

Make 28

You need a pack of playing cards or 4 sets of 1–6 digit cards
 2 copies of the record sheet copymaster

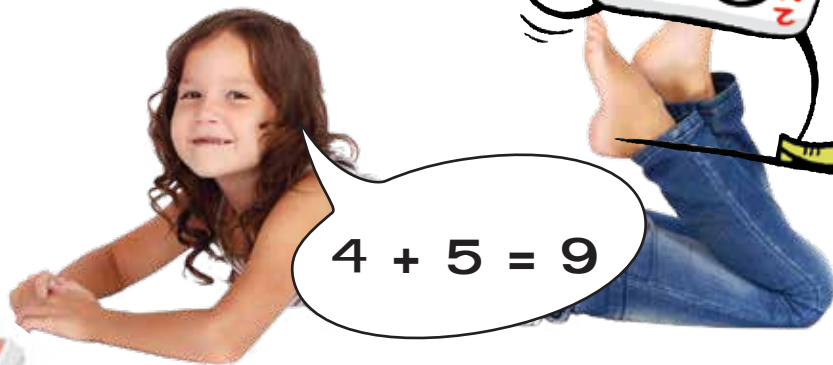
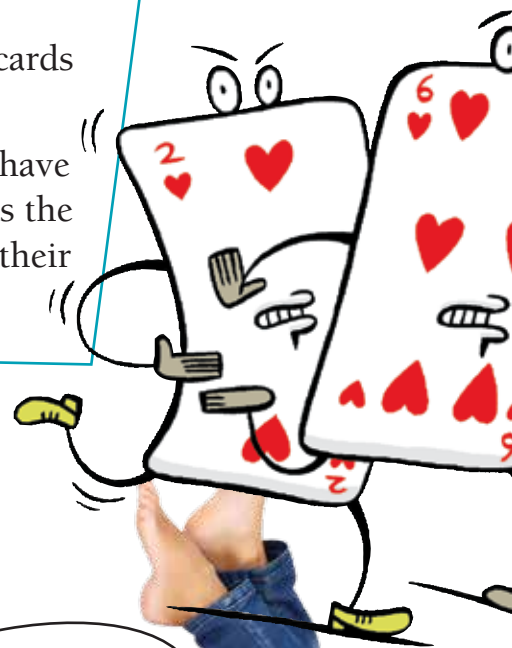
a classmate

Activity

Mark and Raiha have invented a card game called Make 28. The cards they use in the game are the 1 (the ace), 2, 3, 4, 5, and 6 from the four suits: ♠ ♦ ♥ ♣.

This gives them a total of 24 cards. (You could use digit cards instead.)

Mark and Raiha share out the 24 cards so that they each have 2 sets of 1, 2, 3, 4, 5, and 6. (It doesn't matter which suits the cards belong to.) They take turns to choose a card from their pile, put it down, and add it to the previous total.



They record their game on a table as they go.



Mark	Raiha	Running total
4		4
	5	9
6		15

The first person to play the card that makes the total exactly 28 is the winner.

If a player goes over 28, that turn doesn't count. The other player then gets a final chance to make 28.

If there is no winner, the game is a draw.

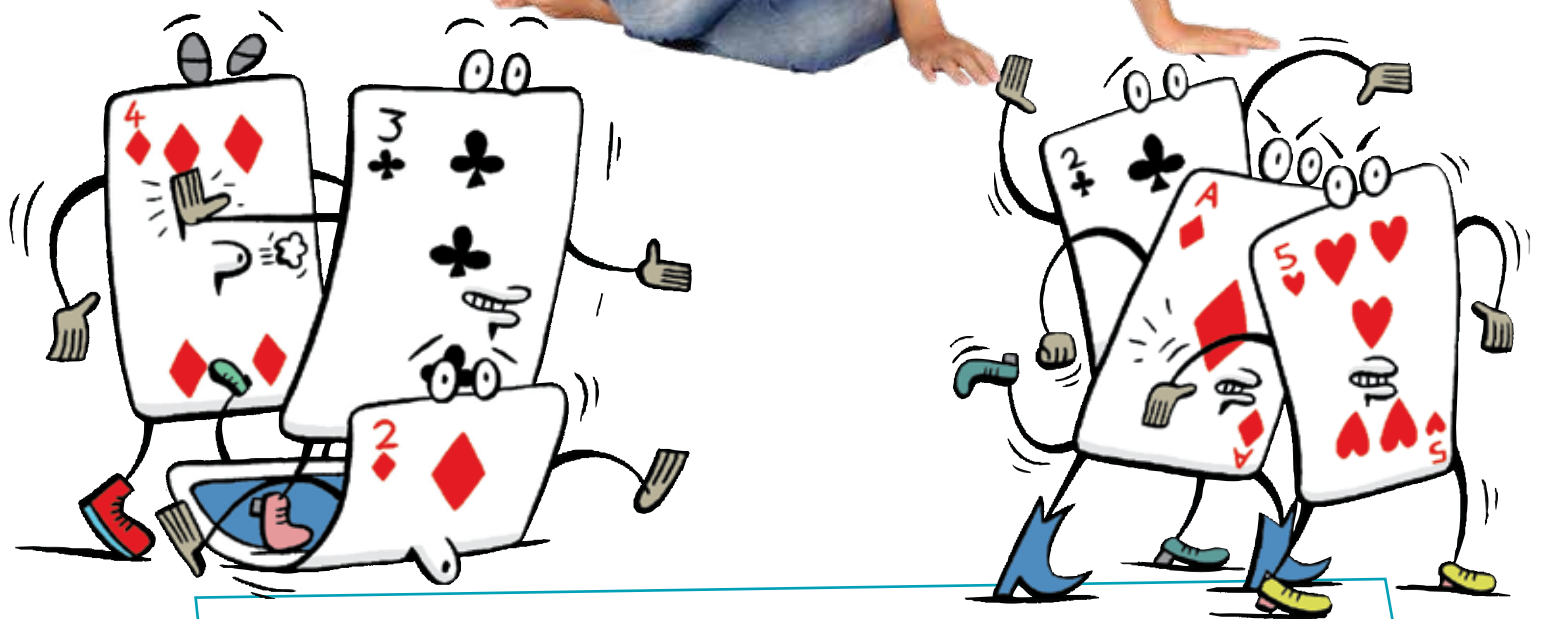
- ① Mark and Raiha play 15 games, taking turns to be the first player to put down a card. Mark keeps a tally of who wins each game.

Raiha	Mark
	

Play a few games of Make 28 with a classmate. Use a photocopy of the record sheet or draw up your own. Keep a tally of who wins each game.

- ② a. Can you work out a way of winning?

Hint:
Look closely for any patterns in the numbers you record.



- b. Is there a good starting number? If there is, what is it and why?
c. If you could choose to play first or second, which would you choose in order to win? Why?