1) list ten examples of interfaces between people and the real world.

- Gas pedal

- Doorknob

- Steering wheel

- Remote control

- Computer mouse

- straw

- skateboard

- bicycle

- piano

- typewriter

2) Give an example of a good interface between a player and a game. Explain why it is a good interface.

A good interface would be in a game that:

Physical input -> world = moving the thumbstick increases speed based on the intensity of the angle. This means that the character will increase their speed if the thumbstick is pushed all the way to one side.

World -> physical output = You see enough of the screen to still be surprised by enemies but do not see so little that the enemies overwhelm you easily

Physical Input -> Virtual Interface = can use double click to dash and clicking on certain areas allows the player to access different items.

Virtual Interface -> World = Actions on items have immediate results and no delay

World -> Virtual Interface = Scores are shown to increase when a player defeats an enemy and energy bars deplete based on the speed at which the player moves around

Virtual Interface -> Physical Output = Can see player and enemy health bars

3) Give an example of a poor interface between a player and a game. Explain why it is a poor interface.

A poor interface would be in a game that:

Physical input -> world = physical input doesn't logically match the gameworld output – right makes you go left, left makes you go right, etc.

World -> physical output = you see too little of the screen so enemies attack you and you do not have time to prepare

Physical Input -> Virtual Interface = no other inputs besides movement (ex: no double clicking, single click, etc)

Virtual Interface -> World = actions on items take too long of a delay for the player to use the objects

World -> Virtual Interface = Scores do not increase and energy bars deplete too quickly

Virtual Interface -> Physical Output = The player cannot see their own health bar or the enemies' health bars

These are all aspects of a game that need to work well with each other in order to have a good interface. This allows the player to successfully interact with the game world in order to accomplish the goals that the game sets in place for them. A good game/interface gives them enough information to succeed while also concealing interesting information to pique interest. All of these aspects should be balanced in a good interface.