

Skimming Stones

You need counters a dice numbered 4, 5, 6, 4, 5, 6 a calculator
 a photocopy of the game board copymaster 1, 2, or 3 classmates

Activity

Stone skimming is where you throw a smooth, flat stone across the top of the water so that it bounces. You count the number of times the stone bounces before it sinks.

Ford is the stone-skimming champion. He and his friends go down to the river to find out who will be the new stone-skimming champion. They take turns to skim their stones.

Here are the number of bounces the six friends make from each skim:

Skim	1	2	3	4	5	6
Number of bounces						
Te Rama	6	8	7	8	5	2
Penny	5	4	6	7	6	8
Harina	4	5	5	2	9	7
Jordan	7	6	7	8	7	7
Lagi	4	6	8	3	7	8
Ford	8	7	4	8	7	8

Lagi used the compatible numbers strategy to work out in her head the total number of bounces her stones made:

$4 + 6 = 10$
 $3 + 7 = 10$
 $10 + 10 = 20$ and $20 + 8 = 28$.
 If I take 2 from the last 8,
 I can add it to 28 to make 30.
 Then I'm left with 6.
 $30 + 6 = 36$ bounces in total for me!

1. Think of a strategy that you can use to work out, in your head, the total number of bounces for each of the friends.
2. What system could you use to find the new champion? Discuss this with a classmate.
3. If each person is allowed to take out their worst skim, who would be the skimming champion?
4. Who was the most consistent skimmer? Explain your answer.

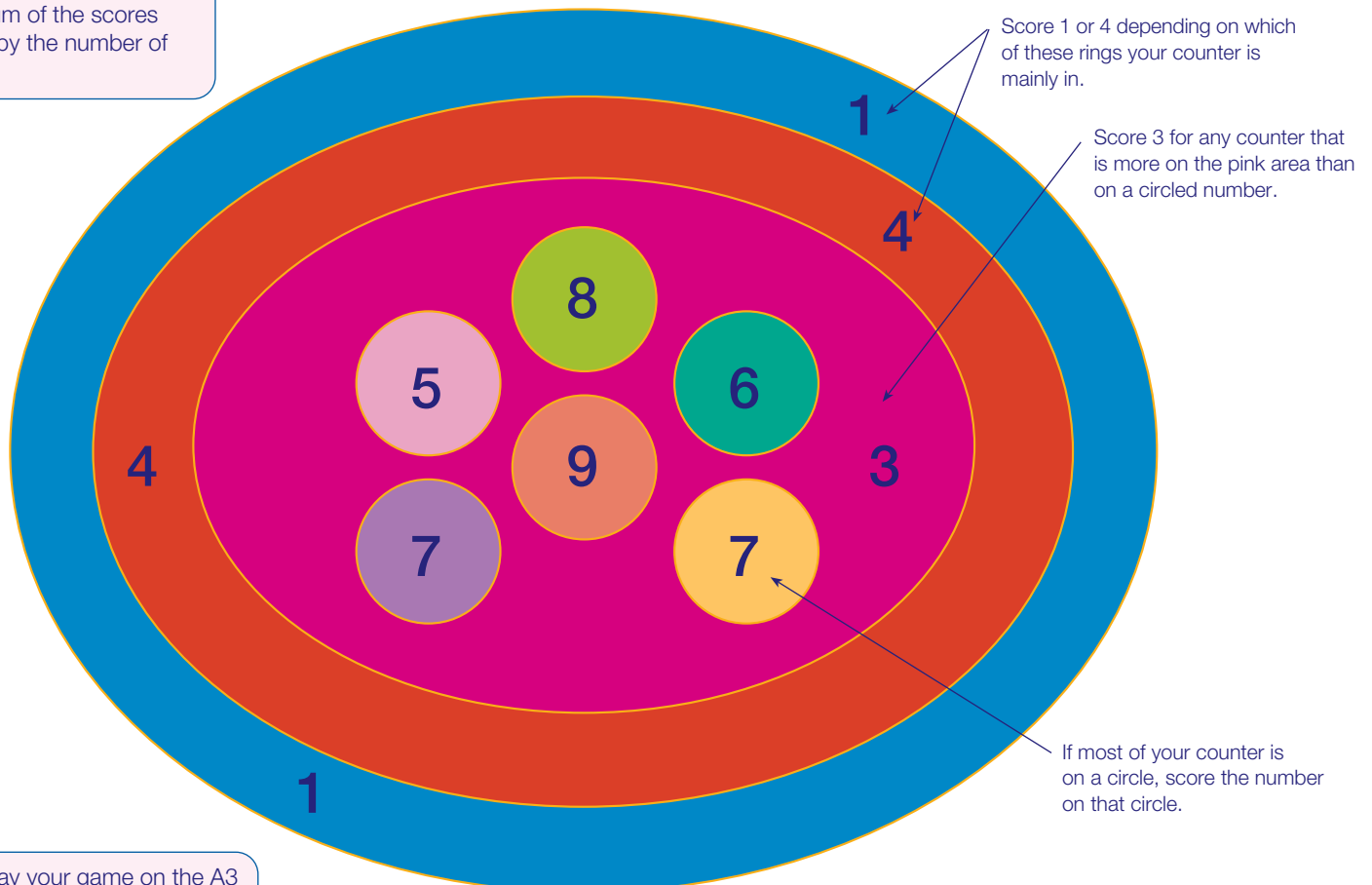


Game

Up to 4 people can play the Skimming Stones game at one time.

- Put a photocopy of the game board in the centre of the players.
- One player throws the dice. Each player picks up as many counters as the number shown on the dice for that round.
- On your turn, “skim” each of your counters, one at a time, onto the game board. (Skim the counter by giving it a gentle flick from outside the outer circle.) The main number your counter lands on is the number of bounces your stone has skimmed.
- Work out your mean score. (One of the other players checks your mean using a calculator.)
- The player with the highest mean wins that round.
- The player who has won the most rounds after 5 rounds wins the game.

The *mean* of a set of scores is the sum of the scores divided by the number of scores.



Note: Play your game on the A3 version of the game board.