UNIT 3 SESSION 2: PRESENTING TIME USE DATA

Age range: 8 - 12 years

Outline
Learners will think about the types of activities they do each day and how long they spend doing these different daily activities. They will start to compare their daily time use with those of children from the four Young Lives countries: Ethiopia, India, Peru and Viet Nam. Learners will then consider and compare the different ways in which data can be presented and select appropriate ways to present data to show their own daily time use.

Learning objectives	Learning outcomes
• To collect data about how much time is spent on different daily activities. • To identify some different ways in which data can be presented and to evaluate advantages and disadvantages of different representations. • To construct bar charts and pie charts.	• Learners will collect data about their own daily activities. • Learners will compare and discuss different ways of presenting data. • Learners will construct bar charts and pie charts to show time use data for some of the Young Lives children.

Key questions	Resources

• What activities do I do each day?
• How much time do I spend on different activities?
• What are the advantages and disadvantages of each way of presenting the data?
• Which way do I prefer and why?
• Are any of these ways not suitable for the data? Why?
• Are there any other ways in which the data could be presented?
	• Unit 3 Slideshow (Sessions 1 – 3): Slides 19 – 33
	• Resource sheets:
	  1. Presenting time use data A
	  2. Presenting time use data B
	• Activity sheet 1: *How do you spend your day?*

Curriculum links

England	Wales	Scotland
Pupils should be taught to: **Mathematics***:* **Statistics** • Interpret and construct bar charts, pictograms, tables, pie charts and line graphs and use these to solve problems. • Complete, read and interpret information in tables, including timetables.	**Mathematics** **Handling Data** • Use and present data in a variety of ways including tables, pictograms, charts, bar charts, line graphs, diagrams, text and ICT. • Collect, represent, analyse and interpret data.	**Numeracy and Mathematics: Data and analysis** • I have carried out investigations and surveys, devising and using a variety of methods to gather information and have worked with others to collate, organise and communicate the results in an appropriate way. MNU 2-20b

Important teaching note
These are suggested activities and resources to **support** your teaching rather than guide it. Additional teaching input may be required to develop learners' knowledge, skills and understanding of some of these concepts.

OXFAM

Young Lives

Activity 2.1 *(45 min)*

- In *Unit 2* learners explore the daily lives of some of the Young Lives children. They complete daily timetables for these children and identify similarities and differences between the lives of these children and with learners' own lives. They also begin to consider the effects of gender and living in a rural or urban area on daily life.

- Show slide 20 of the *Unit 3 Slideshow (Sessions 1 – 3)*. Explain that the photographs on this slide are all of Young Lives children carrying out different daily activities. Learners will be finding out more about these images and the activities shown in subsequent slides. Ask learners what activities they do on a typical school day. Write down their ideas on sticky notes.

- Discuss which activities we could group together. Ask: *What names could we give these groups of activities?* Examples include: playing, sleeping and at school. *Which activities do you think you spend the most time doing each day?*

- Explain that the Young Lives researchers are looking at how much time children spend on different activities. Show slides 21 to 28 with the different categories of daily activities that they are investigating.

- Give learners copies of *Presenting time use data A* and *B* (Resource sheets 1 and 2). Colour copies of the data are provided on slides 29 to 32. Explain that the data shows how much time Manuel (from Peru) spends on each activity in a typical day. Time use is rounded to the nearest hour which in Manuel's case means that there appears to be 25 hours in total in his day. The data is presented in four different ways: table, pie chart, bar chart and line graph.

- Discuss the advantages and disadvantages of each different way of presenting the data and ask the following questions:

  - *Which way of presenting the data do you prefer and why?*

  - *Are any of these ways not suitable for the data? Why? Explain that the line graph is not suitable as the data is discrete rather than continuous.*

  - *Are there any other ways in which the data could be presented, for example a pictogram or bar line chart?*

- Now give learners copies of *How do you spend your day?* (Activity sheet 1) which shows collated time use for four of the Young Lives children: Afework (Ethiopia), Harika (India), Luz (Peru) and Hung (Viet Nam). The table shows the rounded and approximate number of hours each child spends doing different activities in a typical day. Show slide 33 which shows this collated data as a comparative bar chart. As before, discuss the advantages and disadvantages of these two different ways of presenting the data.

- Ask learners to complete the *Me* column to show their individual daily time use and then select appropriate ways to present the data. This could be completed for homework. Some learners may need further guidance on how to round and approximate their time use. In *Unit 2 Session 1*, learners are asked to complete a daily timetable which might be useful for calculating time use in this activity.

- Allow some time at the end for learners to discuss and reflect on any similarities and differences they have noticed in daily time use between the different Young Lives children and themselves. Note that learners will be investigating time use in more detail in *Unit 3 Sessions 3* and *4.*

Differentiation

- *Make it easier: Construct a bar chart to represent the time use data for one of the young people.*

- *Make it slightly harder: Construct a comparative bar chart to show the time use data for all five children for each activity (as shown in slide 33).*

- *Make it harder: Construct a pie chart to represent the time use data for each child as well.*

Further ideas

- Create a spreadsheet of the data on the computer and then experiment with different ways of presenting the data.

- Look in newspapers or on the Internet to find examples of different ways of presenting data. They should discuss why the authors chose this particular way to represent the data and the type of graph/chart chosen.

Terms of use

Copyright © Oxfam GB / Young Lives
You may use these photographs and associated information for the educational purposes at your educational institution. With each use, you must credit the photographer named for that image and Oxfam and Young Lives. You may not use images and associated information for commercial purposes or outside your educational institution. All information associated with these images relates to the date and time that project work took place.
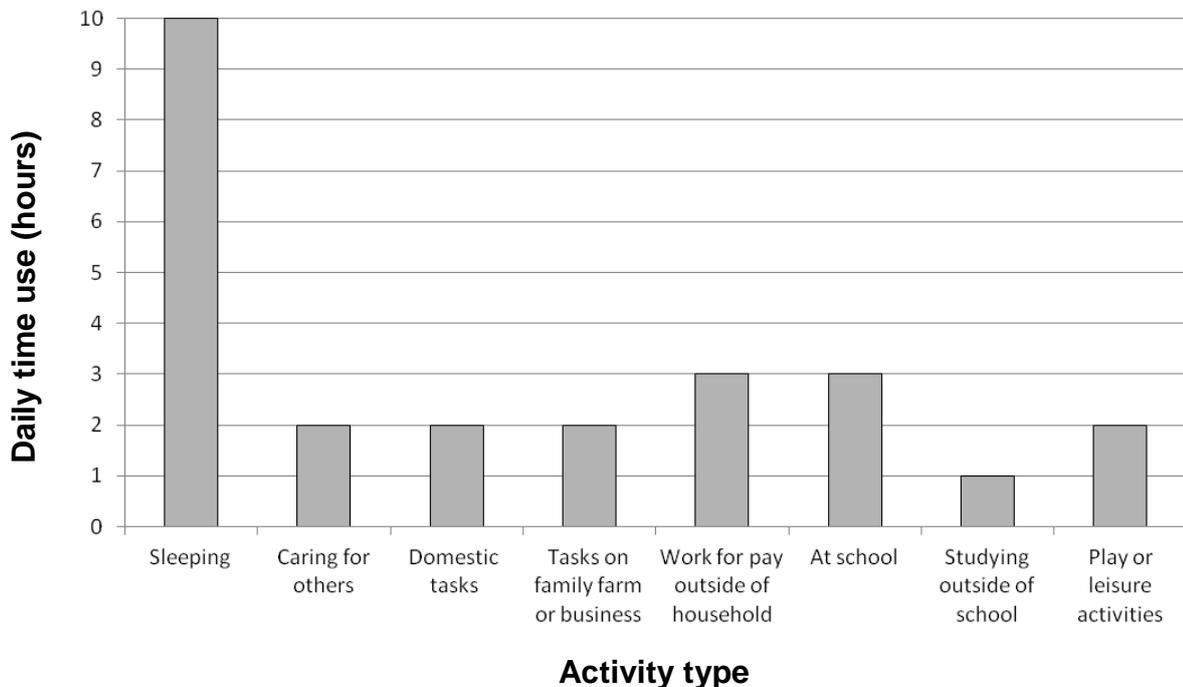
Presenting time use data A
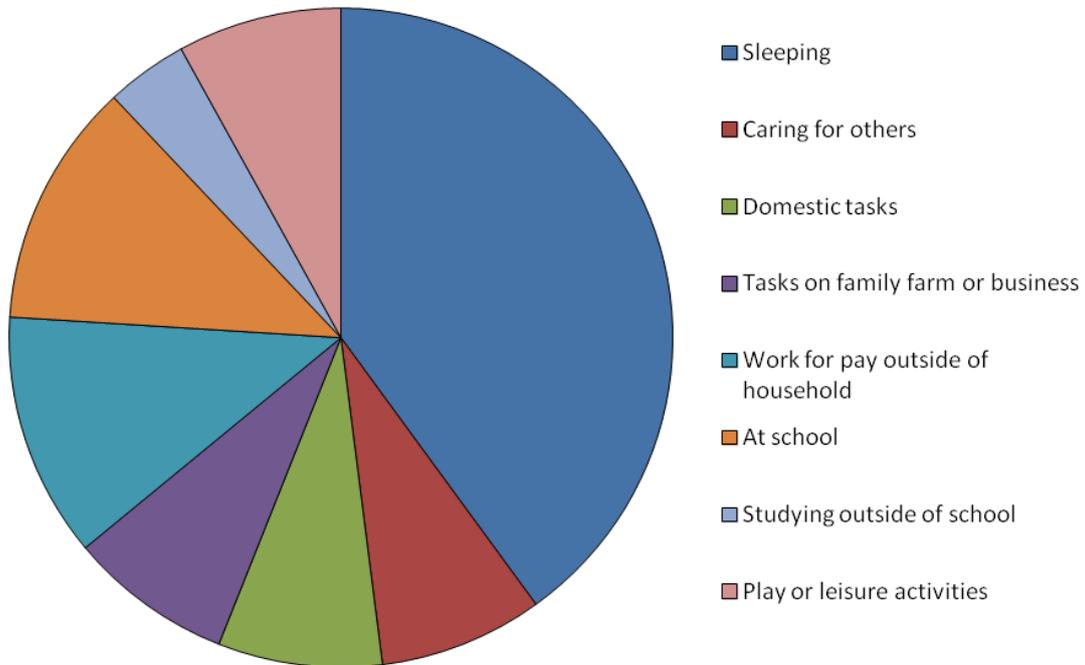
Pie chart

Legend:
- Sleeping
- Caring for others
- Domestic tasks
- Tasks on family farm or business
- Work for pay outside of household
- At school
- Studying outside of school
- Play or leisure activities

Bar chart

Y-axis: **Daily time use (hours)** (0 to 10)

X-axis categories: Sleeping, Caring for others, Domestic tasks, Tasks on family farm or business, Work for pay outside of household, At school, Studying outside of school, Play or leisure activities
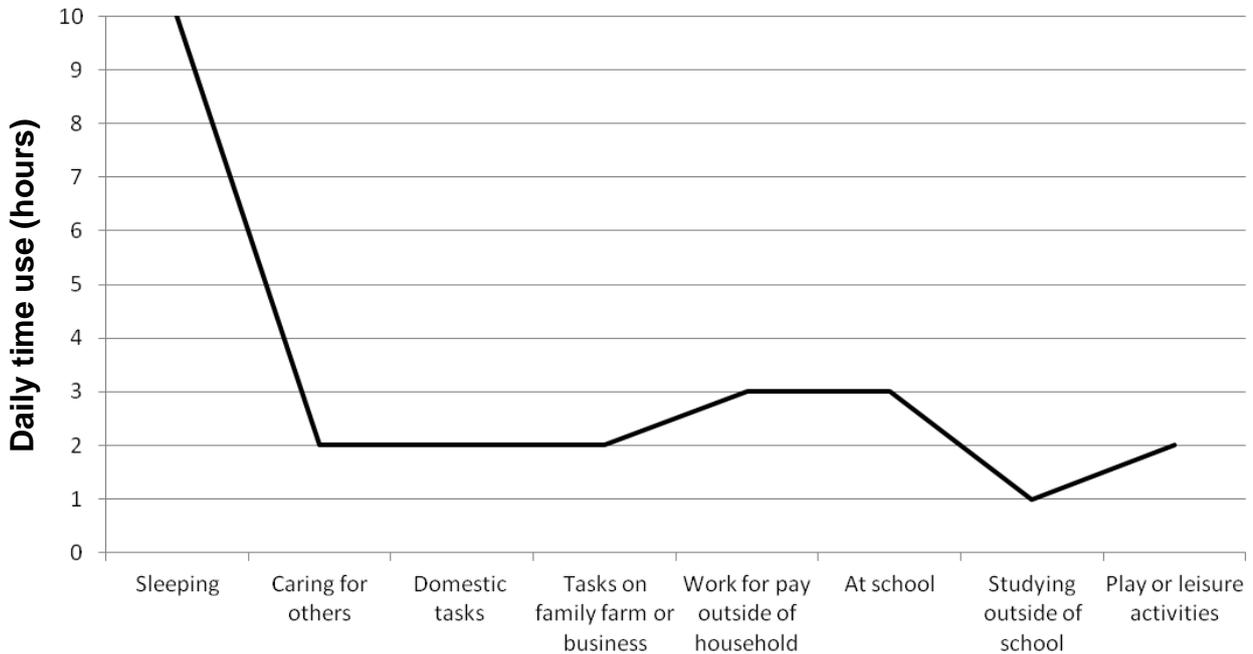
X-axis label: **Activity type**

Note: Time use is rounded to the nearest hour which in Manuel's case means that there appears to be 25 hours in total in his day.

Presenting time use data B

Resource sheet 2

Manuel, Peru

Line graph

Table

Activity type	Sleeping	Caring for others	Domestic tasks	Tasks on family farm or business	Work for pay outside of household	At school	Studying outside of school	Play or leisure activities
Daily time use (hours)	10	2	2	2	3	3	1	2

Note: Time use is rounded to the nearest hour which in Manuel's case means that there appears to be 25 hours in total in his day.

How do you spend your day?

Activity sheet 1

This table shows how much time each child spends on different activities each day. Time use is rounded to the nearest hour. Calculate the amount of time you spend on these different activities and record your time use in the *Me* column.

	Afework	**Harika**	**Luz**	**Hung**	**Me**
Time spent sleeping	9	9	9	9	
Time spent caring for others (younger siblings, ill household members)	0	1	2	0	
Time spent doing domestic tasks (for example, fetching water, firewood, cleaning, cooking, washing or shopping)	1	2	2	1	
Time spent doing tasks on family farm or business	0	0	0	3	
Time spent working for pay outside of the household (or for someone not in the household)	0	0	0	0	
Time spent at school	7	6	6	5	
Time spent studying outside of school (for example, extra tuition or studying at home)	2	2	3	2	
Time spent playing or doing leisure activities	5	4	2	4	

OXFAM