EduFlow Study Notes

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```
[
  {
    "title": "What is Quantum Computing?",
    "bullets": [
      "Represents a revolutionary approach to computation.",
      "Leverages the principles of quantum mechanics."
    ]
  },
  {
    "title": "The Quantum Difference: Qubits",
    "bullets": [
      "Classical computers use bits (0 or 1).",
      "Quantum computers use quantum bits, or qubits.",
      "Qubits can exist in superposition, representing multiple states simultaneously."
    ]
  },
  {
    "title": "Superposition: Parallel Processing Power",
    "bullets": [
      "Qubits in superposition can be in multiple states at once.",
      "This enables quantum computers to process vast amounts of information in parallel."
    ]
  },
  {
    "title": "Core Quantum Concepts",
    "bullets": [
      "Superposition: Qubits exist in multiple states simultaneously.",
      "Entanglement: Qubits become correlated in ways that have no classical equivalent."
    ]
  },
  {
    "title": "Potential Applications of Quantum Computing",
    "bullets": [
```

```
      "Revolutionize cryptography and security.",
      "Accelerate drug discovery and material science.",
      "Enhance financial modeling and optimization problems."
    ]
  }
]
```