



Training Principles

A 5-Week Unit Plan for Workout Producer

DURATION

**5
Weeks**

YEAR
LEVEL

7 - 10

FOCUS

**FITT · Specificity ·
Overload**

BUILT BY **CONNECTEDPE**



Unit Overview

Understand, apply, and demonstrate key training principles through progressive workout design and video creation.

DURATION

5 Weeks

LESSONS / WEEK

2 – 3

YEAR LEVEL

7 – 10

APP

Workout Producer

Unit Rationale

Knowing *which* exercises to perform is only part of the picture — understanding *how* to structure and progress a program is what separates a random collection of exercises from effective training. This unit moves students beyond exercise selection into **training principles**: the evidence-based rules underpinning every well-designed program.

Through Workout Producer, students **apply** principles directly — manipulating FITT variables, designing sport-specific programs, building progressive overload sequences, and ultimately producing a polished workout video that demonstrates their understanding.

Key Training Principles

FITT
Principle

↑ Specificity

↑ Individual
Differences

↑ Progressive
Overload

↑ Reversibility

↑ Warm Up & Cool
Down

Learning Outcomes

By the end of this unit, students will be able to:

- ✓ Define the FITT principle and explain how each variable influences workout design
- ✓ Apply specificity to design sport- or goal-specific workouts
- ✓ Demonstrate progressive overload by creating base and progressed versions of a workout
- ✓ Explain reversibility and why consistent training matters
- ✓ Design a complete training session with warm up, main workout, and cool down
- ✓ Justify exercise selection and structure using training principles
- ✓ Produce a polished workout video in Assessment Mode demonstrating principle application

APP INTEGRATION

Students use **Creator Mode** in Weeks 1–4 to build, compare, and refine workouts. The Workout Analysis feature lets students compare different versions of the same workout — making FITT changes and progression visible. In Week 5, students switch to **Assessment Mode** for the final capstone video.



Scope & Sequence

A week-by-week overview of the unit's progression from foundational principles to the integrated capstone.

WEEK	THEME	KEY ACTIVITIES	CONNECTED LEARNING	APP MODE
1	Dial It In <i>The FITT Principle</i>	Explore F-I-T-T variables; build two versions of same workout with different FITT settings	FITT Planning Worksheet	Creator Mode — compare versions via Workout Analysis
2	Built for the Sport <i>Specificity & Individual Differences</i>	Design workout for specific sport/athlete; gallery walk comparison across sports	Athlete Case Study Cards	Creator Mode — sport-specific builds
3	Level Up <i>Progressive Overload & Reversibility</i>	Build base then progressed workout; plan 3-week progression; compare versions	Overload Tracking Sheet	Creator Mode — base vs progressed
4	Start Right, Finish Right <i>Warm Up, Cool Down & Recovery</i>	Design complete session (WU → Main → CD); explore active vs passive recovery	Complete Session Planner	Creator Mode — WU & CD templates
5	Prove Your Program <i>Capstone & Assessment</i>	Workout demonstrating ALL principles; Assessment Mode video; written annotation & showcase	Written Reflection	Assessment Mode — final export



Assessment Progression

Weeks 1–3: Formative — students build and compare workouts in Creator Mode, documenting reasoning.

Week 4: Transitional — students design a complete training session, integrating all principles.

Week 5: Summative — final workout in Assessment Mode with written reflection explaining principle application.

Equipment & Resources Needed

Technology

- iPads/iPhones with Workout Producer (1 per pair min.)
- Tripod or tablet stand for stable recording
- Headphones (optional, for music selection)

Physical & Print Resources

- Open gym/hall space for recording
- FITT worksheets, case study cards, tracking sheets
- Yoga mats, light dumbbells/bands (optional)



Weekly Lesson Plans

Detailed activities, app integration, and connected learning for each week.

1

Dial It In

The FITT Principle · Frequency, Intensity, Time, Type

LEARNING INTENTIONS

- Define the four FITT variables and explain how each influences workout outcomes
- Demonstrate that changing a single variable produces a meaningfully different workout
- Build two workout versions with different FITT settings and compare them

LESSON SEQUENCE (2–3 LESSONS)

Lesson 1 — Meet the FITT Principle: Brainstorm "What makes one workout harder than another?" Introduce Frequency, Intensity, Time, Type. Practical comparison: same 4-exercise circuit at moderate (50% effort, 20s/20s) then high intensity (100%, 40s/10s). Debrief how changing just I and T transformed the workout.

Lesson 2 — FITT Planning Worksheet: Students modify a base workout one variable at a time and predict the impact. Example: swap bodyweight squats for jump squats (Type change → higher cardio intensity). Write predictions before testing.

Lesson 3 — Build, Compare, Analyse: In pairs, build **Version A** (base) and **Version B** (2–3 FITT changes) in Creator Mode. Use Workout Analysis to compare side by side. Discussion: which suits a beginner vs experienced athlete?

Squats

Push Ups

Star Jumps

Mountain Climbers

Plank Hold

Lunges

2

Built for the Sport

Specificity & Individual Differences · Designing for Purpose

LEARNING INTENTIONS

- Explain specificity — training must match the demands of the sport or goal
- Recognise that individuals need different programs based on age, fitness level, and goals
- Design and justify a sport-specific workout for a given athlete profile

LESSON SEQUENCE (2–3 LESSONS)

Lesson 1 — One Size Doesn't Fit All: Scenario debate: "Should a marathon runner and sprinter train the same?" Introduce specificity and individual differences. Sort exercise cards into "Best for ____" sport categories.

Lesson 2 — Athlete Case Studies: Each pair receives a Case Study Card (e.g., "15-year-old netball player returning from ankle injury"). Design a workout specifically for their athlete, justifying every exercise. Build in Creator Mode.

Lesson 3 — Gallery Walk: Pairs display athlete card + workout at stations. Gallery walk to review 3–4 other designs. Whole-class discussion: what was similar? Different? Why? Key takeaway: same principles, different applications.

Lateral Shuffles

Shoulder Press

Agility Drills

High Knees

Jump Squats

Lunges



3

Level Up

Progressive Overload & Reversibility · Building and Losing Fitness

LEARNING INTENTIONS

- Define progressive overload and explain why gradually increasing demands is essential
- Describe reversibility ("use it or lose it") and its implications for training consistency
- Build a base and progressed workout, then compare using Workout Analysis

LESSON SEQUENCE (2–3 LESSONS)

Lesson 1 – The Overload Concept: "Week 1: 10 push ups feel hard. Week 6: 10 push ups feel easy. What changed?" Introduce progressive overload (4 ways: more reps, more time, more intensity, less rest) and reversibility. Students discuss how to make each exercise in a circuit harder.

Lesson 2 – Tracking Sheet & Base Workout: Students complete a Progressive Overload Tracking Sheet – choose 6 exercises and plan how each progresses over 3 weeks. Build the **Week 1 (base)** workout in Creator Mode.

Lesson 3 – Progressed Version & Comparison: Build the **Week 3 (progressed)** version – same exercises with overload applied (longer durations, harder variations, less rest). Compare base vs progressed in Workout Analysis. Discuss: "What happens if you stop training after Week 1?" (reversibility).

Squats → Jump Squats

Push Ups → Diamond Push Ups

Plank 20s → 40s

Lunges → Walking Lunges

Star Jumps → Burpees

4

Start Right, Finish Right

Warm Up, Cool Down & Recovery · Preparing and Protecting the Body

LEARNING INTENTIONS

- Explain why warming up and cooling down are essential parts of any training session
- Distinguish between active and passive recovery and when each is appropriate
- Design a complete session (warm up → main workout → cool down) as one workout

LESSON SEQUENCE (2–3 LESSONS)

Lesson 1 – Why Warm Up?: Practical demo: attempt a flexibility test cold, then again after 5 mins dynamic warm up – compare results. Discuss what happens to muscles, heart rate, blood flow. Introduce cool down purposes: gradual HR reduction, lactic acid removal, flexibility.

Lesson 2 – Active vs Passive Recovery: Define active recovery (light movement, stretching) vs passive (rest, sleep, nutrition). Students complete a Session Planner: design a full training session. Explore the Warm Up and Cool Down templates in Workout Producer.

Lesson 3 – Complete Session Build: Build the complete session as one workout in Creator Mode: Phase 1 – Warm Up (3–4 dynamic exercises), Phase 2 – Main Workout (4–5 exercises), Phase 3 – Cool Down (3–4 static stretches). Record all phases.

Arm Circles (WU)

High Knees (WU)

Leg Swings (WU)

Quad Stretch (CD)

Hamstring Stretch (CD)

Child's Pose (CD)



5

Prove Your Program

Capstone Assessment · Integrating All Training Principles

LEARNING INTENTIONS

- Design a workout that demonstrates understanding and application of ALL training principles
- Complete the workout in Assessment Mode, identifying fitness components and muscle groups independently
- Produce a written reflection annotating how each principle was applied

LESSON SEQUENCE (2–3 LESSONS)

Lesson 1 — Revision & Capstone Planning: Quick-fire revision of all principles. Capstone brief: "Design a workout that applies every principle — and be ready to explain *why* you made each choice." Students plan on paper using a Principle Application Checklist:

- FITT variables clearly defined and justified
- Exercises specific to a chosen sport, goal, or athlete profile
- Includes warm up, main workout, and cool down phases
- Can explain how to progress this workout over time

Lesson 2 — Assessment Mode Recording **SUMMATIVE**

Students build their final workout in **Assessment Mode**. They identify fitness components and muscle groups independently (scored by app). Record each exercise with correct form. Teacher circulates to observe process.

Lesson 3 — Export, Annotate & Showcase: Export final workout video (landscape/portrait/square). Written reflection: annotate each section of the workout, explaining which principles apply and why. Example: "I chose 40s work / 15s rest because I was designing for muscular endurance (FITT — Time & Intensity)." Class showcase: watch 3–4 selected videos with creator explaining their reasoning.

ASSESSMENT MODE

In Assessment Mode, the app hides all fitness component and muscle group tags. After recording each exercise, students must select the correct components and muscles themselves. The app scores their answers instantly — giving both student and teacher immediate feedback on knowledge accuracy.

CONNECTED LEARNING — WRITTEN REFLECTION & ANNOTATION

Students produce a 1–2 page written document annotating their workout. For each section, they explain which training principle(s) apply and justify their design choices. This is the deepest demonstration of understanding — connecting practical workout design back to theoretical principles.



Assessment Overview

How student learning is measured – formative checkpoints and summative evidence.

Assessment Structure

WEEK	TYPE	TASK	EVIDENCE
1	Formative	FITT Planning Worksheet + two workout versions	Completed worksheet; saved workouts showing FITT variation
2	Formative	Sport-specific workout from athlete case study	Case study response; Creator Mode workout
3	Formative	Base vs progressed workout + tracking sheet	Tracking sheet; two workouts; Workout Analysis comparison
4	Formative	Complete training session (WU → Main → CD)	Session planner; complete session in Creator Mode
5	Summative	Final workout in Assessment Mode + written annotation	App scores; exported video; 1–2 page written reflection

Summative Assessment Rubric

Combines Assessment Mode score, workout design quality, and the written reflection.

Excellent (A)

App Score: 85–100%

Clear application of all training principles. Detailed, accurate justifications for every design choice. Well-structured WU/CD. Progressive overload strategy articulated.

Proficient (B)

App Score: 70–84%

Applies most principles effectively. Explains key design choices with reasonable justification. Includes WU/CD. Some understanding of overload demonstrated.

Developing (C)

App Score: 50–69%

Partial application of principles – some present but not all clearly applied. Surface-level reflection. WU or CD may be incomplete.

Beginning (D)

App Score: Below 50%

Limited understanding of principles. Minimal or inaccurate reflection. Incomplete session structure. Requires additional support.

Holistic Assessment Criteria

Principle Knowledge — 30%

Assessment Mode score + written reflection accuracy

Program Design — 30%

Exercise selection, FITT variables, session structure

Application & Justification — 25%

Connecting design choices to specific principles

Performance & Technique — 15%

Correct form, smooth transitions, presentation quality



Differentiation & Extensions

Strategies for supporting all learners and extending capable students.

Support Strategies

- **Simplified principle cards** — Printed cards with each principle in simple language plus visual examples
- **Reduced scope** — Focus on 3 core principles (FITT, Overload, Warm Up/Cool Down)
- **Pair support** — Pairs for Weeks 1–4, individual for Week 5 only
- **Creator Mode scaffold** — Review in Creator Mode first, then switch to Assessment Mode
- **Structured reflection** — Sentence starters for annotation (e.g., "I chose this because...")
- **Fewer exercises** — Allow 4 exercises instead of 6+ for final workout

Extension Activities

- **Periodisation plan** — Design a 6-week periodised program using all principles
- **Coaching video** — Create a video that teaches a principle to younger students
- **Real-world analysis** — Analyse a pro athlete's published training program
- **Training diary** — 3-week diary applying progressive overload personally
- **Myth busting** — Research and debunk training myths (e.g., "no pain, no gain")
- **Cross-curricular** — Link to Science (adaptations) or Health (wellbeing)

Training Principles Reference Table

Quick-reference guide for revision or classroom display. All exercises below are available in Workout Producer's built-in library.

PRINCIPLE	DEFINITION	EXAMPLE	IN THE APP
FITT	Frequency, Intensity, Time, Type — the four variables of exercise prescription	Increase duration 20→30 min; swap bodyweight for resistance	Adjust durations, rest, exercises in Creator Mode
Specificity	Adaptations are specific to the training performed	Swimmer = upper body & cardio; sprinter = explosive power	Component filters to find sport-specific exercises
Individual Differences	People respond differently based on age, fitness & goals	Beginner needs lower intensity than experienced athlete	Build versions for different profiles; compare via Analysis
Overload & Reversibility	Demands must increase over time; gains are lost if training stops	Wk 1: squats → Wk 3: jump squats; detraining after injury	Base + progressed versions; Workout Analysis comparison
Warm Up / Cool Down	Preparing the body for exercise and returning it to rest	Dynamic stretches before; static stretches after	Built-in WU & CD templates; complete sessions



**Plan it. Perform it.
Prove you understand it.**

Workout Producer — available on the App Store

A CONNECTEDPE RESOURCE