• What's in the inode?

The metadata for a single file.

• We describe a free block bitmap in this exploration. What other ways might we represent free blocks in the system?

There is another way that is similar to a linked-list, a free list. A free list points to the first free block which points to the next free block and so on.

• Why would not having a buffer cache make things run more slowly?

Without a buffer cache there would be no stored instances of blocks, which would mean that everytime we make a call to read or write to a block, we would have to get that block from the slow disk which would cost time. By using a buffer we store recent blocks in memory that we have used and can get them easier than if we had to go back to the disk everytime.