

Critical Art Practices

Hands on with wallets, blockchain, and NFTs

PREP-STEPs Required: If you have not already done so, download and install metamask for your browser: <https://metamask.io/download/> (<https://metamask.io/download/>)

You will also need to click through Metamask's onboarding flow, generating and explaining your private key. If you are unfamiliar with blockchain wallets, I highly recommend paying attention to this part!

Optional: if your computer is decent, open the faucet website, put in your address and start collecting test coins: <https://sepolia-faucet.pk910.de/#/claim/459da40b-8c2e-4bb8-94b8-94555f86a3f8> (<https://sepolia-faucet.pk910.de/#/claim/459da40b-8c2e-4bb8-94b8-94555f86a3f8>)

The address will be at the top of metamask and look something like this

0x301DF95382B88305E475E9A58EBd947fE123bDD0

STEP ONE Put your name and metamask address in the worksheet here: (Link removed for student privacy)

STEP TWO Make testnets visible in Metamask.

Click the small network icon in the top left. You should see a drop down appear, with the names of various networks. Turn on the toggle that says `show test networks` and select `sepolia`.

STEP THREE Claim your test coins from the Faucet (if using) *Note: you will need to have gathered at least 0.05 to be able to claim them, this is why we started at the beginning of class*

If you weren't using the faucet, tell Sarah and she will send you enough to complete the activity

STEP FOUR Open metamask and verify that you are on Sepolia network, and that you see a balance. It might take a moment or two to update

STEP FIVE Search your metamask address on the block explorer, and find the transaction that sent the test coins to you: <https://sepolia.etherscan.io/> (<https://sepolia.etherscan.io/>)

Identify the transaction sender, and transaction hash

STEP SIX Take a look at our class NFT contract:

<https://sepolia.etherscan.io/>

[address/0xc2f54aa675228137f7c69599db63c9d0efff8bed](https://sepolia.etherscan.io/address/0xc2f54aa675228137f7c69599db63c9d0efff8bed) (<https://sepolia.etherscan.io/>

[address/0xc2f54aa675228137f7c69599db63c9d0efff8bed](https://sepolia.etherscan.io/address/0xc2f54aa675228137f7c69599db63c9d0efff8bed))

Under the tab `Contract` → `Read Contract` try calling some of the methods. Of particular interest are `defaultURI` `name` and `tokenURI`

If you look at the past transactions, you will see that I have minted three NFTs. You can use `tokenURI` to inspect the metadata of NFTs with id `1` and `2`. One is "onchain" and one is not. Try visiting both URIs in browser

STEP SEVEN Under the tab `Contract` → `Write Contract` click `Connect to web3`. Metamask should prompt up for you to approve the connection.

Click `Mint` to mint an NFT to your own address. You will also need to approve this in Metamask.

STEP EIGHT On the block explorer, find the transaction that minted the NFT. You should be able to read its token number in the transaction details.

Add the token number to this URL to view the token you just minted on OpenSea:

<https://testnets.opensea.io/assets/>

[sepolia/0xc2f54Aa675228137F7c69599db63C9d0eFfF8Bed/](https://testnets.opensea.io/assets/sepolia/0xc2f54Aa675228137F7c69599db63C9d0eFfF8Bed/) (<https://testnets.opensea.io/>

[assets/sepolia/0xc2f54Aa675228137F7c69599db63C9d0eFfF8Bed/](https://testnets.opensea.io/assets/sepolia/0xc2f54Aa675228137F7c69599db63C9d0eFfF8Bed/)) YOUR TOKEN ID HERE

STEP NINE As a bonus, find someone else's address in the class and use metamask to send them a simple currency-transferring transaction