## AFRICAN INSTITUTE FOR MATHEMATICAL SCIENCES

SCHOOLS ENRICHMENT CENTRE (AIMSSEC)
AIMING HIGH

## FIFTEEN GAME

This is a game for two players (or a group split into two teams).
Take it in turns to choose one of the numbers 1 to 9 . It is now your number and your opponent cannot choose it. Each number can be chosen only once.

To win, be the first to pick 3 numbers that add up to 15 .
If all the numbers have been chosen and nobody can make 15 , then the game ends in a draw.


## HELP

- Write down all the combinations of three of the numbers that add up to 15.
- Have you met anything like this before?
- Remember you can't use 2 numbers to make 15 , you can't use 4 numbers, it must be 3 numbers.


## NEXT

- Is it an advantage to go first (or second?)
- Can you work out how to play this game so that nobody can beat you?
- When you write down all the different combinations of 3 numbers that sum to 15 :
- How can you be sure that you have found all the combinations?
- Have you met anything like this before?
- Which numbers appear in 2 of these combinations?
- Which numbers appear in 3 of these combinations?
- Which numbers appear in 4 of these combinations?
- Can you think of any other games you know like this one?
- Make up a number game of your own.

Large cards for the Fifteen Game


## CARDS FOR <br> FIFTEEN <br> GAME

Cards for the Pat the Pig Game



