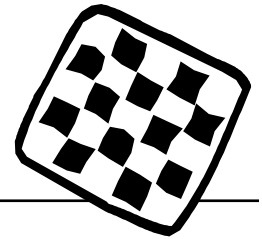


Fun Fruit - Advanced



Plan your moves so you can take the last piece of fruit.

What you need

18 pieces of pretend fruit or pictures of fruit:

- 6 oranges
- 5 apples
- 4 bananas
- 3 lemons

What to do

1. Decide who will go first.
2. Players take turns “eating” the fruit on the table.
3. Each player can take as many pieces of one kind of fruit on their turn.
4. For example, you can take 5 oranges, but you can’t take bananas and oranges.
5. Players can switch fruit type each turn.
6. Each player must take at least one piece of fruit at each turn.
7. The player who takes the last piece of fruit wins.

What to ask

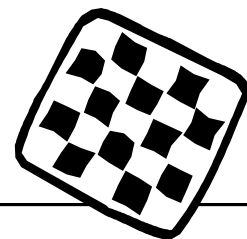
- Is it easier to win when there is an even number of fruit or an odd number of fruit?
- Does it matter who is first?
- Is there a strategy that you can use to make sure you always win?



Did you know?

The reflective strategies players use during games like chess, checkers, etc., where strategy is key, develop mathematical sense making by gathering data and making predictions throughout the play. We say to ourselves “If I move here and then she moves here, then I can do this or that.” State your strategies out loud.





What's next?

- What happens if you limit the number of pieces of fruit the players can take?
- Make a rule that you have to take at least two fruits. If you can't take two then the game is over, and the last person to take two wins.
- Make up other rules to see how they affect the game.

To learn more

The Grapes of Math

by Greg Tang

This innovative and delightful book challenges children and parents to open their minds and solve problems in new and unexpected ways. By looking for patterns, symmetries and familiar number combinations displayed within eye-catching pictures, math will become easier, quicker and much more fun than anyone could have ever imagined.

The I Hate Mathematics Book

by Marilyn Burns

This book has tons of fun math puzzles and games. It teases you into thinking about mathematics in a really fun way.

Fruit Game

<http://www.2020tech.com/fruit/index.html>

In this interactive game, play against the computer and try to be the person who takes the last piece of fruit.

How it helps with school

Texas Essential Knowledge and Skills (TEKS) Standards

Patterns, Relationships, and Algebraic Thinking: 5.5A,B

Probability and Statistics: 3.14C; 4.13A

Underlying Processes and Mathematical Tools: 3.15C; 4.14C; 5.14C

National Council of Teachers of Mathematics (NCTM) Standards

Algebra, Data and Probability, Problem Solving