

- Three days of supplies covers the quiet part. Day 3 is when it turns.
- With 30 days, you are not in the grocery store crowd on day 3, on the highway on day 4, or in a water line on day 5.

NOTES

Part 3A: Water

HOW MUCH

- 2 to 3 gallons per person per day. That is 60 to 90 gallons per person for 30 days.
- Family of four: 240 to 360 gallons.
- You can live about 3 days without water. Dirty water can be worse than none.

Where your water comes from

- **City water** depends on electric pumps and treatment plants. When the power is out long enough, the tap stops. Most of the storage advice below is for you.
- **Well water.** The pump needs electricity, but the water is already there.
  - A solar setup that can run your well pump keeps water flowing. Pumps pull a big surge when they start, so plan for it.
  - A manual pump such as a Flojak goes down your well and lets you pump by hand, with no power.
  - Test your well. Shallow wells are more likely to be contaminated. If you are not sure, purify it.

Water you already have

- Water heater tank: about 40 to 50 gallons. Learn where the drain valve is today.
- Bathtub: about 40 to 80 gallons. Fill it in the first hours, while there is still pressure. A WaterBOB liner helps.
- Pool water: fine for flushing and washing. Do not drink it unless it is properly filtered.

Water you store

- Gallon jugs from Costco or Sam’s Club. Washed 2-liter soda bottles. Water bricks (3.5 gallons, stackable). 55-gallon drums, the cheapest per gallon, but about 500 pounds when full.
- **Water is heavy.** About 8 pounds a gallon. 60 gallons is about 500 pounds.
- Use clean, food-grade containers. Wash, rinse and sanitize with a little bleach solution. City tap water is already treated.
- Write the date on each one. Keep them cool and dark. Swap them out about every 6 months.

Get more water

- Rainwater is free. One inch of rain on a 1,000-square-foot roof gives over 600 gallons. You need a gutter, a diverter, and a food-grade barrel with a screen. For drinking water, metal or plastic roofs beat asphalt shingles.
- Creeks, ponds, rivers and wells work only if you can purify what comes out.

Purify it (have at least two ways)

- **Boil.** A rolling boil for 1 minute (3 minutes at high altitude). Kills bacteria, viruses and parasites.
- **Filter.** A gravity filter for the family. A Sawyer, LifeStraw or Grayl for your bags. Check what yours removes.
- **Bleach.** Plain, unscented household bleach. About 8 drops per gallon of clear water. Stir and wait 30 minutes. For cloudy water, double it and strain through a cloth first. Check your bottle’s label.
- **Tablets.** Cheap and light. Good for a bag.
- **Warning:** bleach kills germs but does not remove chemicals. Start with the cleanest source you can find.

COMMON MISTAKES, AND WHERE TO START

- Storing only drinking water. Keeping it somewhere hot. Buying a filter and never trying it.
- Thinking a few cases of bottled water is a plan. Four cases lasts a family of four about a day and a half.
- **This week:** find your water heater drain and buy a filter. Then add 1 gallon per person per day to your cart until you have 2 weeks.

NOTES

Part 3B: Warmth, cooling and carbon monoxide

- Cold kills fast. Within about two days of Winter Storm Fern, at least 35 people were dead, including from hypothermia.
- In the Texas freeze in 2021, carbon monoxide killed at least 11 people. It was not the cold. It was what people did to get warm.

If you have a wood stove

- You are in great shape. It heats, cooks, boils water and dries clothes, with no electricity.
- You need a full winter of seasoned wood, cut and split before it gets cold. In a cold climate that is 3 to 6 cords. Seasoning takes 6 months to a year.
- Buying wood? Ask if it is a full cord or a face cord. They are very different amounts.

If you do not have a wood stove: heat the person, not the house

- **Make your house smaller.** Pick one room near the middle with the fewest windows, or the basement. Close the doors to the rest. Hang blankets in doorways, tape plastic over drafty windows, put towels at the bottom of doors, and put rugs on the floor.
- **Set up a tent in that room.** Your body is a heater and the tent holds the heat. Add sleeping bags.
- **Dress in layers.** A wool base layer (no cotton). Fleece, wool or down for warmth. An outer layer that blocks wind and wet. Hat, gloves, warm socks, boots. If you start to sweat, take a layer off.
- **Have a real heat source, ideally two.** Furnace as your main, a propane heater as backup, a small electric heater off a generator as a fallback. Use only indoor-rated propane or kerosene heaters. Electric heaters pull about 1,500 watts each, which drains a generator or battery fast.

CARBON MONOXIDE (CO) RULES

- You cannot see, smell or taste it. It can put you to sleep before you notice. Portable generators alone kill more than 80 people a year in the US.
- Generators run outside, at least 20 feet from the house, exhaust pointed away from doors, windows and vents. Never in a garage, on a porch or in a basement.
- No grills, camp stoves or charcoal indoors. Ever. Never idle a car in an attached garage.
- Battery-powered CO detectors near every bed and on every level. Test them.
- If one goes off, get everyone outside. Headache, dizziness or nausea in more than one person: think CO.

- **Fire.** Keep heaters at least 3 feet from beds, curtains and furniture. Use flashlights and battery lanterns, not candles. Know where your fire extinguisher is.

- **Pipes.** If the house stays below freezing for days, pipes can burst. Know where your main water shutoff is. If the cold is serious or you are leaving, shut it off and drain the lines.
- **In summer:** go to the basement or the coolest, shadiest room. Close blinds, use reflective window covers, open the house at night. Use battery or solar fans. Drink water and replace electrolytes. Check on the elderly and little kids. Watch for mold in humid places.

NOTES

Part 3C: Food and cooking

Get the free Food chapter from Prep Like Noah at preplikenoah.com

- **90 meals per person** for 30 days, about 75,000 calories.
- A typical adult needs 2,000 to 2,500 calories a day. Cold or hard physical work can mean 3,500. Plan on the high side.
- Plan for babies, pets, allergies and diabetics from day one.
- **Eat in this order:** fridge first, then the freezer, then the pantry. Keep the doors shut. Use coolers. Keep an appliance thermometer in the fridge and freezer. If in doubt, throw it out.

What to stock

- **No-cook food.** Peanut butter, canned meat and fish, crackers, jerky, nuts, dried fruit. Your first few days, and what you grab if you have to leave.
- **Your working pantry.** Rice, beans, pasta, oats, flour, canned vegetables, soup, sauce. Foods you already eat, just more of them. If you use 4 jars of pasta sauce a month, keep 12. Eat it and replace it.
- **Long-term food.** Freeze-dried meals and properly packed grains last decades but cost more per calorie. Do not build your whole plan on them.

A ROUGH MONTH FOR ONE ADULT

- About 20 pounds of rice, 15 pounds of dry beans, 10 pounds of oats
- Several jars of peanut butter and 1 to 2 quarts of cooking oil
- Canned meat, fish, vegetables and fruit to fill the gaps
- Salt, spices, bouillon, and coffee or tea
- Adjust it to what your family eats. It only works with water and fuel to cook it.

Cooking and storage

- Food, water and fuel are one plan. 50 pounds of dry beans are no use without water and a way to boil them.
- Have at least two ways to cook without power: a camp stove or propane burner, a grill outdoors, or a wood stove. No grills or camp stoves indoors.
- Beans use a lot of fuel. Rice and pasta cook faster. Use a lid. Finish cooking in a thermos or cooler.
- Buy 2 or 3 manual can openers.

- Store food cool, dry and dark, in sealed containers. Date everything. First in, first out. Keep an inventory.
- Stock coffee, chocolate, hot sauce and a few things your kids love. It helps morale.
- You do not need $10,000. Start with one extra week, then two, then a month.

NOTES

Part 3D: Medical, medications and sanitation

Talk to your doctor or pharmacist about anything specific to your family.

Medications and supplies

- Any daily medication is part of your preps: insulin, blood pressure, heart, seizure, thyroid, inhalers. Antidepressants and other psychiatric medications count too. Some are dangerous to stop suddenly.
- Ask your doctor or pharmacist about keeping an extra 30 days. Some insurance plans allow an early refill in an emergency.
- If it has to stay cold, like insulin, ask your pharmacist how long it lasts without refrigeration.
- Also keep: spare eyeglasses, backup contacts and solution, hearing aid batteries, dentures, formula, diapers, feminine hygiene products.

Electric medical equipment

- Oxygen concentrators, ventilators, home dialysis. Talk to your equipment provider and doctor about backup power and backup oxygen.
- Ask your utility if it keeps a priority list for medical customers. Get on it. Ask your local emergency management office what help they offer.
- A generator is not a plan until you have worked out the fuel and the carbon monoxide risk.
- Check early on elderly neighbors who use medical equipment.

First aid and trauma

- **First aid kit:** bandages and gauze in different sizes, medical tape, gloves, antiseptic wipes, antibiotic ointment, tweezers, medical shears, pain and fever medicine, antihistamines, stomach and anti-diarrhea medicine, oral rehydration salts, burn dressings.
- **Trauma kit:** a tourniquet from a reputable brand, pressure dressings, hemostatic gauze, a splint.
- **Get training.** Stop the Bleed (quick, often free). CPR and first aid from the Red Cross, the American Heart Association or your local fire department. Wilderness first aid is excellent. When there is no 911, you are 911.
- **Wounds.** Wash with clean water, get the dirt out, cover it. Spreading redness, swelling, pus or fever means you need real medical help.

Sanitation

- A 5-gallon bucket with a toilet seat made for it. Line it with heavy-duty bags and cover each use with sawdust or cat litter.
- When a bag is full, tie it, double-bag it, and keep it sealed in a covered can outside. Do not bury the bags. For a long outage, dig a latrine well away from any well, stream or garden.
- Stock lots of soap. Wash your hands. Keep baby wipes and spare socks.
- Trash: heavy bags and lidded cans, away from the house. You can burn paper and clean wood. Do not burn plastics, treated wood, batteries or chemicals.
- **Your body is your best gear.** Can you walk 5 miles, carry water, split wood for an afternoon? Deal with health problems now, while there is still a doctor.

NOTES

Part 3E: Power and fuel

- Start with one question: **what absolutely has to keep running?** Medical equipment, a well pump, the fridge or freezer for a few hours a day, the blower on your heat source, a few lights, phone and radio charging. Add up the watts for that short list. That tells you what to buy.
- **Batteries and solar.** A portable power station and a folding solar panel (around 100 watts) keep phones, radios and lights going. They are quiet, have no exhaust, and are safe indoors.
- **Generators.** A generator without fuel is a paperweight. Figure out how many hours your stored fuel really lasts.
  - Do not run it all the time. A well-insulated chest freezer can coast for hours between runs. Keep the lid closed.
  - Outside only, 20 feet from the house.
  - Never plug a generator into a wall outlet to power the house. It can send power back into the lines and kill a lineman. Use a transfer switch installed by an electrician.
  - A loud generator tells everyone you have power, fuel and probably food.
- **No electricity at all.** Wood for heat, propane for cooking, battery lanterns for light.

Fuel

- **Gasoline** goes bad. Use a stabilizer, rotate it into your car every few months, label the date, and use approved containers away from your house.
- **Diesel** stores better. Keep water out of it. **Propane** basically does not go bad. **Firewood** is fuel you stack.
- **Your car is your cheapest fuel tank.** Keep it at least half full. Think of half a tank as empty.

CHECK YOUR GAPS

- ReadyScore.com is a free preparedness check. It shows where you are strong and where you have gaps, and gives you an easy action plan.

NOTES

Part 3F: Security, and the neighbor at your door

- In most disasters, people died from missing medicine, bad water, cold and carbon monoxide. Not gunfights. But when systems fail, some people do desperate things, and the longer it lasts, the more likely it is.

Don’t be a target

- Do not advertise. Do not tell neighbors what you have. Do not post it online.
- Keep light and noise low at night. Cover the windows.
- Be the gray man. Dress like everyone else. No camo, no tactical vests.
- Do not leave firewood, water jugs and food where the whole street can see them.

Make your house harder than the next one

- Solid-core or steel doors, real deadbolts, 3-inch screws in the frame. Window film on ground-floor windows. Dowels in sliding door tracks.
- Motion lights. Gravel paths so you hear footsteps. Thorny bushes under windows.
- A dog. It does not have to bite. It just has to bark, and it still works when the battery dies.

Neighbors and training

- **Your neighbors matter most.** Find 5 to 10 households who have talked about this ahead of time. Who has medical training? Radios? Repair skills? Who needs check-ins? Who takes night watch?
- Get to know your local sheriff. Ask: “If the phones are down, how do I reach you?”
- **Tools.** If it is legal where you live, have a firearm. If you do not have one, now is a good time. Training matters more than the gun, so take a class from a certified instructor and practice.
- Store it locked, away from kids and thieves, with one quick-access option for home defense. Know your state’s laws, including when you can and cannot use force. Stick with common calibers.
- If a firearm is not for you: pepper spray, a good flashlight, self-defense training. Practice with whatever you choose.
- The goal is to avoid a fight. Avoid, de-escalate, leave if you can.

THE NEIGHBOR AT YOUR DOOR

- Day 12. A neighbor knocks with a toddler. They are out of food. You have enough for your family, not the whole block. What do you do?

  1. Decide before the knock. Talk it over with your spouse now.

  2. Accept you cannot feed everyone. If you try, you end up with nothing.

  3. Build the group ahead of time. A mutual aid group where everyone brings food, skills, labor or watch duty.

  4. Be generous without being reckless. A meal, a jug of water, a first aid fix, a trade for work. Do it at the door. Do not invite strangers in or show what you have.

NOTES

Part 4: If you live in a city or a suburb

Why cities break first

- Millions of people in a few square miles, with only a few days of food.
- City water depends on electric pumps. In a high-rise, the building's pumps push water to the upper floors. When they stop, the water stops.
- Toilets stop. Trash piles up. Your storage space is a closet, not a basement.
- Everyone who can leave leaves at once. Highways turn into parking lots.
- The last place you want to be in a long grid-down is the middle of a big city.

The suburbs

- Better, but not as much as people think. You have a garage, basement and yard for storage, a garden and rain barrels.
- You still depend on city water and the grocery store, and so do thousands of families around you.
- Suburbs sit between the city and everywhere else. When a city empties out, those people come through.

When to go

- Most people should not leave in a short outage. Leaving can be riskier than staying.
- But do not make the decision on day 4 in a traffic jam. Write your triggers down now. If you go, go early, while the roads are open.

OUR GO / NO-GO WORKSHEET

We leave if (check all that apply):

- ☐ Power is out and the utility gives no restoration estimate, or says weeks
- ☐ The city water is out or unsafe
- ☐ Widespread unrest within a mile or two
- ☐ A fire, flood or hazardous spill is heading our way
- ☐ Someone in our house has a medical need we cannot meet at home
- ☐ Other: _____

Where we will go: _____

Route out 1: _____

Route out 2 (not the interstate): _____

Somewhere to go

- If you had to leave tomorrow, where would you go? A sister, a cousin, your parents? Have the awkward conversation now. Then plan it together.
- Show up with a month of food, water filters, medical supplies and tools. You are a contribution, not a burden.
- No family? Get to know farmers at your market and the owners of a small B&B or rural rental an hour out.
- **A storage unit outside the city** can hold supplies you cannot fit at home. Many have electronic gates, so ask about emergency access. Read the rules. Fuel and hazardous materials are usually not allowed.

Routes and the get-home bag

- Know 2 or 3 ways out of the city, not just the interstate. Drive them once. Keep a paper map and a tank at least half full.
- **Get-home bag** for your car or work: walking shoes, socks, water, a filter, snacks, a map, a headlamp, a first aid kit, a battery pack, small bills, a rain poncho.

If you stay, or have no choice

- **Water.** 60 gallons is about 500 pounds. Use bathtubs, a tub liner and water bricks. Check how much weight your floor can take. On the 12th floor, you will be carrying water up 12 flights of stairs.
- **Cooking.** Lean on food that needs no cooking. Hot water in a thermos makes rice or oatmeal. A power station can run an electric kettle for a few minutes at a time. No fuel cooking in an enclosed space. Ask your building about fire rules.
- **Heat and waste.** One small room, a tent, layers, a CO detector. A bucket toilet, heavy bags, and a plan for getting them down the stairs.
- **Your building is your fortress or your trap.** Meet the people on your floor. Find out who is elderly, who has a medical device, who has a useful skill. Set up a floor captain. Stay quiet about what you have and keep your door locked.
- If you can choose where you live, think about somewhere less crowded, with a reliable water source and room to grow food. Do not isolate yourself. You still need people nearby.

NOTES

Part 5: The first 72 hours

How you act in the first one to three days affects what life looks like on day 30.

Hour 0: Stop. Think. Observe. Plan.

- Do nothing for about 10 minutes. Panic and “it’ll be back in an hour” both waste your best hours.
- **Stop.** Do not act on adrenaline. Gather the family. Keep your voice calm.
- **Think.** What do I know? What don’t I know? What is the worst that could happen in the next few hours?
- **Observe.** Just my house? My street? Are the streetlights out?
- **Plan.** Pick the first few things to do. Give everybody a job.
- Write down the time and start a logbook: when the power went out, what you heard, what you did. Do not open the fridge. Put your phone in low power mode.

Is it just me?

1. Check the breaker and the main.
2. Look at your neighbors. Knock if you need to.
3. Check the utility’s outage map while your phone still has data.
4. Does your phone work? Bars but nothing loads? That is a clue.
5. Turn on the radio.

- You may not know why it happened for the first 72 hours. Plan for the effect, not the cause.

Your information plan

- **NOAA Weather Radio.** About $30 to $80. Get one with SAME so you can program your county, and one that runs on batteries and solar or a hand crank. The crank is a last resort.
  - It carries alerts for chemical spills and other emergencies, sent at the request of local and state officials. **Silence does not mean safe.** There is even an alert type for a 911 phone outage.
- **AM and FM radio.** FEMA supports 77 radio stations with backup power. AM travels far at night. Local news tells you about roads, shelters and water.
- **Scanner.** Many departments encrypt their traffic. Look up your county at RadioReference.com before you buy.
- **Talking to neighbors.** Walkie-talkies (expect a mile or two). GMRS (more power, FCC license, no test, covers your family). CB (no license, channel 19 for road news). Ham (no towers or internet, 35-question entry test). Satellite messengers like Garmin inReach (text only, subscription).
- **How to use it.** Listen at set times, like 10 minutes at the top of every hour. Do not burn your batteries. Write down what you hear and the time.
- **The rumor rule.** The first thing you hear is usually wrong. Do not act on anything from only one source. Get three sources before a big decision.

WHAT YOU ARE TRYING TO FIND OUT

- How big is this? Local, regional or widespread?
- How long is it expected to last?
- What are the official instructions? Boil water, shelter in place, stay off the roads?
- What is happening around you? Roads, stores, the neighborhood.
- If you hear about a chemical, radiological or nuclear hazard, follow the official shelter-in-place instructions.

OUR FAMILY RADIO PLAN

Main channel and backup channel:

Check-in times:

Family meeting place and backup:

Out-of-state contact:

Hours 1 to 6: Do it in this order

- ☐ **Water first**, before the pressure drops. Fill tubs, pots, pitchers and containers.
- ☐ **Cash.** If ATMs still work, get small bills.
- ☐ **Fuel.** Fill your car.
- ☐ **Food clock.** Fridge 4 hours. Full freezer 48. Half-full freezer 24. Eat what spoils first. Use coolers and ice.
- ☐ **Charge everything,** then conserve.
- ☐ **Medications.** Count them. Handle anything that has to stay cold.
- ☐ **Heat or cooling.** Pick your room. Set up the tent and blankets, or fans and shade.
- ☐ **CO check.** Detectors work? Nothing burning indoors? Flashlights out, no candles.

- A short trip in the first hours for water, cash or fuel can be smart. A trip to the store on day 3 is not. By then the shelves are empty and the mood has changed.

Night one

- Keep one light on in the main room. Voices down, windows covered, dogs inside or close by. Check your CO detectors.
- Take turns awake: one adult up for a couple of hours, then switch. Sleep matters. Tired people make bad decisions.
- With kids, set the tone: “This is like camping. We have what we need. Mom and Dad have a plan.”

Day 2: Settle in

- Set a routine: meal times, radio times, chores, quiet times. Ration gently.
- Walk the block. Meet your neighbors. Check on the elderly and anyone on medical equipment. Be careful what you tell people about your own supplies.

- Keep up the radio schedule and the logbook. Is the news getting better or worse?

Day 3: Decision day

- Three days is where the government's plan ends and yours starts.
- Sit down as a family with your go/no-go worksheet. Is there a restoration estimate? Is the water running? Is the neighborhood calm? Do you have enough for the long haul? Do the radio, the neighbors and your own eyes agree?
- **If your triggers are hit,** go early, with your plan, bags, destination and a full tank. **If not,** settle in and take it one day at a time.
- You will be afraid. So will everyone around you. Feel it, then make a plan.

NOTES

Do one thing this week

- Not twelve things. One.

- ☐ Fill the tub
- ☐ Buy a weather radio
- ☐ Call your pharmacist
- ☐ Write down your go/no-go triggers
- ☐ Take ReadyScore at ReadyScore.com
- ☐ Get the free Food chapter at preplikenoah.com

MY PLAN AND QUESTIONS FOR THE Q&A