



Action Cards (27)

Reflection Questions (15)

Uses & Gratifications (12)

Technology Cards (33)

Character Cards (31)

Instruction Cards (9)

A solid circle indicates the card is from an expansion deck.

Julia (ju - lee - ah)

she/her

5

Name (Phonetic Pronunciation)

**Pronouns** 

---- Age



Occupation ----

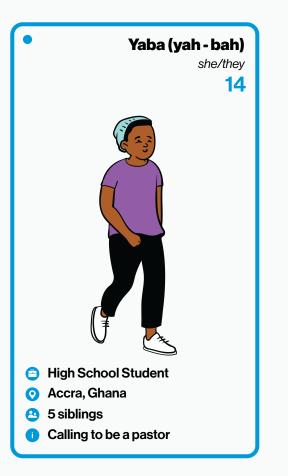
Current Location ----

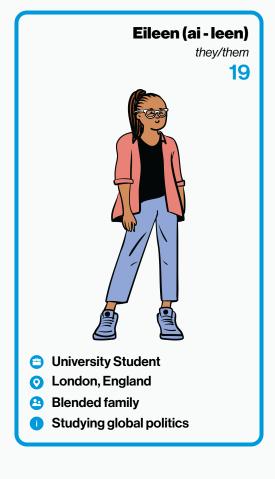
Family Fact ----

Personality Trait ----

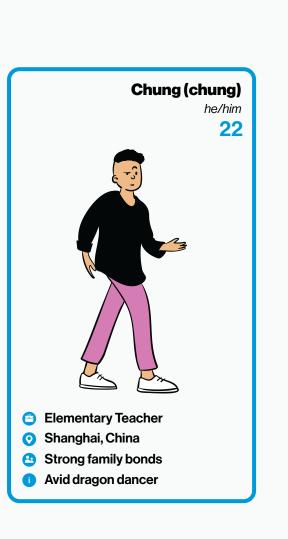
- Kindergartner
- Vienna, Austria
- German and Hungarian parents
- 1 Loves giraffes and smartphones











Charlotte (shar - lot)

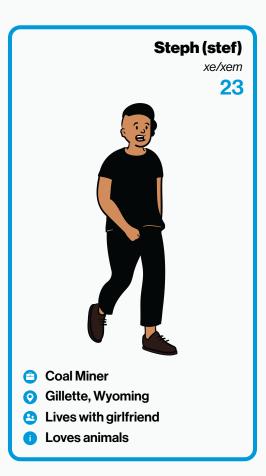
High School Student

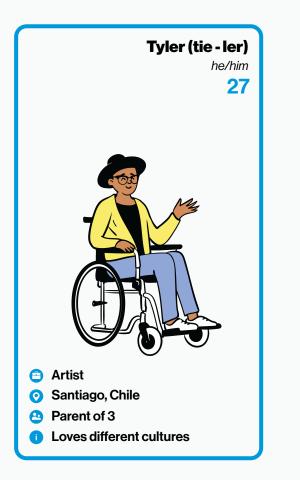
Melbourne, Australia

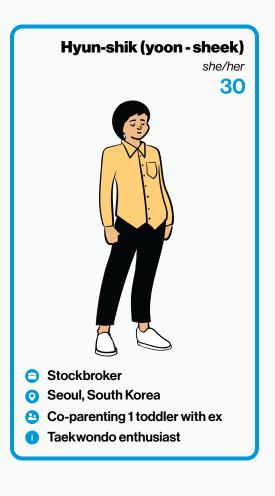
High school basketball star

Lives with mothers

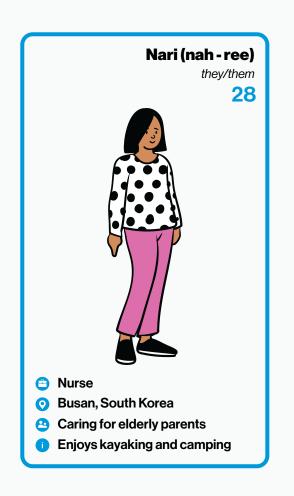
**15** 

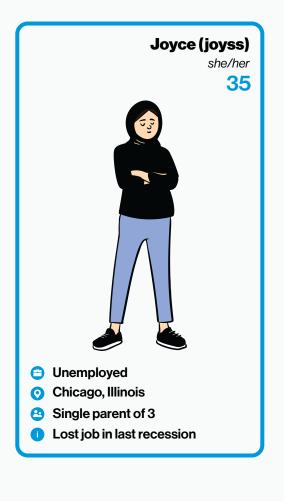






















Rural Physician

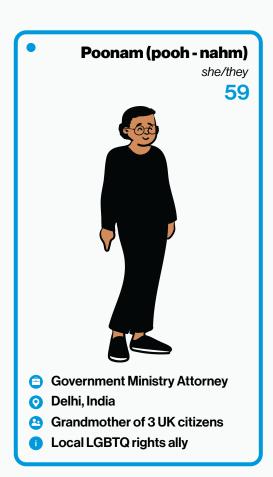
Parent of 2 teenagers

Creates and sells soaps

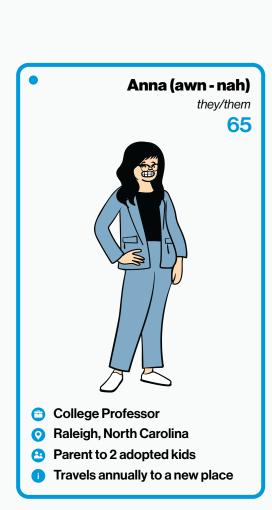
Indiana, USA

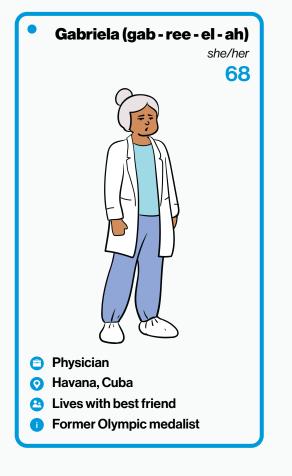
Martha (mar - tha)

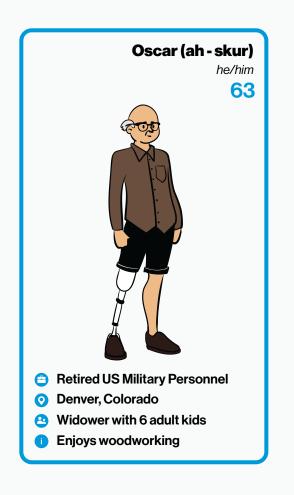
45





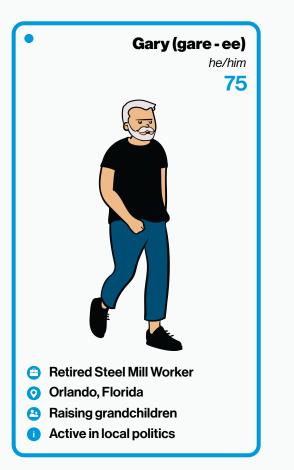




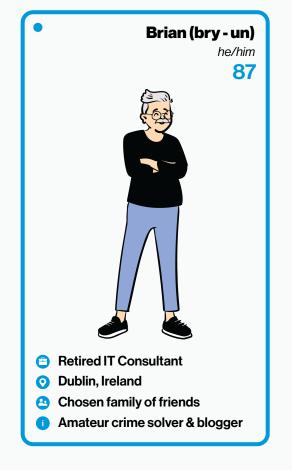


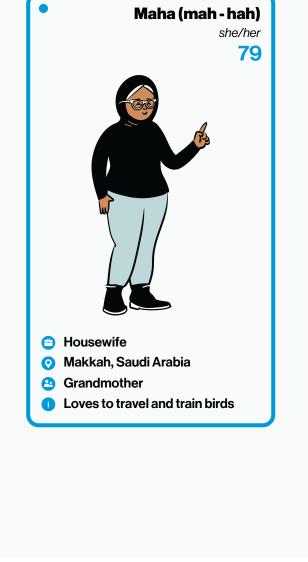














# (Advanced) Robotics



Combination of sophisticated programming and powerful hardware

Utilizes smart sensor technology to interact with real world

Enables manufacturing factories to run without human oversight around the clock

#### 360° Video Camera

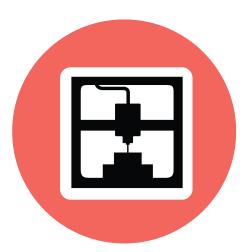


Records video in a sphere for playback on a computer, mobile, or headset

Reproduces a scene as it happens in all directions at a specific point in time

Enables the viewer to observe places in immersive detail for greater understanding

#### **3D Printer**



Produces physical representations of digital 3D models

Leverages additive manufacturing (new layers built on prior layers)

Key component of rapid prototyping in product design and testing

#### 3D Scanner



Professional imaging tool for constructing digital 3D models

Uses software to stitch multitudes of images into detailed textures

Used for reconstructing crime scenes, historical artifacts, real estate, & much more

#### **Autonomous Vehicles**



Vehicles that sense their environment to travel safely with little or no driver input

Integrates a wide variety of sensors, including radar, lidar, sonar, GPS, and odometry

Also known as a self-driving car, driverless car, or robo-car

#### **Action Camera**

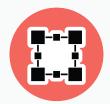


A camera designed to record while being immersed in an activity

Usually compact and waterproof with burst, time-lapse, and slow-motion modes included

Typical cameras are usually worn on the body or attached to gear

#### Blockchain



A decentralized, distributed ledger that records the ownership of a digital asset

Includes a database that stores encrypted blocks of data that is unable to be modified

Chains blocks of data together to form a chronological single-source-of-truth

#### **Artificial Intelligence**



Systems or machines that mimic human intelligence

Can iteratively improve itself based on the information it collects

Examples include machine learning, robotics, natural language processing, chatbots, & more

**Bots** 



A software application that runs automated tasks over the Internet

Typically performs tasks that are simple and repetitive

Can often do tasks much faster than humans can

#### **CNC Machine**



Computer Numerical Control machine

A high-precision tool that is computer-controlled

Makes repeated, accurate movements

#### **Drone**



A small, unmanned aircraft controlled by a remote controller or smartphone

Usually outfitted with cameras and/or scanners

Can also be programmed to fly without an operator

#### Computer Robotic Kits



Creation of robotic devices that can move and react to sensory inputs

Utilizes code to translate inputs into reactions

Can be used for complex output designs and specific reactionary functions

#### **DSLR Camera**



High-end, digital camera with interchangeable lenses and other accessories

Many can record video, providing a cinematic look

Uses a mirror to reflect, or direct, the incoming light towards the viewfinder

#### **Data Mining**



The process of extracting, analyzing, and discovering patterns in large data sets

Does not actually mine data, but the purpose is on discovering patterns

These patterns are often used in machine learning

#### **Electric Scooter**



Commonly outfitted with two wheels, an electric motor, and a standing platform

Requires frequent electric charges; does not need gasoline

Classified as a form of micro-mobility; is popular in metro areas for fast travel

#### Extended Reality (VR, AR, MR)



Extended reality encompasses all forms of content experienced via wearable headsets

VR replaces reality with a generated alternate while AR enhances reality with digital info

Mixed reality adds generated content to reality in a sophisticated, blended manner

**Machine Learning** 



Algorithms that enable computers to learn patterns from data

Allows data-driven decisions to be made

Popular end-goal examples include personalized recommendations

**Eye Tracking** 



The process of measuring the point of gaze or the motion of an eye relative to the head

Sensor technology that allows a computer device to know where a person is looking

Allows for unique insights into human behavior and facilitates natural user interfaces

Natural Language Processing



Al research investigating computer processing of languages for performing useful tasks

Algorithms that allow for the parsing and understanding of human language

Also allows for the creation or synthesis of written texts

Internet of Things (IoT)



A growing network of physical objects all connected via the internet

Usually embedded with sensors, software, and other technologies used to share information

Most devices store and exchange data with users via apps

Paper & Pencil



Communication tool

Can be used to illustrate, speak, or share ideas

One of the oldest forms of technology

#### Portable Energy Tech



Mobile electricity generation units used to directly power or recharge equipment

Can provide emergency power to home or business devices or extra power to personal gear

Examples are portable battery packs, solar powered chargers, & alternative fuel generators

**Post-it Notes** 



Simple, paper squares that typically have adhesive on the back

Can adhere to most surfaces for a limited time

Used for brainstorming, remembering things, or to cover entire rooms



**Proximity Tech** 

Sensors that have the ability to detect nearby objects without touching them

Can be used to trigger other outputs, signals, or notifications

Common use cases are automatic doors, vehicle backup cameras, and museum tours

#### **Smart Mirror**



A two-way mirror with a digital display behind the glass

Displays information in the form of widgets, such as weather, time, and news updates

Can often use AR to enhance the user's own image

#### **Prototyping Tools**



Simple building tools that allow rapid iterating of ideas

Allows users to create functioning ideas that can be later translated to final inventions

Lego®, Makey Makey, and littleBits are popular examples

#### **Smart Speaker**



An internet-enabled speaker that is controlled by spoken commands

Used for streaming audio content, relaying information, & communicating with other devices

Usually includes an integrated virtual assistant that offers interactive actions

#### **Smartwatch**



Wearable technology that provides real-time info and notifications

Monitors health and biometric data and enables personal reporting

Offers lower distraction alternatives to receiving digital updates

#### **Solar Panels**



Panels of sensors that absorb the sun's energy and converts it into electricity or heat

Can be used to decrease carbon footprint and provide electricity in secluded areas

Popular, consumer example is rooftop solar energy

Tablet with Smart Stylus

**Tablet computer with** multi-touch screen

Smart stylus offers detailed drawing and note-taking capabilities

Usually includes high-end camera that can take pictures and video

#### **Telepresence Robot**



Enables audio/video communication from a distance

User can log on and access the robot from anywhere in the world with internet

Allows the user to have a physical presence in another location

#### **XR Development**



Often requires advanced coding skills to generate virtual worlds or objects

Allows creation of custom experiences tailored to users' experiences or occupations

Commonly overlaps with game development skillsets

#### **XR Headset**



Enables consumption of 360° video, virtual, augmented, and mixed reality content

Standalone headsets do not require a connection to a computer, while higher-end units do

Often connected to app stores where developers can distribute immersive content

# There are two types of action cards: Reflection Questions and Uses & Gratifications.

Reflection questions encourage exploratory conversation amongst players. There is no right or wrong answer to the reflection question cards.

#### **Reflection Question**

Does [technology]
overshadow, mask, or
otherwise draw the focus
away from [character]'s
job duties?

#### **Information Seeking**



Looking for information pertaining to things/concepts/entities

What product or service can you create using [technology] that would allow [character] to fulfill their need for information seeking?

Uses and Gratifications are from the entrepreneurship expansion. These cards encourage players to pitch a product or service that best fulfills the need stated on the card. These cards also include a voting mechanic, that enables players to score points.

## **Reflection Question**

# Does [technology] overshadow, mask, or otherwise draw the focus away from [character]'s job duties?

## **Reflection Question**

Does [technology]
replace, or does it aid,
[character]? What are the
effects of this?

#### **Reflection Question**

Could [technology] be utilized by [character] in both appropriate and empowering ways?

#### **Reflection Question**

How can [character] use [technology] to improve their occupation? Their day-to-day life?

#### **Reflection Question**

What are some pitfalls for [character] in using [technology] in their occupation?

#### **Reflection Question**

As [technology] is increasingly used by those like [character], what is the impact on society?

#### **Reflection Question**

What are [technology]'s effects on the health of the planet and of [character]?

#### **Reflection Question**

What might be lost or who might be displaced in [character]'s community with the widespread adoption of [technology]?

#### **Reflection Question**

How could [technology] affect [character]'s personal life?

#### **Reflection Question**

Would [character] be fearful of their role/world being disrupted by [technology]? What is your reasoning?

#### **Reflection Question**

How could [technology]
foster/suppress
[character]'s local and
distant family
relationships?

#### **Reflection Question**

What are the ethical implications of [character] adopting [technology]?

#### **Reflection Question**

How could [technology]
build (or tear down)
community bridges for
[character]?

#### **Reflection Question**

Could [technology] have an impact on the globalization of [character's] career?

Globalization is defined as the connection of different parts of the world resulting in the expansion of international, cultural, economic, and political activities. It is the movement and integration of goods and people among different countries.

#### **Reflection Question**

What does [technology]
allow [character] to
ignore? How could this be
used to enhance
[character]'s [career]?

#### Information Seeking



Looking for information pertaining to things/concepts/entities

What product or service can you create using [technology] that would allow [character] to fulfill their need for information seeking? Social Surveillance



Keeping track of friends, relatives, or people you know

What product or service can you create using [technology] that would allow [character] to fulfill their need for social surveillance?

#### **Escape/Diversion**



Attempting to divert the mind from tedious or serious concerns

What product or service can you create using [technology] that would allow [character] to fulfill their need for escape/diversion?

#### **Social Competition**



Experiencing the thrill of competing with others

What product or service can you create using [technology] that would allow [character] to fulfill their need for social competition?

#### Entertainment



Pursuing an activity for the sake of enjoyment

What product or service can you create using [technology] that would allow [character] to fulfill their need for entertainment?

#### Challenge



Challenging oneself; testing one's abilities

What product or service can you create using [technology] that would allow [character] to fulfill their need for challenge?

#### **Self-Documentation**



Noting and keeping track of information about oneself/one's opinions

What product or service can you create using [technology] that would allow [character] to fulfill their need for self-documentation?

#### **Self-Expression**



Expressing one's feelings, thoughts, or ideas

What product or service can you create using [technology] that would allow [character] to fulfill their need for self-expression?

#### **Distributed Cognition**



Using technology or services to reduce one's mental load

What product or service can you create using [technology] that would allow [character] to fulfill their need for distributed cognition?

#### Social Interaction



Interacting with other people or social groups

What product or service can you create using [technology] that would allow [character] to fulfill their need for social interaction?

#### **Content Creation**



Generating new content for various purposes

What product or service can you create using [technology] that would allow [character] to fulfill their need for content creation?

Time Managment



Keeping track and managing time

What product or service can you create using [technology] that would allow [character] to fulfill their need for time management?

# **Card Categories Character**

The blue cards represent fictional characters from real locations around the world. Each character card includes name, phonetic pronunciation, pronouns, and age in the top-right corner. The bottom-left corner includes four elements: occupation, current location, family dynamic, and a personal fact(s).

# **Card Categories**

**Technology** 

The red cards represent technologies. These technologies range from emerging to current, to as old as paper and pencil. Each technology includes a small image/icon of that technology and three (3) short definitions of what it is. These definitions are meant to provide a high-level overview of what the technology is, but should not act as a complete definition. To learn more about the technologies and their uses, we encourage you to do your own research.

## **Card Categories**

**Action** 

The green cards represent discussion prompts. Each action card includes a [character] and a [technology] blank. Cards with no solid, green circles in the top, left-hand corner are reflection questions. Cards with solid, green circles in the top, left-hand corners indicate expansion cards. For further explanation on expansion action cards, reference the expansion instruction cards.

#### **Basic Instructions**

Step 1

## Shuffle cards into three piles; draw cards.

Separate the deck colors into three smaller decks: blue character cards, red technology cards, and green action cards. Shuffle piles. Select one (1) card from each pile.

#### **Expansions**

What The Deck is designed to be scaled and integrated with expansion decks. Expansion cards are marked with small, solid circles in the top, left-hand corners of the cards. If there is one circle, it is from Expansion #1. Two circles indicate Expansion #2 and so on. If there is no circle, it is from the original deck. It is recommended that you leave the character and technology expansion cards in the deck for any variation you play. However, you should separate the action cards into their respective expansion packs. Each expansion will include a description and rule variation card to further expand on how it integrates and interacts with What The Deck.

#### **Basic Instructions**

Step 2

# Read your cards and complete the action card prompt.

Use the character card and technology card to fill in the respected blanks on the action card. If you aren't familiar with a technology or any information on the character card, please feel free to do some research and learn more about it.

#### Expansion #1

Entrepreneurship Overview

The "entrepreneurship expansion" adds new character and technology cards, as well as Uses and Gratification action cards. This includes a different way to play What The Deck. The new action cards present a scenario where players must create a product or service that encompasses the selected technology. This product or service should allow the character to fulfill the need associated with the Use or Gratification defined on the action card.

#### **Basic Instructions**

Step 3

#### Discuss the completed

action card.

There is no right or wrong answer to the action cards – the goal is to think about your interpretation and have exploratory conversations with the other players.

#### Expansion #1

Entrepreneurship Rules

Players are challenged to come up with the best pitch or idea, defined by the action card prompt. After each player or group has their idea, players will take turns pitching their ideas to the rest of the class, or group of players. Players will then vote on the pitch/idea that best addresses the need. The best idea wins one point. At the end of the game, the team or player with the most points wins. The number of rounds should be determined before play begins, or by the facilitator.

