



DICE GAME

2-10 MINUTES

Ages 3+

How to play

The dice game can be played in many forms. For younger children, dice can be used to identify numbers. For example, a parent can roll the dice and ask the child to identify the number verbally as quickly as possible.

A parent rolls the dice and a two dots appear. The child shouts "two!" in any language (or multiple languages).

For children 6+, dice can be used to make addition and subtraction equations. For example, if a parent rolls the dice and one dice shows a "1" and the other shows a "4", the child will shout "five" (addition) or "three" (subtraction). You can also add rules or dice as you go along. For example, you can tell the child to add five or ten to whatever the dice are showing.

AGES

9+

FOR CHILDREN 9+, DICE CAN BE USED TO MAKE MULTIPLICATION EQUATIONS. YOU CAN ALSO USE MORE THAN TWO DICE.

MATERIALS NEEDED: AT LEAST 2 DICE



DICE GAME

Multi-STEM research findings related to this game

1

WE OBSERVED A DIFFERENCE IN LANGUAGE-USE FOR PARENTS/CAREGIVERS AND CHILDREN DURING THE DICE GAME. WE TESTED THIS GAME WITH A GROUP OF PARENTS/CAREGIVERS, SOME NATIVE TURKISH SPEAKERS AND SOME NATIVE ARABIC SPEAKERS. THE OTHER ACTIVITIES THAT THEY DID WERE DONE ALMOST EXCLUSIVELY IN THEIR NATIVE LANGUAGE. HOWEVER, DURING THE DICE GAME, THEY USED DUTCH. ACTIVITIES SUCH AS THE DICE GAME IN WHICH NUMBERS ARE INVOLVED, BUT NO DISCUSSION IS REQUIRED COULD BE BENEFICIAL FOR PARENTS/CAREGIVERS WHO WANT TO DO ACTIVITIES IN DUTCH, BUT ARE STILL LEARNING THE LANGUAGE.

2

WE OBSERVED THAT PARENTS/CAREGIVERS WERE ABLE TO “SCAFFOLD” THEIR CHILDREN'S LEARNING DURING DICE GAMES. THIS MEANS THAT IF THEIR CHILDREN WERE FINDING ONE-DIGIT ADDITION QUESTIONS (SUCH AS $5+6$) TOO EASY, PARENTS/CAREGIVERS ASKED MORE CHALLENGING QUESTIONS, SUCH AS “ $11+16$ ”, WHILE PLAYING THE DICE GAME.

3

WE OBSERVED A LOT OF SMILES AND ENGAGEMENT DURING THE DICE GAME. STUDENTS AGES 4-12 WERE LEANING OVER THEIR TABLES AND TRYING TO BE AS QUICK AS POSSIBLE IDENTIFYING NUMBERS AND DOING MATH IN THEIR HEADS.