

LESSON PLAN

LEARNING TARGET: WALT or L.O. Create a budget for the project.

LEARNING OUTCOMES: How to:

- break down a complex problem into simpler steps
- identify important data in word problems
- plan and present a budget



GLOBAL DIMENSION CONCEPTS INCLUDED: CONFLICT RESOLUTION / SOCIAL JUSTICE / **VALUES & PERCEPTIONS** / SUSTAINABLE DEVELOPMENT / INTERDEPENDENCE / HUMAN RIGHTS / DIVERSITY / **GLOBAL CITIZENSHIP**

CURRICULUM

Ma2 Number

1 b) break down a more complex problem or calculation into simpler steps before attempting a solution; identify the information needed to carry out the tasks

Solving numerical problems

4 a) choose, use and combine any of the four number operations to solve word problems involving numbers in 'real life,' money

Ma4 Handling data

Problem solving

1 c) identify the data necessary to solve a given problem

1 d) select and use appropriate calculation skills to solve problems involving data

1 f) decide how best to organise and present findings

RESOURCES

The supporting PowerPoint for this lesson can be downloaded from our website at www.worldleprosyweek.org under Free lessons Key Stage Two

KEY WORDS

Budget, Naira (Nigerian currency), Addition, Multiplication, Subtraction, Multiplication, Graph, Data, Excel

Abbreviations

HA – High Ability

MA – Middle Ability

LA – Low Ability

LESSON ACTIVITIES

Teacher's Notes

This lesson can be linked to the PSHE lesson which debates what the money should be spent on and the Literacy lesson where children write a letter of persuasion asking the Nigerian government for more money.

This lesson can be easily adapted for various ages / abilities by adjusting the figures in the Excel file which can be downloaded from the website.

Introduction

Share with the children that it is World Leprosy Week (26 – 30 January). This year The Leprosy Mission is focusing on a project in Chanchaga, a rural village in Nigeria.

Today we are going to help the people in Chanchaga create a budget. We don't have enough money for everything, so we are going to have to decide how the money is spent.

Review the budget

Familiarise the children with the budget and demonstrate how to find the correct data.

1. How much would a complete uniform cost in pounds and naira?
10 GBP / 1,800 NGN
2. Which item is the most expensive? new house 500 GBP / 90,000 NGN
3. How much is one book in GBP and NGN? (Two step problem - 5 GBP / 900 NGN)
4. Which items cost 54,000 NGN? (small business loan/ repair road to village)
5. Which item costs 145 GBP? (child's education for one year)

Provide the children with the following questions (you can print the page from the PowerPoint).

Activity One

Now that you know how to find the data have a go answering the following questions on your own.

HA (includes two and three step problems)

1. How much are 10 crutches? 70 GBP / 12600 NGN
2. How much is one pair of crutches? 7 GBP / 1,260 NGN
3. How much are a complete uniform, four books and a seed packet?
35 GBP / 6,300 NGN
4. I would like to buy a new house, two packets of seed and a child's education for a year. 655 GBP / 117,900 NGN. If I had 121,000 NGN how much change would I receive? 3,100 NGN
5. How much are three crutches and two books? 31 GBP / 5,580 NGN



Gifted and talented bonus questions

1. If I spent 620 GBP, what did I buy? There are multiple answers.
One correct answer is Repair road, Medicine for the clinic for one month, 10 crutches, Uniform and Seed packet.
2. The exchange rate is 1 GBP to 180 NGN. If that changed to 1 GBP to 165 how much would one crutch cost in GBP and NGN? Divide 70 GBP by 10 to find one unit – 7 GBP, then multiply 7 GBP by 165 NGN to find NGN = 1155 NGN.
3. If I was only interested in buying one quantity of each education item from the budget what items would they be? Secondly, what would the total be? Books, Classroom, Child's education and Complete uniform / Total = 410 GBP / 73,800 NGN.

MA (includes two step problems)

1. If I had 1,700 NGN could I buy a complete uniform? No. How much more would I need? 100 NGN.
2. How much would it cost to repair the road and keep the tractor running for a month? 350 GBP / 63,000 NGN
3. How much would two seed packets and one classroom cost? 260 GBP / 46,800 NGN
4. I bought three items for 450 GBP. What items could I have possibly bought? Repair road, Medicine and Tractor running costs.
How many combinations can you find that add up to 450 GBP?
5. What is the price difference between the most expensive and least expensive item? Most expensive is build new house at 500 GBP and least expensive is Seed packet at 5 GBP. Therefore the difference is 495 GBP.

LA (one step problems)

1. Which item costs 250 GBP? Build classroom
2. Which item costs 3,600 NGN? Books
3. If I had 500 GBP what could I buy? Multiple combinations – one is New house
4. Which item is the cheapest? Seed packet
5. How much would it cost to build a new classroom and a new house? 750 GBN / 135,000 NGN

Activity One

The Nigerian government, in response to a letter from the people of Chanchaga (cross-link Literacy lesson on writing a persuasive letter), have agreed to give the village £1,000 (180,000 NGN). They will not be able to afford every item on the budget. Decide what items they can afford or, if you have already had your PSHE lesson, choose the items you have prioritised from that lesson and decide how you would spend the money.

Work in mixed ability pairs or groups of four.

Note: You can extend this to further lessons by asking the children to present their budget to the class on large poster paper / PowerPoint etc. They can think about which type of graphs they should use to present the information and how they will communicate their plan to the rest of the class. Graphs can be drawn by hand or using Excel. Their plans could also feed back into the PSHE lesson and help develop their debate on what the villagers should do with their money.

Plenary

Groups to present back their final budget showing what they chose to spend the money on and why.

EXTENSION WORK:

- A further lesson can be taught looking at how the data can be represented. Would it be better to show it as a pie or bar chart?
- Children could devise questions for each other using the budget.

CHANCHAGA VILLAGE BUDGET

ITEM	QUANTITY	PRICE <i>Pounds</i>	PRICE <i>Naira</i>
Books	4	20	3,600
Build classroom	1	250	45,000
Build new house	1	500	90,000
Child's education for one year	1	145	26,100
Complete uniform	1	10	1,800
Crutches	10	70	12,600
Medicine for the clinic for one month	1	100	18,000
Repair road to village from highway	1	300	54,000
Tractor running costs for one month	1	50	9,000
Seed packet	1	5	900
Small business loan	1	300	54,000
TOTAL	23	1,750	315,000

Exchange Rate

1 GBP = 180 NGN (Naira)