Name: _____

Aufgabe 2: Leseverstehen (Reception) **20 Punkte**

Ihre Firma hat den Auftrag erhalten, eine Produktionsfirma von Automotoren über die Einsatzmöglichkeiten und die technischen Voraussetzungen von Virtual Reality (VR) und Augmented Reality (AR) sowie den möglichen Mehrwert für das Unternehmen zu informieren. Sie bereiten eine Präsentation für den Firmenvorstand vor.

*Lesen Sie den Artikel auf Seite 6 und notieren Sie die relevanten Informationen auf **Deutsch**.*

Virtual Reality vs. Augmented Reality			
1.	Sinnesbereiche, die durch VR angesprochen werden	• •	2
2.	Haupteinsatzbereiche von VR:	• •	2
3.	Funktionen der zugrundeliegenden Programmiersprache VRML:	• •	2
4.	Definition Augmented Reality:	Funktionsweise:	1
5.	Bereiche des täglichen Lebens, in denen AR bereits eingesetzt wird:	• •	2
6.	Hauptsächlich in führenden Branchen eingesetzte Funktionen von AR:	• •	2

Fortsetzung nächste Seite

Name: _____

Fortsetzung zu Aufgabe 2: Leseverstehen (Reception)

7.	Unterschied zwischen VR und AR in der Interaktion mit der Umgebung:	VR: AR:	2
8.	Gemeinsamkeiten von VR und AR:	• •	2
8.	Technisches Zubehör für Virtual Reality:	• •	2
9.	Potentieller Einsatzbereich von Mischung von VR und AR:	_____ Beispiel:	2
10.	Ziel der Vermischung von VR und AR:		1

zu Aufgabe 2: Leseverstehen (Reception)

Virtual Reality vs. Augmented Reality

One of the biggest confusions in the world of augmented reality is the difference between Augmented Reality (AR) and Virtual Reality (VR). Both are earning a lot of media attention and are promising tremendous growth.
VR is an artificial, computer-generated simulation or recreation of a real life environment or situation. It immerses the user by making them feel like they are experiencing the simulated reality firsthand, primarily by stimulating their vision and hearing. VR is typically achieved by wearing a headset equipped with the technology, and is used prominently in two different ways. First, to create an imaginary reality for gaming, entertainment, and play. Second, to enhance training for real life environments by creating a simulation of reality where people can practice beforehand. VR is possible through a coding language known as VRML (Virtual Reality Modeling Language) which can be used to create a series of images, and specify what types of interactions are possible for them.

AR is a technology that layers computer-generated enhancements atop an existing reality in order to make it more meaningful through the ability to interact with it. AR is developed into apps and used on mobile devices to blend digital components into the real world in such a way that they enhance one another, but can also be told apart easily. AR technology is quickly coming into the mainstream. It is used to display score overlays on telecasted sports games and pop out 3D e-mails, photos or text messages on mobile devices. Leaders of the tech industry are also using AR to do amazing and revolutionary things with holograms and motion activated commands.

AR and VR are inverse reflections of one in another with what each technology seeks to accomplish and deliver for the user. The difference is that VR offers a digital recreation of a real life setting, while AR delivers virtual elements as an overlay to the real world. Augmented and virtual realities both leverage some of the same types of technology, and they each exist to serve the user with an enhanced or enriched experience. AR enhances experiences by adding virtual components such as digital images, graphics, or sensations as a new layer of interaction with the real world. Contrastingly, VR creates its own reality by replicating an environment which cannot react. VR is usually delivered to the user through a head-mounted, or hand-held controller. This equipment connects people to the VR, and allows them to control and navigate their actions in an environment meant to simulate the real world.
Both technologies enable experiences that are becoming more commonly expected and sought after for different purposes. While in the past they seemed merely a figment of a science fiction imagination, new artificial worlds come to life under the user's control, and deeper layers of interaction with the real world are also achievable. In the early stages the two technologies were mostly used in the entertainment industry. But nowadays, both virtual and augmented realities have great potential in changing the landscape of the medical field by making things such as remote surgeries a real possibility.
They do not always operate independently of one another, and in fact are often blended together to generate an even more immersing experience. For example, haptic feedback-which is the vibration and sensation added to interaction with graphics-is considered an augmentation. However, it is commonly used within a VR setting in order to make the experience more lifelike touch. Alone or blended together, they are undoubtedly opening up worlds-both real and virtual alike.