



ACTION BASED ACTIVITIES

TOPIC N6.1 : USING SPREADSHEETS

THEME N6 USING ICT IN SOCIAL ROLES



APPLICATION OF NUMBER

LEVELS 1 & 2

ISSUED SEPTEMBER 2005

INSTRUCTIONS

WHAT DO I DO?

Use this Theme Template to help you:

- plan an Action-based Activity on the theme of Using ICT in Social Roles
- carry out an investigation into the subject
- produce evidence needed for your portfolio.

NOTE: Use this booklet WITH your Learner's Planner and Guide.

WHAT IS ASSESSED?

Using ICT in Social Roles is one of six themes you can choose for your Action-based Activity/portfolio work. It includes topics such as:

N6.1 USING SPREADSHEETS

N6.2 Online Shopping

N6.3 Sport

APPLICATION OF NUMBER

TOPIC N6.1 : USING SPREADSHEETS

TOPIC N6.1 USING SPREADSHEETS

Spreadsheets are a very useful way of using a computer to do a range of calculations for you. You can use them at home and at work. This template will take you step by step from getting started, to writing and checking your final pieces of work. Each step follows Part Two of your *Learner's Planner & Guide*, so read it alongside this Theme Template.



It's a good idea to follow this advice.



You must do this to get the qualification.



**STEP
A**



CHOOSING A TOPIC

One of the best ways to start thinking about a subject is to *mindmap*. You can find how to do this on page 5 of the *Learner's Planner & Guide*.

TASK 1

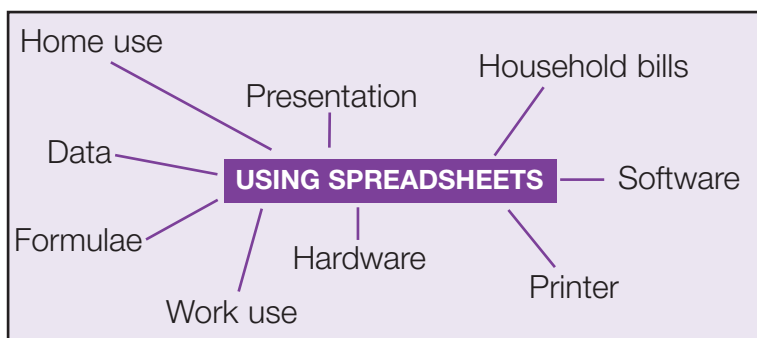
Allow about
20 minutes

On your own, or with a colleague, think about and talk about "Using Spreadsheets" and aspects of it you might like to study.

Work together to make a **mindmap** of the subject. You may want to think about:

- when would you use a spreadsheet?
- which programs are best suited to your particular uses?
- where would you buy the program at the best price?
- will using it lead to a saving on your household expenses?
- would your employer let you investigate different programs at work?

PORTFOLIO EVIDENCE – You could copy and add to the unfinished example below. This could then go into your portfolio as evidence that you have thought about your chosen subject.



ESSENTIAL SKILLS
ACTION BASED ACTIVITIES



Continued

TASK 2
Allow about
15 minutes

When you have made your mindmap, focus in on one or two ideas that:

- interest you
- will be easy to research and get information about (talk to your tutor if you are unsure).

Write these ideas down and then try to turn them into **QUESTIONS**. This will help when you write up your conclusions later. The examples in the box may help you do this.



Topic : Using Spreadsheets

Original Idea	Question
Home use	How many of my bills should I include?
Presentation	What is the best way to display the figures?
Software	Which program would be best for me?

TASK 3
Allow about
10 minutes

In your portfolio, write down your chosen title/question.

Check with your tutor that it is okay. (Remember, you can always change it later if necessary.)

TASK 4
Allow about
30 minutes



PLAN – It's a good idea next to draw up a plan of action. Make a table and on it write down what you intend to do and when you will do it by. Highlight key dates and deadlines (e.g. when you are giving a talk or having a discussion).

APPLICATION OF NUMBER
TOPIC N6.1 : USING SPREADSHEETS



CHOOSING & INTERPRETING INFORMATION

Interpreting information from suitable sources is an essential part of the qualification and you must be able to show that you have collected, read and extracted information from **DIFFERENT** sources.

There are lots of ways of finding information such as:

- books and other resources in the library
- magazines and newspapers
- using the Internet
- talking and interviewing people
- television and radio programmes

TASK 5

Allow about 2-3 hours

Look for suitable documents to read. Remember:

- at **both levels 1 and 2** you must use **TWO** different sources of information.
- overall **at level 1** at least one source must include a table, chart, graph or diagram
- **at level 2** at least one source must include material containing a chart or a graph.

You will need to make careful notes as you work. Put these in your portfolio (see also pages 8 and 9 in the *Learner's Planner & Guide*).



Topic: "Using Spreadsheets"

Title of document: *"An introduction to Spreadsheets"*
Author: *Priory Woods School*
Website:
<http://www.priorywoods.middlesbrough.sch.uk/subject/ict/training/spread.htm>

Information about

1. How to create a worksheet.
2. Know the functions of the tools.
3. How to add data.
4. How to perform multiple calculations.
5. How to save and print.

Summary: In your own words, write up what you have read.
This is the main piece of evidence.



ASSESSMENT Your tutor will assess that:

- you have chosen the information you need
- you have obtained the information needed
- you have identified the best methods to get the results you need.

Remember to label sources clearly.

**STEP
C**



CARRY OUT AND CHECK CALCULATIONS

Carrying out and checking calculations is an essential part of the qualification. At each level you are required to carry out calculations to do with:

a. amounts/sizes	3	3
b. scales/proportion	3	3
c. handling statistics.	3	3
d. using formulae		3

It may be difficult to cover all the required calculations for this topic (See *Learner's Planner & Guide*, page 10).

TASK 6

Allow about
1 hour

1. Carry out calculations. You will need to:

- pick out the data/information you think will be useful
- decide on the calculations you need to find the results you want
- show calculation methods clearly
- check calculations and correct any errors

At Level 2 calculations must involve two or more steps

Talk this over with your tutor if you are at all unsure. A few ideas are given below.



CARRYING OUT AND CHECKING CALCULATIONS

Examples – Carrying out and checking calculations

At level 1:

- you might use information collected first hand as the basis of calculations (eg the cost of running your home). You might carry out calculations using data from a secondary source such as a Government website showing average household expenditure and containing tables, charts, diagrams or line graphs.

At level 2:

- your calculations will be more complex, perhaps comparing two sets of data on a similar subject.



ASSESSMENT Your tutor will assess:

- how well you carried out your calculations (including your working)
- that you checked your methods
- that you spotted and corrected any errors
- that your results make sense.

**STEP
D**



INTERPRETING RESULTS & PRESENTING FINDINGS

Having collected, sorted, extracted data and carried out calculations based on them, you are now ready to interpret your findings.

TASK 7

Allow about
3 hours

1. Go through all the information you have collected and sort it out carefully. Keep only relevant information and make sure EVERYTHING is properly labelled.
2. Now sift through again and, on notepaper, write down your main findings and conclusions. Remember, your first question (Task1)? Can you now answer your question?
3. Think how you will present your information.

Remember:

- At level 1 you have to present it in **two** different ways using charts or diagrams
- At level 2 you need to present it in **two** different ways using graphs, charts or diagrams.

Other points to consider:

- Which graphs, charts or diagrams will you use to present your findings?
- How do the results of your calculations relate to the purpose of the action-based activity?
(See Learner's Planner and Guide page 12)

TASK 8

Allow about
3 hours



At this stage you will be required to present your findings to a tutor or supervisor. Before you hand your work in, check that:

- you have covered all requirements intended
- that each section has suitable headings/labelling
- that diagrams, charts, maps etc are properly labelled
- pages are numbered
- there is a contents page.

N.B. There is a checklist on page 14 of the Learner's Planner and Guide



It is a good idea to produce a draft plan/outline of what you will include in your final presentation. An example is given on the next page.

STEP
D



INTERPRETING RESULTS & PRESENTING FINDINGS
continued

EXAMPLE OF A DRAFT PRESENTATION PLAN

Topic: Producing a Spreadsheet of Household Costs

1. I will present my work as a **short report** (computer typed and to include graphs, tables etc) with the sections below.
2. **Introduction** – I will include what I wanted to find out and why it interests me.
3. **Method** – a short section saying how I set about collecting data/information e.g. interviewed 20 people to find out their household expenses.
4. **Calculations and Interpretation** – I will include how I extracted information from the data collected; how I worked out averages; analysis of results of interviews with people.
5. **Presentation** – I will use written information and diagrams – mainly tables, graphs and pie charts.
6. **Appendices** – I will include some photocopied data from energy suppliers, supermarkets, consumer groups etc, copy of questionnaire used to interview people.

I must remember to number pages and add a Contents page.



ASSESSMENT Your tutor will assess your work as follows:

At level 1 you will be assessed on:

- how you have interpreted the results of calculations
- suitable choice of chart or diagram with appropriate labels and correct use of units
- how you have explained what the chart or diagrams show.

Additionally **at level 2** you will be expected to:

- describe the methods you have used
- explain the results of calculations in terms of how they meet the purpose of your chosen Activity.

**USING SPREADSHEETS
MORE ACTION-BASED ACTIVITY IDEAS**

In all these cases think about the ways you could bring Application of Number into your work.

Organising a survey and representing the results clearly and accurately will benefit your work.

1. **How can I use a spreadsheet to help me choose my holiday destination?**

Choose three different holiday destinations and compare them in terms of temperature, rainfall, hours of sunshine, cost of living and flight costs. Present your findings on a spreadsheet.

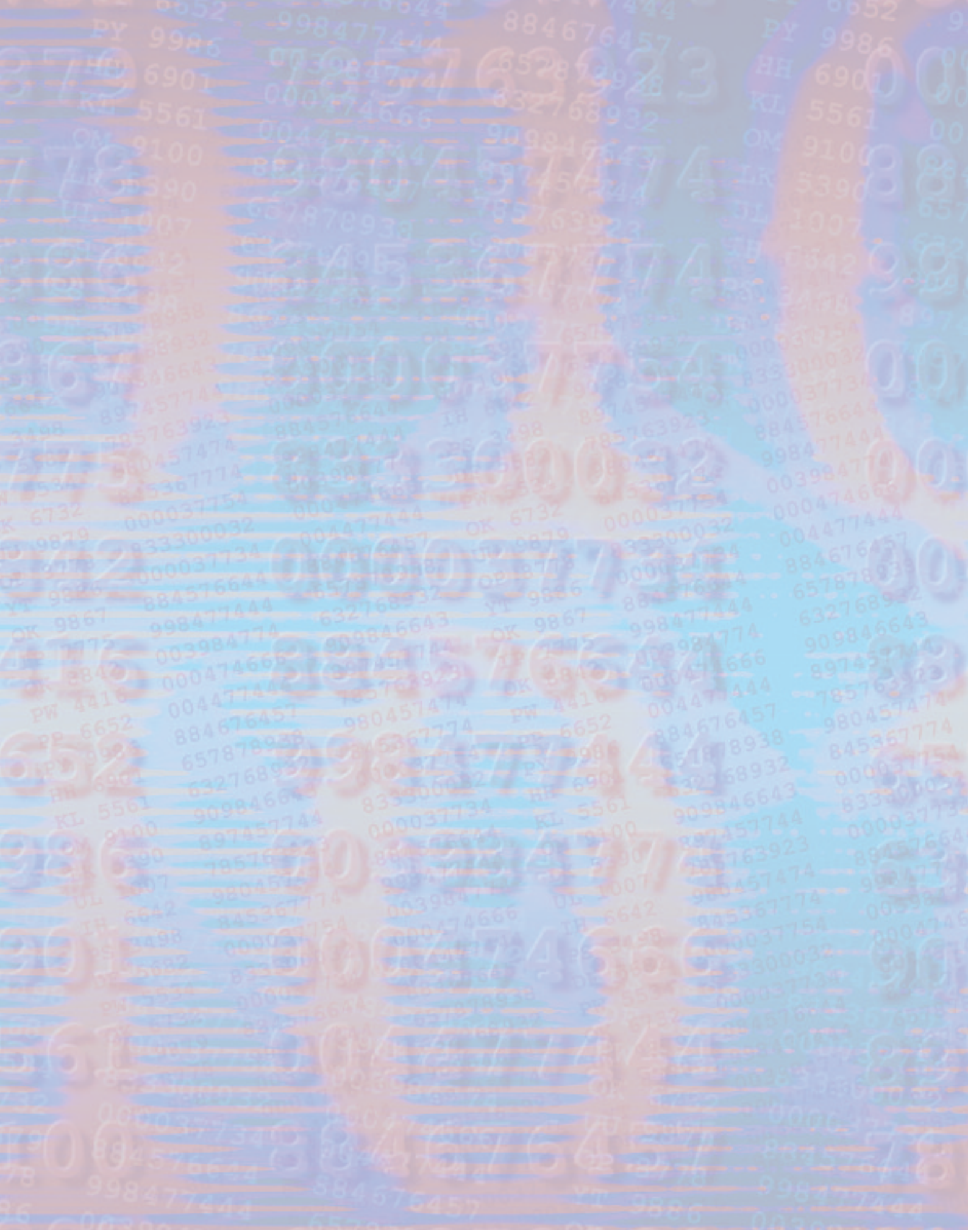
2. **How are the players in my favourite team performing this season?**

Keep a record on your spreadsheet of matches played, goals scored, assists, fouls, bookings, sendings off, substitutions. Does this change for each player if the team is playing home rather than away? Present your findings on your spreadsheet, using appropriate graphs and charts etc.

3. **Which is the cheapest local supermarket?**

Produce a spreadsheet showing the cost of a range of food products (known as a shopping basket) at three local supermarkets.

Record price changes and special offers and see whether this affects the rankings of the supermarkets. Take account of any other factors such as transport, parking, loyalty cards etc. Present your findings on a spreadsheet, using appropriate graphs and charts.



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