



ACTION BASED ACTIVITIES

**TOPIC VN6 CONSTRUCTION
– HEALTH AND SAFETY AT WORK**

THEME: EDUCATION & TRAINING



APPLICATION OF NUMBER

LEVELS 1 & 2

ISSUED SEPTEMBER 2006

INSTRUCTIONS

WHAT DO I DO?

Use this Theme Template to help you:

- plan an Action-based Activity on the theme of Education and Training
- carry out an investigation into the subject
- produce evidence needed for your portfolio

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

WHAT IS ASSESSED?

Education and Training is one of six themes you can choose for your Action-based Activity/portfolio work.

APPLICATION OF NUMBER

TOPIC VN6 CONSTRUCTION – H&S AT WORK

TOPIC V6 CONSTRUCTION – HEALTH & SAFETY AT WORK

Health and Safety at Work is an important issue in Northern Ireland. In 2002 over 4000 workers suffered near fatal accidents and the economy lost over £500 million. If you want to study this topic you will need to narrow it down. This guide 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.



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 “*Construction – Health and Safety at Work*” and aspects of it you might like to study.

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

- looking at the major causes of death and accidents
- risk assessment
- scaffolding
- personal protection equipment

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.



APPLICATION OF NUMBER

TOPIC VN6 CONSTRUCTION – H&S AT WORK



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 : Construction – Health and Safety at Work

Original Idea	Question
Serious accidents at work	What are the causes of many accidents at work?
Serious accidents at work	How do NI statistics compare with other countries?
PPE	What personal protection equipment is needed on your site? How much does this cost?
Risk assessment and accident prevention	By occupation, which are the most hazardous jobs?

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 carrying out a survey or presenting your findings).



**STEP
B**



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 on Construction – Health and Safety at Work such as:

- books and other resources in the library
- DIY magazines, trade journals and newspapers
- using the Internet
- interviewing people

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: "Construction – Health and Safety at Work"

Title of book: *"A Building Craft Foundation"*

Date: *April 2006*

Author: *Peter Brett*

Chapter: *2 Health and Safety*

Other sources:

- internet
- site plans
- company documents



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.



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:

	Level 1	Level 2
a. amounts/sizes	✓	✓
b. scales/proportion	✓	✓
c. handling statistics	✓	✓
d. using formulae		✓

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

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 overleaf.

 eg**CARRYING OUT AND CHECKING CALCULATIONS****Examples – Carrying out and checking calculations****At Level 1:**

- you must carry out calculations using data from a secondary source such as text books and internet sites containing tables, charts, diagrams or line graphs
- you might use information collected first hand as the basis of calculations (eg surveys, measuring)
 - a. costs, sizes
 - b. calculations from scale drawing
 - c. range or average calculations of number of accidents or hours lost through accidents

At Level 2:

- you must carry out calculations using data from a secondary source such as text books, trade journals and internet sites containing charts or line graphs
- you might use information collected first hand as the basis of calculations (eg surveys, measuring)
- your calculations will be more complex, perhaps comparing two sets of data from different countries or different years
 - a. costs including discounts
 - b. calculations for pie charts or ratios for different equipment requirements
 - c. comparison of average costs for different suppliers or costs of accidents in different countries or trades
 - d. formula for volume calculations

**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**



TASK 7

Allow about
3 hours

INTERPRETING RESULTS & PRESENTING FINDINGS

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

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 (Task 2)? Can you now answer your question?
3. How do the results of your calculations relate to the purpose of the Action-based Activity? (See Learner's Planner and Guide Page 12)
4. Think how you will present your findings.

Remember:

- at Level 1 you have to present your findings in **two** different ways using charts or diagrams
- at Level 2 you need to present your findings in **two** different ways using graphs, charts or diagrams
- comment on your graph, chart or diagram

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
- each section has suitable headings/labelling
- 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: The cost of Health and Safety at work

1. I will present my work as a **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 the subject interests me.
3. **Method** – a short section saying how I set about collecting data/information e.g. books and trade journals, survey to collect data/information. Also used the Internet.
4. **Calculations and Interpretation** – I will include how I calculated averages and extracted information from the data collected; how I worked out best value for money.
5. **Presentation** – I will use written information and diagrams – mainly tables, charts and graphs.
6. **Appendices** – to include some photocopied data from shops and Internet, which included prices.

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:

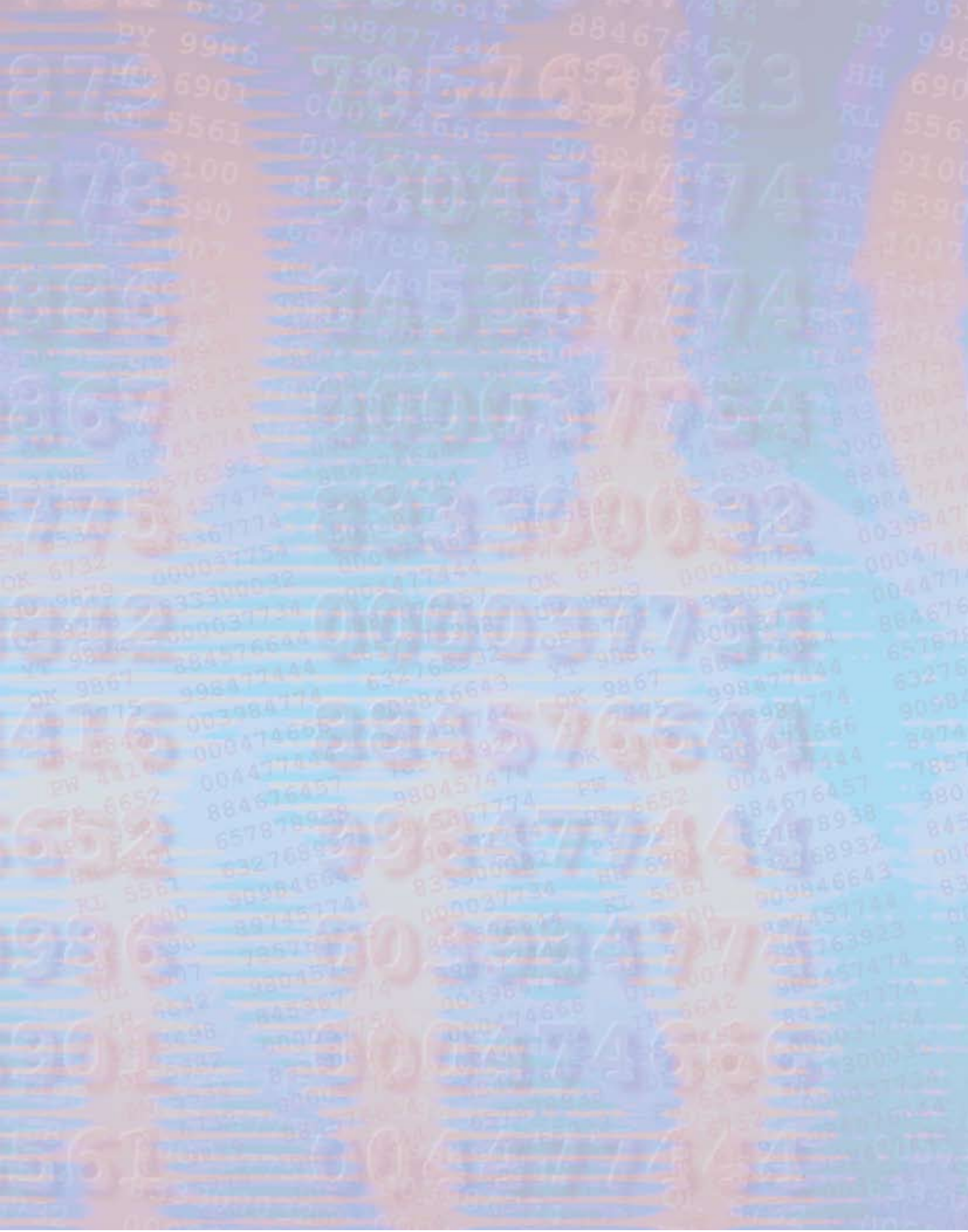
- describe the methods you have used
- explain the results of calculations in terms of how they meet the purpose of your chosen Activity



CONSTRUCTION – HEALTH & SAFETY AT WORK

MORE ACTION BASED ACTIVITY IDEAS

1. Carry out a survey to find out what people think of the importance of health and safety at work. You will need a questionnaire.
2. Contact and visit your local H&S office. Investigate changing trends in the local pattern of H&S at work.
3. “Prevention is better than cure”. Select a building, this could be your training centre or a local building, and identify as many potential health and safety hazards as possible. Draw a plan to demonstrate some of the hazards and cost out ways of reducing these hazards.
4. Research the latest H&S issues connected with modern technology e.g. ICT and RSI (Repetitive Strain Injury). For more information on RSI, try visiting www.tuc.org.uk/rsi or www.worksmart.org.uk.
5. Research H&S issues in an occupational area in which you have a special interest.
6. Investigate H&S statistics in different countries.



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