Odd or Even

Collect the most cards by guessing if the next number to appear will be odd or even.

What you need
A deck of cards

What to do
1. Remove face cards (Jack, Queen, King) of each suit from the deck. This should leave you with number cards Ace to 10 of each suit in the deck.
2. Before beginning, have all the players look at the suits on each card. Notice that the even cards have two equal rows of the suit, but the odd cards have an extra one off to the side (or in the center of the two rows).
3. Shuffle the deck and put the stack face down.
4. On each player's turn they guess whether or not the card they will turn over will be odd or even.
   a. If they are right they get to keep the card and take another turn.
   b. If the person guesses wrong, the card goes to a discard stack, and the next player goes.
5. The player with the most cards when you get to the bottom of the deck wins!

What to ask
• Is there a way for this game to end in a tie? Why?
• Is there a better way to predict what is coming up? How?
• Does it matter if you think of the Ace as 1 or 11?

Did you know?
In the world of numbers understanding what the terms odd and even mean can help in understanding larger numbers structure. Many times children simply memorize that every other number in the counting sequence is odd if they begin with one and that the "two's" are the even numbers.

The Children's Museum of Houston

ExxonMobil
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Magnificent Math Moments

What's next?

- Put the face cards back into the deck. Each one is worth 10. How does this change the game?
- Play the game but use the cards to build a 2-digit or 3-digit number. Turn over one card at a time to build the number from left to right (as the player is looking at it). Just before turning over the last card to build the number, predict if your number will be odd or even.

To learn more

Even Steven and Odd Todd
by Kathryn Cristaldi

The arrival of Cousin Odd Todd greatly upsets Even Steven who likes everything to come in even numbers, his pets, his library books, and even his pancakes. The story of two mismatched boys who are opposites in seemingly everything teaches young readers basic numbers concepts in a humorous and lighthearted manner.

Ten Black Dots
by Donald Crews

What can you do with ten black dots? "One dot can make a sun or moon when the day is done. Two dots can make the eyes of a fox…" Count all the way to ten with Donald Crews and delight in the simple rhymes, everyday objects, and stunning graphics of a master of the picture concept book.

More Than One
by Tana Hoban

Photographs illustrate words that suggest more than one of an object, animal, or person, such as stack, bundle, batch, and heap.

How it helps with school

Texas PreKindergarten Curriculum Guidelines
Number and Operation, Patterns

Texas Essential Knowledge and Skills (TEKS) Standards
Number, Operation, and Quantitative Reasoning: K.1A-C; 1.1A-B; 2.1
Patterns, Relationships and Algebraic Thinking: K.5, K.6A; 1.4A, 1.5A; 2.5A, 2.6C
Probability and Statistics: 1.10B; 2.11C
Underlying Processes and Mathematical Tools: K.13D, K.15; 1.11D, 1.13; 2.12D, 2.14

National Council of Teachers of Mathematics (NCTM) Standards
Number and Operations, Algebra, Data Analysis and Probability, Reasoning and Proof, Representation

Activity inspired by: Number Jugglers: Math Game Book by Ruth Alexander