Quiz: Computational Thinking Techniques

**Instructions**: Choose the correct answer for each question.

1. What is decomposition in computational thinking?

a) Breaking down a complex problem into smaller, more manageable parts.

b) Identifying the essential details and ignoring unnecessary details.

c) Developing a step-by-step plan or set of instructions to solve a problem.

2. Which computational thinking technique focuses on identifying the essential details and ignoring unnecessary details?

a) Decomposition

b) Abstraction

c) Algorithmic thinking

3. What is algorithmic thinking?

a) Breaking down a complex problem into smaller, more manageable parts.

b) Identifying the essential details and ignoring unnecessary details.

c) Developing a step-by-step plan or set of instructions to solve a problem.

4. How can decomposition be used in problem-solving?

a) By simplifying complex problems through focusing on essential details.

b) By breaking down a problem into smaller, more manageable parts.

c) By developing a step-by-step plan or set of instructions.

5. Which computational thinking technique involves developing a step-by-step plan or set of instructions?

a) Decomposition

b) Abstraction

c) Algorithmic thinking

6. How can abstraction be used in problem-solving?

a) By simplifying complex problems through focusing on essential details.

b) By breaking down a problem into smaller, more manageable parts.

c) By developing a step-by-step plan or set of instructions.

7. What is the importance of algorithmic thinking in problem-solving?

a) It helps in breaking down complex problems into smaller parts.

b) It helps in identifying the essential details and ignoring unnecessary details.

c) It provides a systematic approach to solving problems.

8. Which computational thinking technique involves identifying the essential details and ignoring unnecessary details?

a) Decomposition

b) Abstraction

c) Algorithmic thinking

9. How can algorithmic thinking be used in problem-solving?

a) By simplifying complex problems through focusing on essential details.

b) By breaking down a problem into smaller, more manageable parts.

c) By developing a step-by-step plan or set of instructions.

10. What is the difference between decomposition, abstraction, and algorithmic thinking?

a) Decomposition breaks down a problem, abstraction focuses on essential details, and algorithmic thinking develops a plan.

b) Decomposition focuses on essential details, abstraction breaks down a problem, and algorithmic thinking develops a plan.

c) Decomposition develops a plan, abstraction breaks down a problem, and algorithmic thinking focuses on essential details.