



Cyber Threat Guardian

Introduction

Cyber Threat Guardian (CTG) is a great game for all ages. Like other family games, it involves a little strategy and a bit of luck. This game is a fun way for younger children to begin learning about patterns, online safety practices, technology terminology and cyber attacks!

CTG is a fun, easy card game for the whole family where you can watch children learn as they play.



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Preparation & Objectives

When preparing to play Cyber Threat Guardian, a single CTG deck is needed for two players. Each CTG deck consists of 50 cards: 16 Blue Asset, 18 Red Attack, and 16 Green Defense cards.

There are **two primary game objectives** to consider when playing:

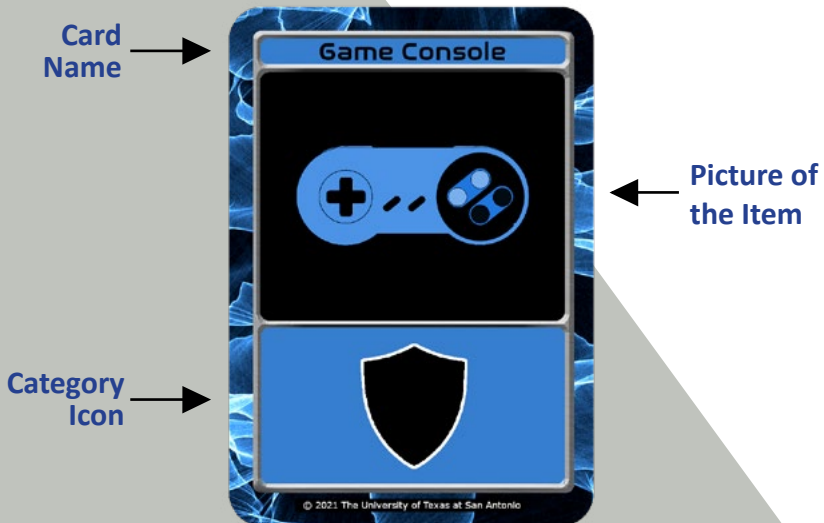
- A.** Each player lays down as many blue asset cards as possible while protecting each asset with a green defense card.
- B.** The player with the most asset and defense cards at the end of the game is the winner.

In the following pages, the game setup and **rules vary for three different age groups**: Grades K-1, Grades 1-2, and Second Grade. Choose the game option that best fits your needs.



Anatomy of a Card

Cyber Threat Guardian cards display three types of information: the name of the card, a picture representing the item, and an icon depicting the card's category.





CTG Card Types

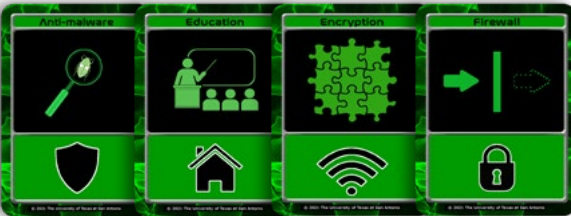
Blue Asset Cards

These cards represent the things you may have in your home like a desktop computer, cell phone, game console or private information about yourself. These are the cards you need to protect.



Green Defense Cards

Defense cards represent the systems used to protect devices, such as firewalls, anti-malware, encryption and education. These are the cards used to protect the asset cards. Defense cards will prevent the attack cards from removing asset cards.



Red Attack Cards

Attack cards are represented by the various ways hackers, or bad guys, can harm computers, game consoles, mobile phones or steal private personal information. Attack cards will remove unprotected asset cards. Note: Defense cards protect against attack cards.



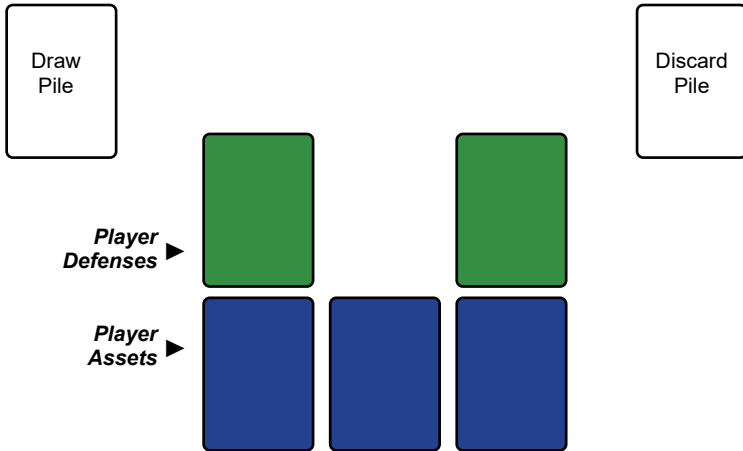


Game Setup & Rules

(Grades K-1)

Setup (recommended for grades K-1)

- Each player selects one blue asset card and places it in front of them in the playing area. This can be any blue asset card.
- Shuffle the cards. Once the deck is shuffled, the deck is set to the side of the playing area. This is called the draw pile.
- If players are using a CTG game mat, cards will be placed in front of the player in the respective areas on the game mat. If players are not using a CTG game mat, players should place their cards in the playing area like the layout below:



- Asset cards are placed closest to the player. Defense cards are placed above the asset cards with attack cards placed above unprotected asset cards.

Game Play

Step 1: Both players draw one card from the draw pile (it does not matter who draws first). Depending on the card, players can make one of the following moves:

- If the card is a blue asset card, the player places the card in front of them in the playing area next to their other asset card.



Game Setup & Rules continued

(Grades K-1)

- If the card is a green defense card, the player places the card in front of any blue asset card that is in their playing area that does not already have a defense card protecting it.
- If the card is a red attack card, the player can use it to remove any unprotected blue asset card of their opponent. (i.e., there is no defense card in front of the asset card).
- If the player is unable to make any of the above moves, the card is placed in the discard pile.

Note: Cards are played in the following order: **blue** asset cards, **green** defense cards and then **red** attack cards.

- **Example one:**

If Player 1 draws a blue asset card and Player 2 draws a green defense card, then player 1 places their asset card in front of them and then player 2 places their defense card above any of their unprotected asset cards.

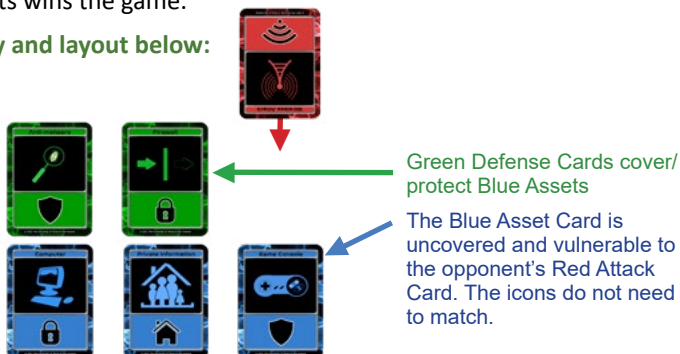
- **Example two:**

If Player 1 draws a red attack card and Player 2 draws a green defense card, then Player 2 places their defense card first above any unprotected asset card (remember to play in order of asset, defense and then attack cards). Player 1 then can use their attack card to remove any unprotected asset card of their opponent.

Step 2: Play continues with each turn; both players drawing one card and attempting to play that card as described in Step 1 above.

Step 3: Once the players use all the cards in the draw pile, the game ends. Players will then count the number of blue asset and green defense cards that they have in front of them. Each card is worth 1 point. The Player with the most points wins the game.

See game play and layout below:





Game Setup & Rules

(Grades 1-2)

Icon Categories (recommended for grades 1-2)

In this version of CTG, players must use the category icon to matchup their cards when attempting to play them. These categories are represented by the following four icons:



The shield icon represents the software used with computers and devices.



The house icon represents the private information that can be found on computers and devices.



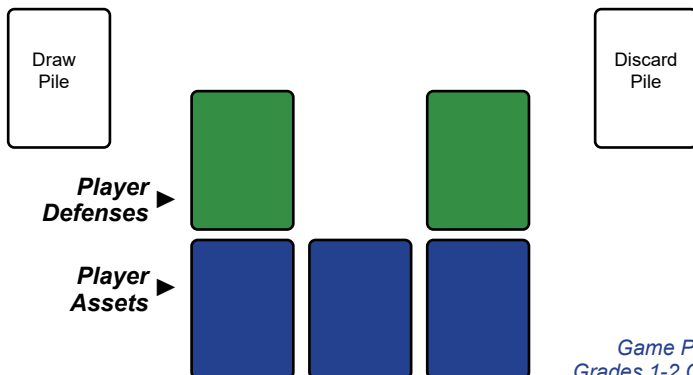
The lock icon represents the hardware used with computers and devices.



The wireless icon represents wireless applications with computers and devices.

Setup

- Each player selects one blue asset card and places it in front of them in the playing area.
- Shuffle the cards. Once the deck is shuffled, the deck is set to the side of the playing area. This is called the draw pile.
- If players are using a CTG game mat, cards will be placed in front of the player in the respective areas on the game mat. If players are not using a CTG game mat, players should place their cards in the playing area like the layout below:



Game Play Rules for
Grades 1-2 Continued >>



Grades 1-2 *continued*

- D. Asset Cards are placed closest to the player. Defense cards are placed above the asset cards with the same category icon. Attack cards are placed above asset or defense cards of the same category.

Game Play

Step 1: Both players draw one card from the draw pile (it does not matter who draws first). Depending on the card, players can make one of the following moves:

- If the card is a blue asset card, the player places the card in front of them in the playing area next to their other asset card.
- If the card is a green defense card, the player places the defense card in front of any blue asset card *with the same category icon* that is in their playing area. The defense card can be played only if the blue asset card does not already have a green defense card protecting it.
- If the card is a red attack card, the player can use it to remove any unprotected (there is no green defense card in front of the blue asset card) asset card of their opponent *with the same category icon*.
- If the player is unable to make any of the above moves, the card is placed in the discard pile.

Note: Cards are played in the following order: *blue* asset cards, *green* defense cards and then *red* attack cards.

• **Example one:**

If Player 1 draws a blue asset card and Player 2 draws a green defense card, then player 1 places their card in front of them and then player 2 places their green defense card above any unprotected blue asset card with the same category icon that they may have.

• **Example two:**

If Player 1 draws a red attack card and Player 2 draws a green defense card, then Player 2 places their green defense card first above any unprotected asset card. Player 1 then can use their red attack card to remove any unprotected asset card with the same category icon of their opponent.

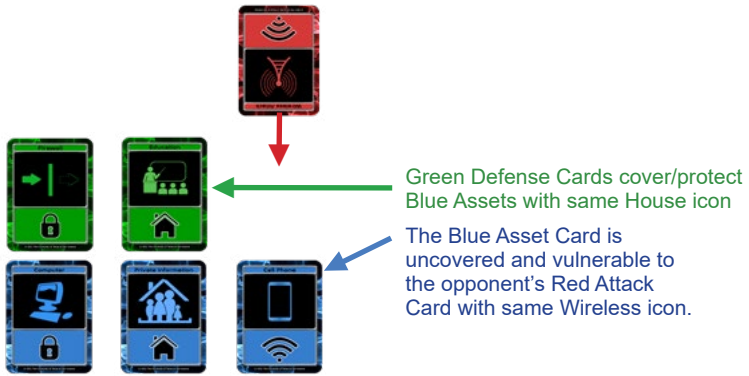


Grades 1-2 *continued*

Step 2: Play continues with each turn, both players drawing one card and attempting to play that card as above.

Step 3: Once the players use all the cards in the draw pile, the game ends. Players will then count the number of blue asset and green defense cards that they have in front of them. Each card is worth 1 point. The Player with the most points wins the game.

See game play and layout below:



CIAS Store

Interested in ordering additional games and accessories? Then make sure to visit our online store (<https://CIAS.Store>) today!



24" x 36" Posters



14" x 24" Game Mats





Game Setup & Rules

(Grade 2+)

Icon Categories (recommended for grades 2 and up)

In this version of CTG, players must use the category icon to matchup their cards when attempting to play them. These categories are represented by the following four icons:



The shield icon represents the software used with computers and devices.



The house icon represents the private information that can be found on computers and devices.



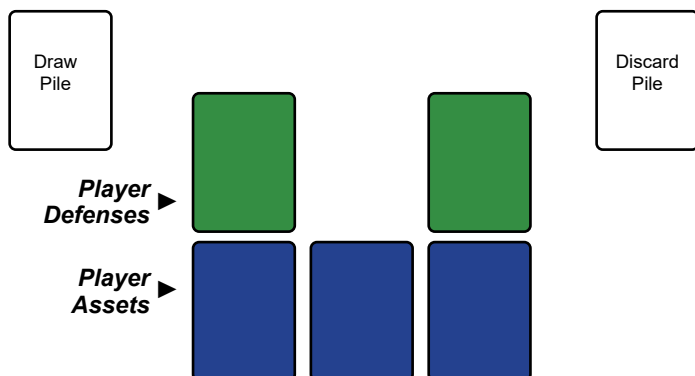
The lock icon represents the hardware used with computers and devices.



The wireless icon represents wireless applications with computers and devices.

Setup

- Each player begins this version of the game without any blue asset card in front of them in the playing area at the start of the game.
- Shuffle the cards. Once the deck is shuffled, the deck is set to the side of the playing area. This is called the draw pile.
- If players are using a CTG game mat, cards will be placed in front of the player in the respective areas on the game mat. If players are not using a CTG game mat, players should place their cards in the playing area like the layout below:



- D. Asset Cards are placed closest to the player. Defense cards are placed above the asset cards **with the same category icon**. Attack cards are placed above asset or defense cards of the same category.
- E. The **red attack card** with the four category icons can be used to **remove any** of the green defense or blue asset **cards**.

Game Play

Step 1: Both players draw two cards from the draw pile (it does not matter who draws first). Depending on the color of the card, players can make the following moves:

- If the card is a blue asset card, the player places the card in front of them in the playing area.
- If the card is a green defense card, the player places the card in front of any blue asset card with the same category icon that is in their playing area that does not already have a green defense card protecting it.
- If the card is a red attack card, the player can use it to remove any green defense card with the same category icon OR any unprotected blue asset card of their opponent with the same category icon. Protected blue asset cards cannot be removed until the green defense card protecting them is removed first.
- If the player is unable to make any of the above moves, they discard the card and place in the discard pile.

Note: Cards are played in the following order: **blue** asset cards, **green** defense cards and then **red** attack cards.

- **Example one:**

If Player 1 draws a blue asset card and Player 2 draws a green defense card, then player 1 places their card in front of them and then player 2 places their green defense card above any unprotected blue asset card with the same category icon that they may have.

- **Example two:**

If Player 1 draws a red attack card and Player 2 draws a green defense card, then Player 2 places their green defense card first above any unprotected asset card. Player 1 then can use their red attack card to remove any green defense card or unprotected blue asset card with the same category icon.

Step 2: Play continues with each turn, both players drawing one card and attempting to play that card as above.

Step 3: Once the players use all the cards in the draw pile, the game ends. Players will then count the number of blue asset and green defense cards that they have in front of them. Each card is worth 1 point. The Player with the most points wins the game.

About the CIAS (Gaming)

The Center for Infrastructure Assurance & Security (CIAS) at The University of Texas at San Antonio (UTSA) is committed to creating a culture of cybersecurity through educational gaming programs. The CIAS conducts research into effective ways to introduce students to cybersecurity principles.

As part of the K-12 Cyber Journey Program, the Cyber Threat Guardian card game is designed for students in grades K-2 to introduce cybersecurity terminology and defense concepts. Other cyber-related games include Project Cipher (ages 9+), Cyber Threat Protector (ages 9+) and the popular Cyber Threat Defender®: The Collectible Card Game (ages 11+). For more information, visit CIAS.UTSA.edu.

We'd Love Your Support!



By sponsoring Cyber Threat Guardian, you are helping elementary students, ages 5-8, nationwide learn the basics of cybersecurity in a fun and engaging game that will prepare them for their future in cybersecurity!

For more information on how to support students in your area, please visit CIASGaming.com.



And please follow the CIAS on: [in](https://www.linkedin.com/company/CIAS) [f](https://www.facebook.com/CIAS) [X](https://x.com/CIAS) [v](https://www.youtube.com/channel/UCIASGaming)

Note to Security Professionals

In developing this game, we recognize that we have taken some liberties with how things actually work. We have attempted to keep true to the spirit of computer security, but for playability reasons have slightly modified how things might actually work in reality. We believe, however, that the game is close enough that individuals playing the game will be able to gain some understanding of basic computer security concepts.