

## Currency from around the World



| Country | Currency             | Value per (£) |
|---------|----------------------|---------------|
| Ireland | Euro                 | 0.67 /1.5     |
| Gambia  | Dalasis              | 186/190       |
| Iran    | Rials                | 250           |
| Japan   | Yen /Yi Yuan (coins) | 195           |
| Nigeria | Naira                | 249/250       |
| Serbia  | Dinar                | 125           |

### Extra Activities

#### Curriculum Areas:

- Pupils to explore other currency used in other parts of the world, its equivalent in pounds
- Pocket money other children receive
- Prices of goods; food, shoes, bags, trainers, jeans etc
- Cost of electronics
- Cost of house rent
- Cost of cars
- Business

#### Maths: Addition, subtraction, problem solving etc.

History: Impression on each country's currency, history of the country, VALUE – what it means to the people.

#### Culture/ Identity:

Teacher can develop on this.



# Mathematics Around the World



## **Mancala (AYO) Game** **{An ancient Mathematical and Strategy Game}**



Ayo is traditional game from Nigeria, and similar games can be found in many parts of Africa and Asia, although the names and rules may vary. Ayo is played on a wooden board with 12 holes carved out, using pebbles or dried beans.

A variety of game boards made of different materials like stones, wood, marble and bronze have been excavated from temples and tombs from ancient civilisation.

### **The Rules of Ayo**

You Need:

2 players

1 board between them

48 seeds - 24 for each player that is 4 in each hole on the board.

Plastic bowls 2, one for each to put in their winnings.

Players must agree on the number of seeds to be captured in the game before the game begins.

### **To Play the Game**

Start with 4 pebbles in each hole on the board

The aim is to collect as many pebbles as possible.

Players take it in turns to have a go

On your go, pick all the pebbles from any hole on your side of the board. Place one pebble in each adjacent hole, counting in clockwise direction.

If you place the last pebble in a hole on your opponent's side of the board, which already contains 1 or more pebbles, then you also collect all the pebbles from that hole.

If you have placed a pebble in any other hole on your opponent's side of the board, which already contain 1 or more pebbles, then you also collect all the pebbles from that hole.

You must not leave your opponent without any pebbles on their side of the board unless there is no other option.

If it is not possible to move any of the pebbles on your side of the board into your opponent's side, then you collect all the pebbles on your side.

The winner is the player who has the most pebbles at the game.

### **Strategy**

When the last seed from your hand makes 3 or 4 (depending on your agreed number) on either side you collect them for your winning.

Try to prevent groups of 3 or 4 (depending on the agreed number) from appearing on your opponent's side.

When a total of 8 seeds are left in the block of cups, the player who wins 3 or 4 takes the remaining 3 or 4.

The loser will not have enough seeds to fill the side of his /her board.

The winning player may start the next round of the game.

It is very important that players understand the game and set down rules to follow.

Teacher should remind pupils that cheating is not allowed in the game. Teacher should also watch for over emotional pupil. This is sometimes inevitable as some pupils react differently to winning or losing in games.



# AYO / MANCALA

**Games and Puzzles: Using and applying mathematics**  
**Curriculum 5-14 - {Problem –solving}**

## **Learning Objectives**

- Playing a game based upon counting and looking for winning strategies.
- Exploring a mathematical game originating from different culture.
- Appropriate for P3 – S4. The game can be based on pupils' level of understanding and comprehension.

## **Resources**

- One copy of the "Rules"
- A game board to be shared by the players ( a board between two)
- 48 counters or Nickernuts.

## **What to do**

Teacher talks about the origin of the game where it came from and different ways the game is played and when.

Teacher encourages pupils to work in pair and enjoy themselves while discussing and developing mathematical strategies.

**NB.** Teacher can start by showing the pupils a DVD on how to play the game.

Pupils should be told that the sessions demonstrated are just few of the many moves of the game.

## **Procedure**

### **Teacher should**

- organise pupils into pairs or small group
- explain to pupils that working in pair will help to stimulate discussion of strategies.
- ensure that pupils understand the rules before they start playing
- use, if available, an OHP and a transparency with a representation of the board and the counters to explain the rules.
- encourage a plenary discussion on possible winning strategies.

## **Further Activities**

Pupils could research on similar games around the world and how such are played including the rules of the games.

Pupils may wish to invent their own games by agreeing a different set of rules.