

# Hidden Card (X-Ray Vision Game)



1-4 players

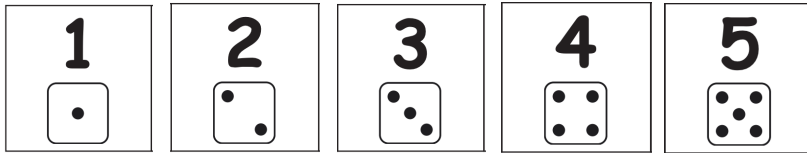
Ages 4+

5-10 minutes

## Materials:

*Two Numbers* cards to use:

1-5 (add more cards as children gain experience)

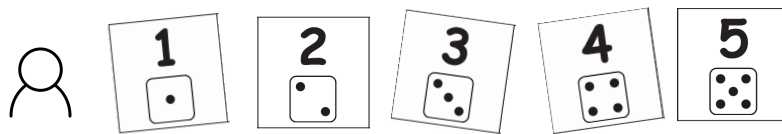


Goal of the game: children identify the hidden numbers on the face-down cards.

## Setup:

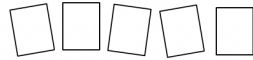
1. Shuffle cards

2. Ask the children to put the cards in order from 1-5

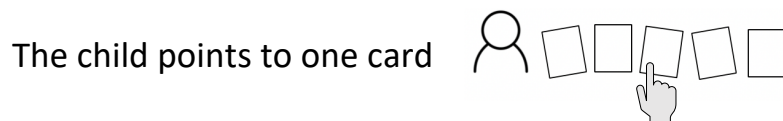


Play:

While the children are watching, turn the cards face down



Ask one player, "Can you point to a card? I will tell you what number is on the card using my special x-ray vision!"



Say, "It is 3! Turn the card over to check." The player turns the card over and checks the number.



Replace the card on the table face down. Say to the next player, "Now it is your turn to use your x-ray vision. Are you ready?"

If they are ready, have children take on the role of identifying the cards.

Variation:

Leave the cards face-up after they have been identified. Encourage children to use the face-up cards to help them identify the hidden cards. Once children practice this game with an adult, they can play in pairs.

What children are learning:

- Notice which strategies children use to identify hidden cards. If a player is unsure of what to do, help them count up from the first card to the hidden card, pointing to each card as they count.
- Leave the identified cards face-up and encourage children to "count on" from the face-up card to the hidden card. For example, you can count on from the face-up 3 card to the hidden 5 card: "3...4, 5!" Counting on is an important math skill.
- This game practices three executive function skills: inhibitory control, working memory, and attention shifting. Children must *inhibit* themselves from impulsively turning the cards over. They use their *working memory* to sort the cards into the correct order to begin with, and they remember that order throughout the game. *Attention shifting* is practiced when children switch between the role of the card selector to the role of the card identifier.

For more information, see Clements & Sarama (2019): [https://www.nctm.org/Publications/Teaching-Children-Mathematics/2019/Vol25/Issue7/Double-Impact\\_-Mathematics-and-Executive-Function/](https://www.nctm.org/Publications/Teaching-Children-Mathematics/2019/Vol25/Issue7/Double-Impact_-Mathematics-and-Executive-Function/)