**Lesson 1 (90 mins) – 7.2.1 Operating Systems & 7.2.2 Utilities**

**Learning Objectives**

* Understand the features and use of different types of operating systems.
* Recognise the role of common system utilities.

**Lesson Flow**

1. **Starter (10 mins)** – *OS Spot Quiz*
   * Quick-fire Kahoot/Mentimeter quiz: “Which OS is this?” with screenshots or features (e.g., batch, mobile, real-time).
2. **Main Activity 1 (25 mins)** – *Operating System Roleplay*
   * Split class into small groups, each acting out a type of OS:
     + Batch → one student acts as a “scheduler” taking jobs from a queue.
     + Multitasking → several students handle “tasks” with a time-slice buzzer.
     + Real-time → group must respond instantly to “incoming transactions.”
   * Each group explains how their OS works to the class.
3. **Main Activity 2 (20 mins)** – *Utility Tools Carousel*
   * 6 mini-stations around the room (file manager, defragmenter, compression, package manager, protection software, backup).
   * Students rotate in groups; at each station they:
     + Match a utility to its function.
     + Discuss an example (e.g., “Why use backup over protection?”).
4. **Plenary (10 mins)** – *Explain it to a 10-year-old*
   * Students pick one OS type or utility and explain it in simple terms to a peer.
5. **Homework / Extension**
   * Research and screenshot a utility tool on their own PC and write 3–4 bullet points on its purpose.

**Lesson 2 (90 mins) – 7.2.3 Development Tools & 7.2.4 Application Software**

**Learning Objectives**

* Understand the features and use of common code development tools.
* Recognise the role of common application software.

**Lesson Flow**

1. **Starter (10 mins)** – *What tool am I?*
   * Teacher gives quick scenarios (e.g., “I highlight syntax errors” → IDE). Students guess the tool.
2. **Main Activity 1 (25 mins)** – *IDE Treasure Hunt*
   * Use an online IDE (e.g., Replit or VS Code demo).
   * Students must find and screenshot features: debugger, compiler, interpreter, project navigation.
3. **Main Activity 2 (25 mins)** – *Application Software Debate*
   * Divide class into groups representing different software: spreadsheets, databases, word processors, email, project management.
   * Each group argues *why their software is the most essential* for a business scenario (e.g., “running a small charity” or “launching a start-up”).
4. **Mini-Plenary (10 mins)** – *Concept Map*
   * Students collaboratively build a map linking OS, utilities, dev tools, and application software → showing how they interrelate.
5. **Homework / Extension**
   * Find a case study/example where poor choice of software (OS, utility, dev tool, or application software) caused issues.