

Task Breakdown

1. Decompose the Problem:

- Identify the necessary components: tea leaves, hot water, cup, milk (optional), sugar (optional).
- Determine the sequence of actions: boiling water, preparing the cup, adding tea leaves, steeping, adding milk/sugar (if desired).

2. Write Pseudocode:

- Create a step-by-step list of instructions using plain language.
- Incorporate conditional statements (if-then-else) for decisions like adding milk or sugar.

Example:

Start

Fill kettle with water

Boil water

While water is boiling:

 Prepare teacup

Once water has boiled:

 Pour boiling water into teacup

 Add tea leaves

 Set timer for steeping time

 Wait for timer to finish

 If milk desired:

 Add milk

 If sugar desired:

 Add sugar

 Stir tea

- End

Flowchart Description for Making a Cup of Tea

Start: Oval shape

Process: Rectangle shape

- Fill kettle with water
- Boil water
- Prepare teacup

Decision: Diamond shape

- Is water boiled?

Process: Rectangle shape

- Pour boiling water into teacup
- Add tea leaves
- Set timer for steeping time
- Wait for timer to finish

Decision: Diamond shape

- Add milk?

Process: Rectangle shape (optional)

- Add milk

Decision: Diamond shape

- Add sugar?

Process: Rectangle shape (optional)

- Add sugar

Process: Rectangle shape

- Stir tea

End: Oval shape

Connections: Use arrows to indicate the flow from one shape to the next, based on the decision outcomes.