```python
class Farmer:
    def __init__(self, side):
        self.side = side

    def __str__(self):
        return "Farmer"

    def cross(self):
        self.side = 1 - self.side

class Sheep:
    def __init__(self, side):
        self.side = side

    def __str__(self):
        return "Sheep"

    def cross(self):
        self.side = 1 - self.side

class Cabbage:
    def __init__(self, side):
        self.side = side

    def __str__(self):
        return "Cabbage"

    def cross(self):
        self.side = 1 - self.side

class Wolf:
    def __init__(self, side):
        self.side = side

    def __str__(self):
        return "Wolf"

    def cross(self):
        self.side = 1 - self.side

class RiverCrossingRiddle:
    def __init__(self):
        self.farmer = Farmer(0)
        self.sheep = Sheep(0)
        self.cabbage = Cabbage(0)
        self.wolf = Wolf(0)

    def display_state(self):
        print("Current positions.")
        print("Farmer side:", "Left" if self.farmer.side == 0 else "Right")
        print("Sheep side:", "Left" if self.sheep.side == 0 else "Right")
        print("Cabbage side:", "Left" if self.cabbage.side == 0 else "Right")
        print("Wolf side:", "Left" if self.wolf.side == 0 else "Right")
        print()

    def cross_river(self, item):
        if item.side == self.farmer.side:
            print("\nYou and", item, "cross the river.")
            self.farmer.cross()
            item.cross()
            self.display_state()
            return self.is_game_over()
        else:
            print("\nThe", item, "is not on the same side as you. Choose again.\n")
            return False

    def cross_empty(self):
        print("\nYou cross the river without taking anything.")
        self.farmer.cross()
        self.display_state()

    def is_game_over(self):
        if self.sheep.side == self.wolf.side and self.farmer.side != self.sheep.side:
            print("Game over! The wolf ate the sheep.")
            print("Please try again!\n")
            return True
```

```python
        elif self.cabbage.side == self.sheep.side and self.farmer.side != self.cabbage.side:
            print("Game over! The sheep ate the cabbage.")
            print("Please try again!\n")
            return True
        elif self.sheep.side == self.cabbage.side and self.farmer.side != self.sheep.side:
            print("Game over! The sheep ate the cabbage.")
            print("Please try again!\n")
            return True
        elif self.wolf.side == self.sheep.side == 1 and self.farmer.side != self.sheep.side:
            print("Game over! The wolf ate the sheep.")
            print("Please try again!\n")
            return True
        return False

    def play_game(self):
        print("Welcome to the River Crossing Riddle!")
        print("A farmer with a wolf, a sheep, and a cabbage must cross a river by boat. The boat can carry only the farmer and a single item.
        print("Do note that if left unattended together, the wolf would eat the goat, or the goat would eat the cabbage.")
        print("How can they cross the river without anything being eaten?\n")
        self.display_state()
        game_completed = False

        while self.farmer.side != 1 or self.sheep.side != 1 or self.cabbage.side != 1 or self.wolf.side != 1:
            choice = input("What do you want to take across the river? (Sheep, Cabbage, Wolf, None, or Exit(to quit) ) \n")
            if choice.lower() == "sheep":
                game_over = self.cross_river(self.sheep)
            elif choice.lower() == "cabbage":
                game_over = self.cross_river(self.cabbage)
            elif choice.lower() == "wolf":
                game_over = self.cross_river(self.wolf)
            elif choice.lower() == "none":
                self.cross_empty()
                game_over = self.is_game_over()
            elif choice.lower() == "exit":
                give_up = input("\nGiving up already? (Yes or No): ")
                if give_up.lower() == 'yes':
                    print("Alright then, exiting the riddle. Goodbye and we hope you enjoyed it!")
                    game_completed = True
                    break
                elif give_up.lower() == 'no':
                    print("That's the spirit! Let's continue.\n")
                    self.display_state()
                    game_over = False
                else:
                    print("\nInvalid input. Please enter either 'Yes' or 'No'")
                    game_over = False
            else:
                print("That is not in the list. Please try again.")
                game_over = False

            if game_over:
                play_again = input("Do you want to play again? (Yes or No): ")
                if play_again.lower() == 'yes':
                    print("Restarting the game!\n")
                    self.__init__()
                    self.display_state()
                elif play_again.lower() == 'no':
                    print("Thank you for playing! Goodbye.")
                    game_completed = True
                    break
                else:
                    print("\nInvalid input. Please enter either 'Yes' or 'No'")

        if not game_completed:
          print("Congratulations! You successfully crossed the river with the sheep, cabbage, and wolf without any of them being eaten.")

if __name__ == "__main__":
    game = RiverCrossingRiddle()
    game.play_game()
```

```
wolf

You and Wolf cross the river.
Current positions.
Farmer side: Right
Sheep side: Right
Cabbage side: Left
Wolf side: Right

What do you want to take across the river? (Sheep, Cabbage, Wolf, None, or Exit(to quit) )
sheep

You and Sheep cross the river.
Current positions.
Farmer side: Left
Sheep side: Left
Cabbage side: Left
Wolf side: Right

What do you want to take across the river? (Sheep, Cabbage, Wolf, None, or Exit(to quit) )
cabbage

You and Cabbage cross the river.
Current positions.
Farmer side: Right
Sheep side: Left
Cabbage side: Right
Wolf side: Right

What do you want to take across the river? (Sheep, Cabbage, Wolf, None, or Exit(to quit) )
none

You cross the river without taking anything.
Current positions.
Farmer side: Left
Sheep side: Left
Cabbage side: Right
Wolf side: Right

What do you want to take across the river? (Sheep, Cabbage, Wolf, None, or Exit(to quit) )
sheep

You and Sheep cross the river.
Current positions.
Farmer side: Right
Sheep side: Right
Cabbage side: Right
Wolf side: Right

Congratulations! You successfully crossed the river with the sheep, cabbage, and wolf without any of them being eaten.
```