

School Baden Powell Tarneit	Year Group: 8 TML	Day Wed	Date 19 th September 2012
Topic Percentages, Decimals and Fractions	Aims Students will complete an in class project covering percentages, decimals, and fractions		AUSVELS: Strands, Domain, Foci and Standards Level 8 - Solve problems involving the use of percentages, including percentage increases and decreases, with and without digital technologies (ACMNA187) Level 7 - Find percentages of quantities and express one quantity as a percentage of another, with and without digital technologies. (ACMNA158) Level 7 - Connect fractions, decimals and percentages and carry out simple conversions (ACMNA157)
Location / Setting Classroom	Organisation / Student Groups Standard classroom setting		Classroom management strategy Standard classroom practice
Key Vocabulary fractions, percentages, decimals, ratios, conversion	Materials, Resources and Equipment Our Global Village project Maths dictionaries		References/Sources Nelsons Maths 8 Pearson Maths 7

INTRODUCTION Connecting, Engaging and Modelling Inquiry	MAIN BODY Guiding Inquiry and Practise	CONCLUSION Sharing, Explaining and Reviewing Inquiry
<p>Introduction: (2 to 3 minutes) Brief introduction to the task. All components of the task are topics covered recently. Students may need to consult maths dictionaries.</p>	<p>Our Global Village project: (50 to 55 minutes) Students will work in pairs on the Our Global Village project. As a pair they will be expected to complete the project, but can discuss and decide within the pair if they will split the work or complete it together.</p>	<p>Sharing It may be necessary to start the students off thinking in the right direction, so possibly do the first few questions as a class on the board. Where students are stuck or have particular questions complete working on the board so that other students can benefit.</p>
<p>Reflection</p>	<p>Mentor Feedback</p>	



Our Global Village

There are over **7.058** billion people on the Earth today. Who is this large community composed of?

By Race:

- 0.597 Asian
- $\frac{105}{1000}$ European
- 0.05 North American
- 0.084 South American and Caribbean
- 0.152 African
- $\frac{52}{10000}$ Oceania (including Australia)

Conditions:

- 0.37 live without basic sanitation
- $\frac{13}{100}$ don't have access to clean, safe drinking water
- 0.16 are hungry and/or malnourished

Wealth:

- 0.06 of the population own 59% of the entire wealth
- $\frac{1}{5}$ of the population have 75% of the income
- 0.53 of the population live on \$2.50 or less per day

Education and Technology

- $\frac{17}{100}$ can't read
- 0.07 have completed secondary education
- 0.22 have a computer
- $\frac{35}{100}$ have access to the internet

Child Health:

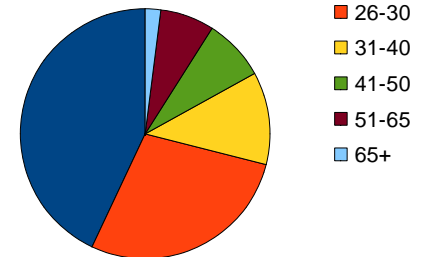
- 0.018 of the world's population are children under five years old classified as underweight
- $\frac{28}{1000}$ of the world's population are children under five years old classified as stunted (too short for their age due to malnutrition)
- 0.079 of the world's population are children living in poverty

How can we help?

There are many charities out there that are trying to create more equality in the world – Oxfam is just one of these. Charities often rely on the generosity of ordinary people. Here is a pie chart of the age groups of Oxfam volunteers:

Volunteers by age group

Oxfam Annual Report 07-08-25



Project Worksheet

Our Global Village

Class Survey

How many people are present in TML today? _____

How many people in TML have a computer at home? _____

How many people in TML have access to the internet at home? _____

1. Write 7.058 billion out fully (with the correct amount of zeroes) _____

2. Convert the decimal and fraction statistics into percentages for the categories Race, Conditions, Wealth, Education and Technology, and Child Health.

Race	%	Conditions	%	Wealth	%
Asian		Sanitation		Own wealth	
European		Water		Have income	
N. American		Malnourished		\$2.50 per day	
S. American					
African					
Oceania					

Education and Technology	%	Child Health	%
Read		Underweight	
Secondary Ed		Stunted	
Computer		Poverty	
Internet			

3. Calculate the percentage of people in TML who have:

a) a computer at home _____

b) access to the internet at home _____

c) Is there a greater or lesser percentage of people in TML that have computers and internet compared to the global percentage above? What is the difference, and what reasons can you think of for that difference?

4. Using the facts you know know or have calculated, find how many people in the world:

a) don't have access to clean water _____

b) struggle to live on \$2.50 or less per day _____

c) have a computer _____

d) have not completed secondary education _____

e) are children living in poverty _____

5. Using the pie chart, find out the following:

a) What percentage of volunteers are between 18 and 30? _____

b) Why do you think most volunteers are in this age range? _____

c) One of the challenges charities face is the need to pay for fundraising and administration costs. If Oxfam spends 24.4% of its income on fundraising and 8.9% on administration costs, what percentage of its income is available to go directly to community-aid projects?