A public key is a key linked to your wallet in the blockchain, it’s like an ID to represent you in the chain. All of the transactions that you execute will be linked to this key (also called address), and everybody can see your portfolio and transaction history.
You also need it if you want to receive assets from another address.

Each transaction you make is signed with your address to prove that you’re the owner, and all of them are public and permanent.

Depending on the wallet provider you’re using, you can have multiple addresses within your seed phrase