# Project: Bug-Out Bunker Blueprint (1-Week Intensive)

## **Materials Needed:**

- Computer with internet access
- Access to a printer (optional)
- Software: Word processor with speech-to-text, mind-mapping software (e.g., Coggle, MindMeister), and/or presentation software (e.g., PowerPoint, Google Slides)
- Video and audio recording device (a smartphone is perfect)
- Large sketchbook or A3 paper
- Pencils, ruler, eraser
- Art and craft supplies for model building (cardboard boxes, craft sticks, glue, paint, recycled materials, clay, etc.) OR access to 3D design software (e.g., SketchUp Free, Tinkercad)
- A backpack ("Go-Bag")
- Items from around the house to practice packing a Go-Bag (tinned food, water bottles, first aid kit, torch, etc.)
- Calculator

# **Project Overview:**

Over one week, you will design a comprehensive plan for a bug-out bunker tailored to survive a specific Australian weather disaster. This project is hands-on and focuses on creative problemsolving. Your final assessment will be a presentation of your bunker design, a stocked "Go-Bag," and your response to a surprise survival simulation. All activities can be documented using methods that work best for you (video, audio, mind maps, etc.).

# **Daily Missions:**

### Day 1: Mission - Threat Assessment & Intel Gathering

**Objective:** To research and select a specific Australian weather disaster, understand its impact, and identify the primary survival challenges it creates.

- **Key Learning Areas:** HASS (Geography, History), Science (Earth & Environmental Science), English (Comprehension, Research).
- **Dyslexia/Dysgraphia Focus:** Learning through video, audio, and discussion. Documenting findings via mind maps or voice notes.

#### Tasks:

- Watch & Learn (1.5 hours): Choose ONE major Australian weather disaster to focus on for the week (e.g., Bushfire, Cyclone, Major Flood). Watch at least two documentaries or extended news reports about your chosen disaster. Search terms like "Black Saturday documentary," "Cyclone Tracy documentary," or "QLD floods 2011 documentary." While watching, listen for the key challenges people faced: loss of power, communication, clean water, shelter, food, etc.
- Expert Consultation (1 hour): Explore the Australian Bureau of Meteorology (BOM) and your state's emergency services website (e.g., SES, RFS/CFA). Use a text-to-speech reader to help you navigate the sites. Your goal is to find their official advice for preparing for your chosen disaster.

- 3. **Document Your Intel (1 hour):** Create a mind map (digital or hand-drawn) or record a 5-minute audio/video log. Your goal is to answer:
  - What is my chosen disaster?
  - What are the top 5 dangers associated with it? (e.g., high winds, fire front, floodwater, smoke inhalation).
  - What are the top 5 survival needs during and after this event? (e.g., breathable air, secure shelter, first aid).

## Day 2: Mission - The Blueprint

**Objective:** To design a floor plan for a bunker that would effectively protect against your chosen disaster and create a scale drawing or 3D model.

- **Key Learning Areas:** Mathematics (Measurement, Scale, Geometry), The Arts (Design), Technologies (Design & Technology), Science (Engineering Principles).
- **Dyslexia/Dysgraphia Focus:** Hands-on, visual, and spatial tasks. Expressing ideas through drawing and building rather than writing.

#### Tasks:

- Design Brainstorm (30 mins): Look up different designs for "storm shelters," "bunkers," or
  "earth-sheltered homes." Sketch out rough ideas in your notebook. Think about key features
  needed for YOUR disaster. A bushfire bunker needs fire-proofing and air filtration. A flood
  bunker needs to be watertight and potentially elevated. A cyclone bunker needs to withstand
  extreme winds.
- 2. Calculations & Scale (1 hour): Decide on the dimensions of your bunker. Let's assume it needs to house 4 people for 2 weeks. How much space would you need? Calculate the total area. Now, choose a scale (e.g., 1cm = 0.5m) and create a neat, to-scale floor plan on paper. Label the different areas: sleeping quarters, food storage, water storage, sanitation, entrance/exit.
- 3. **Build the Model (2 hours):** Bring your design to life! You have two choices:
  - Physical Model: Use cardboard, clay, and other craft supplies to build a physical 3D model of your bunker based on your floor plan.
  - Digital Model: Use free software like SketchUp or Tinkercad to create a digital 3D model of your bunker.

Focus on showing the key protective features.

#### **Day 3: Mission - Life Support Systems**

**Objective:** To plan for essential resources like water, food, power, and sanitation for a two-week period.

- **Key Learning Areas:** Science (Biology, Chemistry), Mathematics (Ratios, Calculations), Technologies (Off-grid systems), Health.
- **Dyslexia/Dysgraphia Focus:** Practical calculations and visual research. Documenting plans in a checklist or diagram format.

#### Tasks:

- 1. Water & Food Rations (1.5 hours):
  - **Water:** The rule of thumb is 4 litres of water per person, per day (for drinking and basic hygiene). Calculate the total amount of water needed for 4 people for 14 days. How

- would you store it safely? Research one simple method of water purification (e.g., boiling, filtration, purification tablets) and draw a diagram explaining how it works.
- Food: Research non-perishable survival foods. Create a 3-day meal plan. Then, calculate
  the total amount of each food item needed for 4 people for 14 days. Present this as a
  visual inventory list with pictures or drawings instead of just words.

## 2. Power & Sanitation (1.5 hours):

- Power: Your bunker has no grid power. Research two different off-grid power sources (e.g., solar panels with a battery bank, a hand-crank generator). Create a simple pros and cons list for each, using a voice recorder or talking it through with someone.
- Sanitation: This is critical. Research how to set up a simple, safe toilet system in an emergency (e.g., a composting toilet or a "twin bucket" system). Draw a diagram showing your chosen system and label the key parts.

# Day 4: Mission - The Go-Bag & First Aid

**Objective:** To assemble a practical "Go-Bag" and learn essential first aid skills relevant to your disaster scenario.

- **Key Learning Areas:** Health & Physical Education (HPE), English (Instructional Texts), Mathematics (Budgeting, Weight).
- **Dyslexia/Dysgraphia Focus:** Kinesthetic learning (packing the bag), practical skills, and creating a visual checklist.

#### Tasks:

- 1. **First Aid Focus (1.5 hours):** Watch instructional videos from St John Ambulance Australia or the Red Cross on YouTube. Focus on three skills relevant to your chosen disaster:
  - **Bushfire:** Treating burns, smoke inhalation.
  - Cyclone/Flood: Treating cuts from debris, wound care, water-borne illness prevention.
     Practice one technique (e.g., applying a pressure bandage) on a pillow or family member.
     Verbally explain the steps as you do it.
- 2. **Go-Bag Inventory (1 hour):** Your bunker is your main goal, but you need a "Go-Bag" to get you there. Use your state's SES/RFS website to find their recommended emergency kit checklist. Use this as a base. Create your own personalised checklist as a mind map or a visual list with drawings/icons for each item.
- 3. **Pack & Weigh (1 hour):** Gather real items from around your house that match your checklist and physically pack them into a backpack. Feel the weight. Is it realistic to carry? Make adjustments. Lay everything out and take a photo or a short video explaining the purpose of 5 key items in your bag.

### Day 5: Mission - Final Briefing & Simulation

**Objective:** To present your complete bunker plan and use your knowledge to solve a simulated emergency scenario.

- **Key Learning Areas:** English (Oral Communication), Technologies (Digital Presentation), HASS (Civics), Critical Thinking.
- **Dyslexia/Dysgraphia Focus:** Demonstrating knowledge through speaking and presenting visuals, avoiding high-stakes writing.

#### Tasks:

- 1. **Prepare Your Briefing (1.5 hours):** Organise all your work from the week (mind maps, photos of your model, checklists, diagrams) into a presentation. You can use PowerPoint/Google Slides, or simply lay out your physical work on a table. Practice talking through your project from start to finish. You are the expert here!
- 2. **Present Your Bunker Plan (30 mins):** Deliver your presentation. Explain:
  - The disaster you chose and why.
  - Your bunker design, pointing out key features on your model/drawing.
  - Your life support plans (food, water, power).
  - Your Go-Bag and key first-aid considerations.
- 3. **SURVIVAL SIMULATION (1 hour):** Read (or have read to you) the following scenario. You must then verbally explain your step-by-step plan of action, using your project as your guide.

**Scenario:** "The warning for your chosen disaster has just been upgraded to 'Emergency Level.' You have 30 minutes before your location becomes unsafe. Your primary route to your bunker is blocked. Your Go-Bag is packed, but you notice a family member has a deep cut on their arm from a fallen tree branch. The power has just gone out, and your mobile phone has no reception. What do you do, and in what order?"

(There is no single right answer. The goal is to think critically and apply what you've learned about first aid, communication, navigation, and staying calm under pressure.)