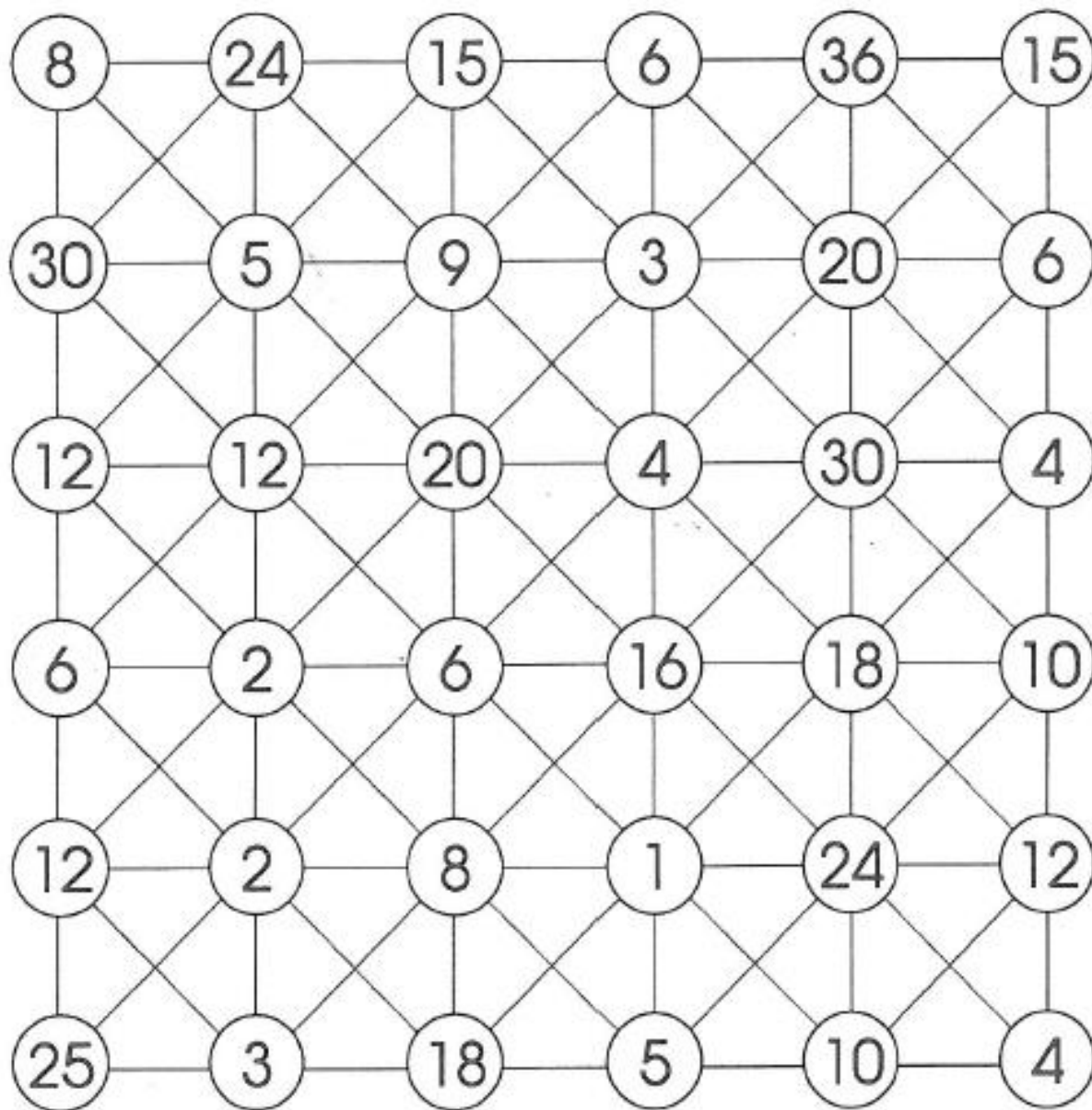




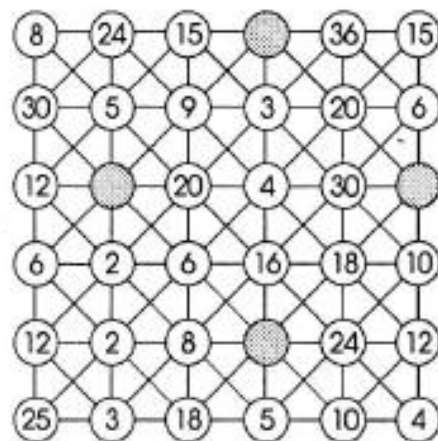
Square Game



- This is a game for two players.
- Each player needs a set of counters (a different colour for each player).
- You need two dice.



- Take turns to throw both dice, and multiply the dice numbers together.
- Place a counter on a spot which matches the number.
- The winner is the first player to make a square with four counters.



Square Game - Ideas Page

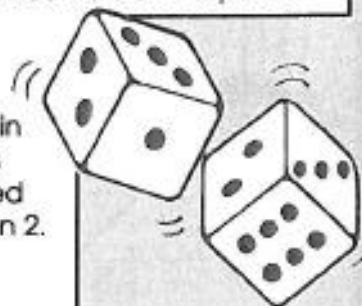


Aims

- To multiply two single-digit numbers.
- To recognise different possible positions of a square by locating its corners.

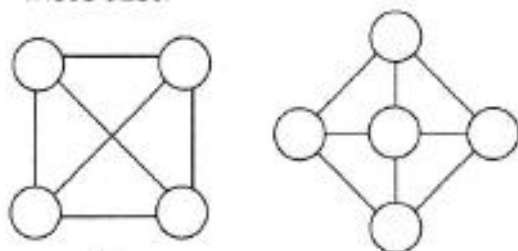
Activities

- The game could be varied by the winner being the first player to have four counters in any one line.
- Ask the children to find out how many counters could be placed on the board, without making four corners of a square.

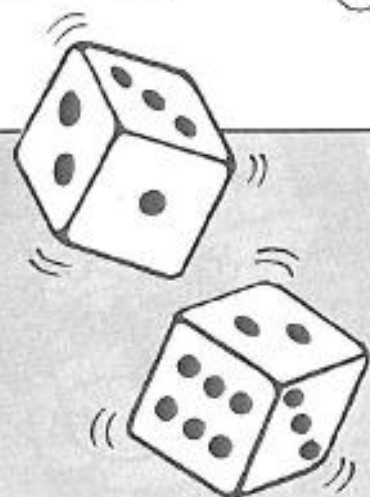


- Encourage the children to investigate multiplication by asking them to choose a number on the board. They could then find a pair of dice numbers which multiply to give that number.
- The children could investigate how many different dice throws can result in covering a particular number. Assume that one die is red and the other is green in order to distinguish them. For example, the 6 spot can be covered by these throws: red 1, green 6; red 6, green 1; red 2, green 3; red 3, green 2.
- Ask the children to investigate which spots are most likely to be covered early and which spots might not get covered.

- The activities could be extended by investigating how many different products are possible when two dice are thrown. The results could be shown in a table like this.
- A further activity could include an investigation of which products can occur in different ways.
- The children could also investigate different squares on the board. For example, ask them to find out how many squares there are of these sizes:



	1	2	3	4	5	6
	2	4	6	8	10	12
	3	6	9	12	15	18
	4	8	12	16	20	24
	5	10	15	20	25	30
	6	12	18	24	30	36



Extension

- Use a pack of playing cards, without the picture cards. Shuffle the cards and deal two cards to each player. Each player should then multiply the two card numbers together.
- Design a board for a game in which all possible products are based on multiplying two numbers up to ten, as opposed to two numbers up to six.