Year 10 Sport Science Worksheet: Components of Fitness & Training Principles

Name: _____
Class: _____
Date: _____

Task 1: Components of Fitness Multiple Choice

*Circle the correct letter (**A, B, C, or D**) for each question based on your course knowledge.*

1. Which component of fitness is best defined as a low body fat percentage or high muscle mass?

- A) Power
- B) Body Composition
- C) Muscular Strength
- D) Balance

2. An activity requiring explosive movement, such as basketball or gymnastics, primarily relies on which component?

- A) Muscular Endurance
- B) Speed
- C) Power
- D) Coordination

3. Which component involves any activity where a quick decision or response to a stimulus is needed?

- A) Agility
- B) Reaction time
- C) Balance
- D) Coordination

Task 2: Principles of Training Match-Up

*Match the correct training principle or concept to its definition by writing the correct number (**1 to 6**) in the middle column.*

Training Concept	Match Number	Course Definition
1. Frequency	_____	**A.** Training should meet the needs of the sport, physical, or skill-related goals.
2. Progressive overload	_____	**B.** Altering types of training to avoid boredom and maintain motivation.
3. Specificity	_____	**C.** The number of training sessions completed over a period of time.
4. Reversibility	_____	**D.** Changes to the body due to increased training loads.
5. Variation	_____	**E.** Training needs to be demanding enough to cause the body to adapt.
6. Adaptation	_____	**F.** If training stops, or intensity is lowered, fitness gains are lost.

Task 3: Short Answer Exam Questions

Answer the questions below using the exact terms from your specification document. (p. 1)

1. What do the letters in the acronym FITT stand for?

- **F:** _____
- **I:** _____
- **T:** _____
- **T:** _____

2. Name three types of technology an athlete can use to measure their exercise intensity.

1. _____
2. _____
3. _____

Task 4: Data & Intensity Calculations

Use the Borg RPE (Rating of Perceived Exertion) scale rule from your specification to solve the problem below.

The Rule: RPE × 10 = Heart Rate (bpm)

1. An athlete rates their current exercise intensity as an **8 on the Borg RPE Scale**. Calculate their estimated heart rate.

   Calculation: _____

   Answer: _____ bpm

2. If an athlete's training zone is set to the **Aerobic Training Zone (60–85% of max heart rate)**, explain why it is important to track their intensity.
