WAGGA WAGGA HIGH SCHOOL

Proud of our past, learning together for the future

Management
&
Communication

(A Portfolio Guide)

Industrial Technology: Multimedia Technologies

Name: _____ Year: _____

Item or Section		Completed	Final Check
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Numbered Each Page			
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Statement of Intent
- **Introduction**
  Briefly state the type of multimedia project you intend to produce, its genre, subject matter and possible title.
- **Motivation/Inspiration**
  Explain why you have undertaken this project or why it is important.
- **Parameters**
  Identify your target audience and suggest why it should appeal or what you wish to achieve.
 Outline the extent of the project, listing the main topics or issues you plan to address.
  Identify output/distribution options and the basic techniques you may use.
  Identify limitations and technical constraints.
  Identify possible opportunities to extend your project.

The statement of intent should be brief, clear and succinct; 1-2 pages in length and written in future tense.

All changes in the design of the project should be documented in the design and development section and with ongoing evaluation. This statement provides the criteria to assess the quality and success of your project in the final evaluation.
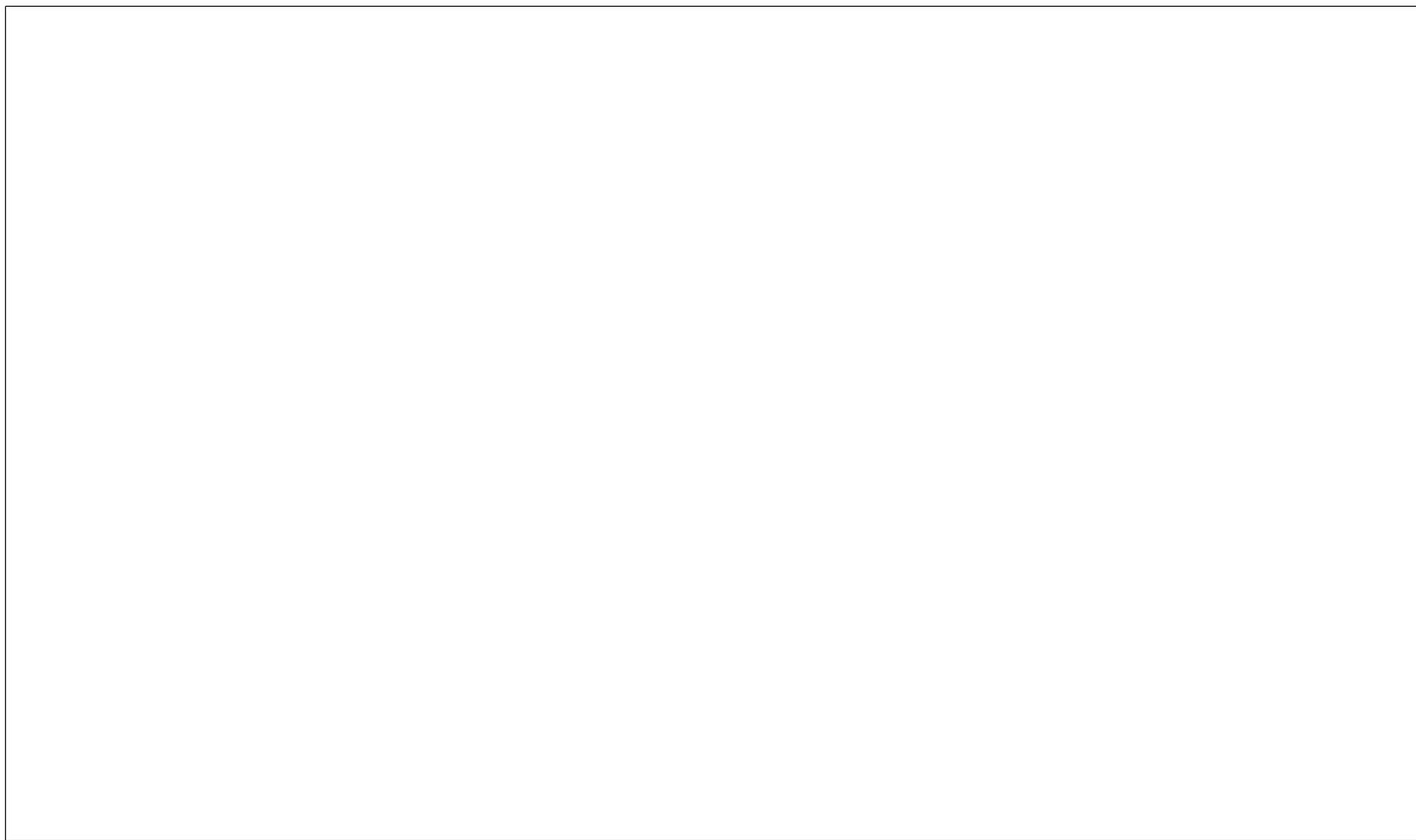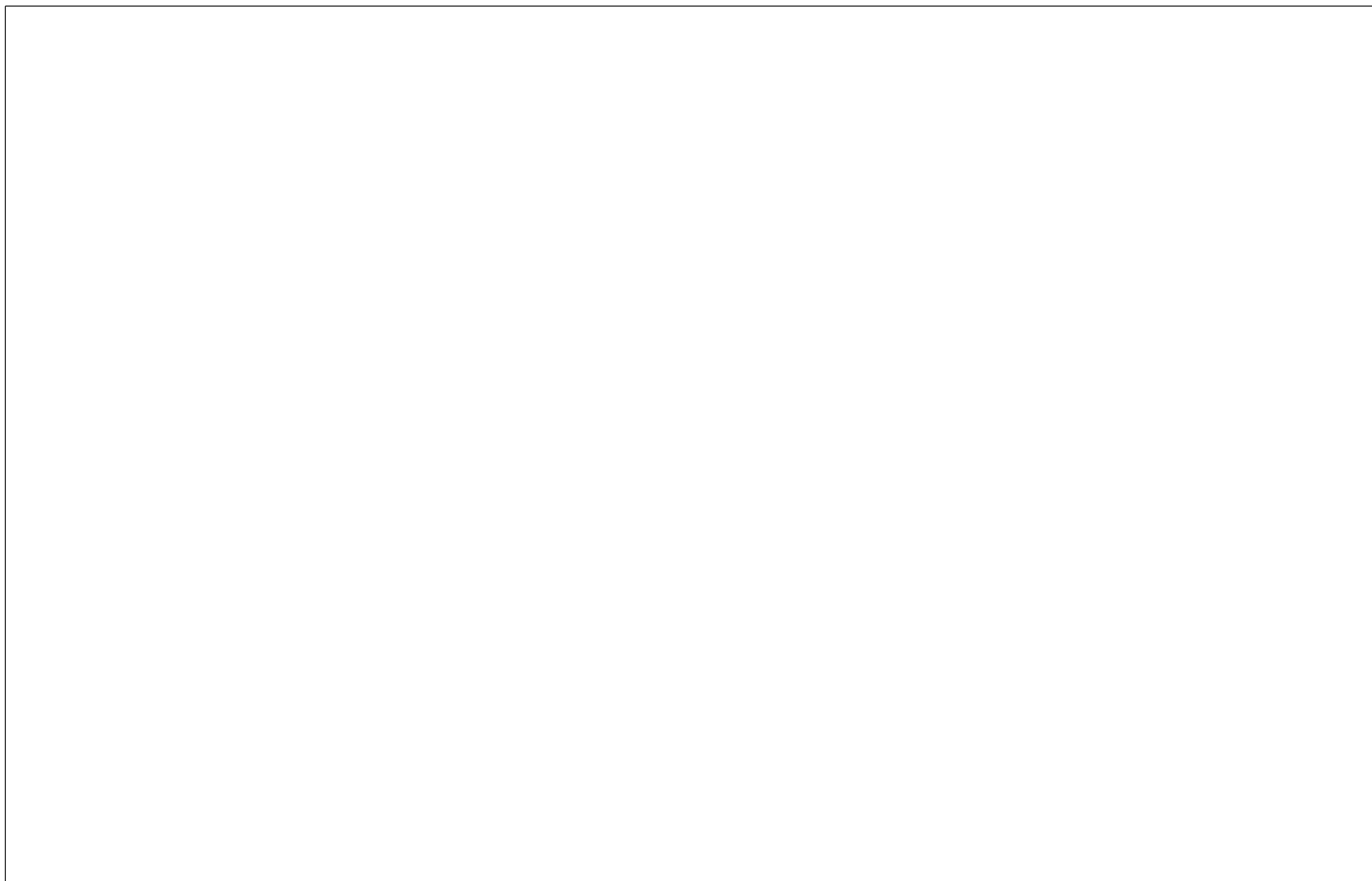
Statement of Intent

Introduction

_____

_____

_____

_____

Motivation/Inspiration

_____

_____

_____

_____

Parameters

_____

_____

_____

_____

How the project could be extended?

_____

_____

_____

_____

Research (15-20 pages)
Conduct and document a wide range of research and relate your investigations to the design and development of your project.

You must research:
- ☐ Materials
- ☐ Resources
- ☐ Processes
- ☐ Technologies

In this section you could:
1. Outline the research methods you will use and identify sources of information
2. Identify a number of existing multimedia publications that address similar content, genre, styles, techniques to your project and that have influenced your direction and design
3. Conduct some 'market' research to 'test' your project ideas or styles with members of your target audience
4. Identify media resources that are available and may be incorporated into your project
5. Investigate a range of possible techniques
6. Conduct experiments and record a summary of your findings
7. Identify equipment (hardware) and software tools, and outline production processes that you may use to create your project.

This section should be quite extensive, but all information must be relevant and directly related to your project. Class notes may be a useful resource but don't use them to 'pad out' this section.

All research must be analysed and evaluated. Explain how your findings could be incorporated into your project.

Title of Researched Item
URL and/or Source

Generic Information

_____
_____
_____
_____
_____
_____

SCREENSHOT/IMAGE

Design Aspect (include screenshot)	Analysis	How can this be implemented/changed in the Major Project	Why would this design or functionality feature be implemented?

Selection and justification of resources

This section should be quite extensive, but all information must be relevant and directly related to your project.

- **Materials**

    Types of media, existing medial collections/libraries you may be able to utilise

    file types, media formats and codes (eg explain why you chose a PNG or GIF)

- **Technologies**

    Devices used for processing, storage, imaging, audio, input/capture, communication and output software applications.

- **Processes**

    Typical workflow procedures and software techniques, particularly industry standards.

    IT processes, back-up, antivirus, incremental saving, legal processes, copyright, seeking copyright

    Identify work that may be appropriately outsources or resources that could be purchased complete.

- **Resources**

    Scripts, modules, templates

    Tutorials and other resources that may include factual information or opinions from websites, forums, blogs, industry exper

Selection and Justification of Resource

Image	Title	Description	Other Options	Why Was this Chosen

Image	Title	Description	Other Options	Why Was this Chosen

Image	Title	Description	Other Options	Why Was this Chosen

Image	Title	Description	Other Options	Why Was this Chosen

Development of ideas

You need to demonstrate your thought processes over a period of time as you select and progressively refine your ideas into your final Major Project.

In this section you could include:

- **Sketching and idea generation**
  a mindmap to show the topics, concepts or sections that may be included as well as the possible organisation, relationships and links between the topics and sections
  draft 'script'
  preliminary sketches of characters, backgrounds, graphics
- **Prototyping, modelling and testing**
  tutorial exercises
  diagrams showing layout of screens/pages, user interface or other components
  detailed storyboards showing the organisational structure of the project
  animatics, location skills, screen tests, short records to assess quality, compatibility, editing techniques, calculations
  outline and explanation of the modifications you made to your initial ideas and concepts
- **Production and working drawings**
  working script / director's notes, animator's 'bible'
  shot list/log
  template files, custom palettes

Select only a good representative sample of your hand-drawn sketches to include in the folio. These may be placed directly into the folio or photographed/scanned into the folio document.

Title of Storyboard/Sketch/Script/Drawing/Shot List

Storyboard/Sketch/Script/Drawing/Shot List

Description	Evaluation	Explanation of how this will help the Statement of Intent

Design and/or design modifications

While you have justified the materials, resources, processes and technologies from a technical point of view in the research section of your folio, this is where you can analyse, evaluate and justify the aesthetic design of your project.

- Discuss the major design features of your project and explain why they are important and appropriate
- Explain how the project evolved and why the changes were made

Title of Final Storyboard/Sketch/Script/Drawing/Shot List

Final Storyboard/Sketch/Script/Drawing/Shot List

Evaluation	Why this design was chosen	Explanation of how this will help the Statement of Intent

Timeline plan

Develop a comprehensive and detailed time plan to ensure your project is completed on time.

- Prepare an outline of critical dates or deadlines for the completion of each stage of your project
- Construct a detailed Gantt chart or other diagram showing both the planned and actual timing of each part of the project - it may include management tasks but more importantly it must include the detailed steps of production
- Identify and explain any major changes to your proposed timeline and evaluate your project throughout the project

Use a journal or diary to regularly record your progress. It should include 'to do' lists and procedures, and may include notes and comments to self and evaluations. While this will not be directly included in your folio, it will be very helpful when it comes time to actually write and edit your folio.

Time & Action Plan

■ **Expected Progress**
■ **Actual progress**

Term 4												
Task	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	Evaluation of Task
Statement of Intent		▮	▮									
			▮									
Task Name				▮	▮							
			▮	▮								
Task Name							▮	▮	▮	▮	▮	
						▮	▮	▮	▮	▮		
Task Name				▮	▮	▮	▮		▮	▮	▮	
			▮	▮	▮			▮	▮	▮		

Ongoing Evaluation:
Explain how you think you went this term in relation to your time management.

Finance plan

Develop a comprehensive and detailed plan to ensure your project is completed on budget.

- Conduct a preliminary investigation into the probable costs associated with your ideas and your own financial position - determine a realistic 'bottom line' that includes contingency planning
- Construct a budge showing predicted expenses for all the processes and items in your project
- Identify capital investments and reoccurring costs not in the budget
- Keep a record of all expenses - explain any significant differences between your proposed budget and actual expenditure

Although many student multimedia projects are produced at very little expense using existing resources, it is important to identify the costs associated with specific processes and items. Finance plans may include 'wages' but this is not realistic for student projects and not necessary.

DoE pricing as of 12th January 2017

HP EliteDisplay E190i LED - 19"

The HP EliteDisplay E190i LED monitor is the most cost effective monitor.

$146.29 (exc. GST)

HP EliteDisplay E202 LED - 20"

The HP EliteDisplay E202 LED monitor is a highly adjustable 20" LED monitor.

$152.32 (exc. GST)

HP EliteDisplay E222 LED - 21.5"

The HP EliteDisplay E222 LED monitor is an affordable mid-size monitor.

$165.28 (exc. GST)

HP EliteDisplay E242 - 24"

The HP EliteDisplay E242 LED monitor is an affordable large monitor.

$267.04 (exc. GST)

HP ProDesk 600 - base desktop

A reliable, fully supported desktop PC suitable for use in the classroom, library and office.

$396.01 (exc. GST)

HP Chromebook 11 G5

The HP Chromebook 11 G5 is a fast, versatile tablet. It is not eT4L ready.

$420.00 (exc. GST)

Lenovo ThinkPad 11e Chromebook

The Lenovo ThinkPad 11e Chromebook is a fast, versatile tablet, ideal for detailed use of Google's application suite for education. Not eT4L ready.

$463.65 (exc. GST)

HP EliteDisplay E272q - 27"

The HP EliteDisplay E272q QHD monitor is the largest contract monitor available from this supplier.

$583.54 (exc. GST)

HP EliteDesk 800 – advanced desktop

An advanced model for use with graphic software and high end applications.

$623.42 (exc. GST)

	Est. Cost	Quant Needed	Total Cost	Actual Cost	Actual Total Cost	Date Purchased	Comment

	Est. Cost	Quant Needed	Total Cost	Actual Cost	Actual Total Cost	Date Purchased	Comment

	Est. Cost	Quant Needed	Total Cost	Actual Cost	Actual Total Cost	Date Purchased	Comment

	Est. Cost	Quant Needed	Total Cost	Actual Cost	Actual Total Cost	Date Purchased	Comment

Overall evaluation of project management:

Record of production

Each stage and important process in the production needs to be explained using detailed procedures, photos and/or screen shots. This provides evidence of your effort and skills and proof that the project is in fact all your own work.

Your record of the production should reference both your research and timeline plane.

All screen shots, pictures and diagrams should be annotated to explain your creative thinking as well as your decision-making and problem-solving processes.

Don't be afraid to identify problems and mistakes, but emphasise and clearly explain how these were solved or corrected. You may also identify processes or aspects of the project that show its functional and aesthetic qualities as well as the degree of difficulty related to the design, processes, techniques and production skills.

Record of Production

| Image/Photo of achievement	What was achieved	How was it achieved	Why it was achieved	Evaluation of achievement

Work Health and Safety

Discuss WHS issues relating to your project and illustrate how you have followed safe working practices.

- Identify WHS issues relating to your project such as hearing loss; tag and testing; electrical safety; RSI; on location risks
- Conduct a risk analysis for several WHS issues relating to your project and identify steps to eliminate or minimise hazards
- Illustrate and explain how you followed safe working procedures in the production of your project

This section is often poorly completed by Multimedia students. Never write that WHS issues were not important. Always include photos and/or diagrams of yourself in your environment as well as a written explanation of your procedures.
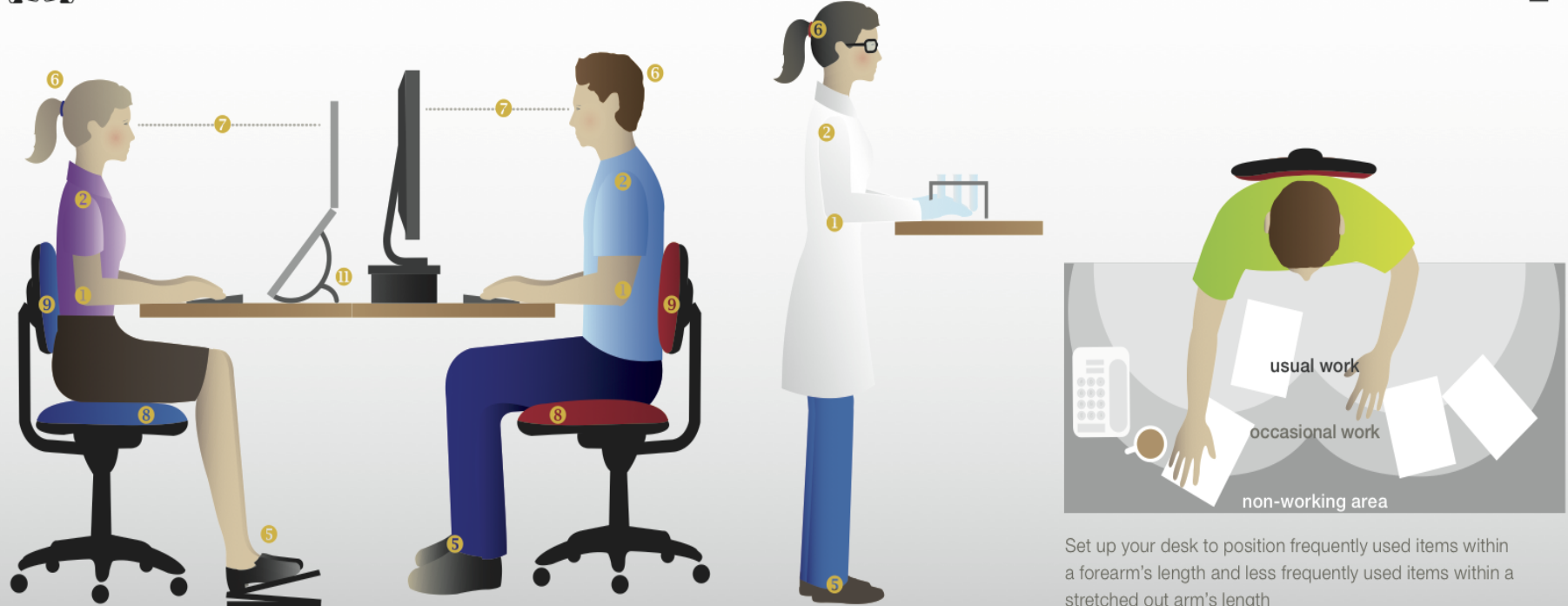
The next four pages contain notes to help you complete the WHS section of your folio.
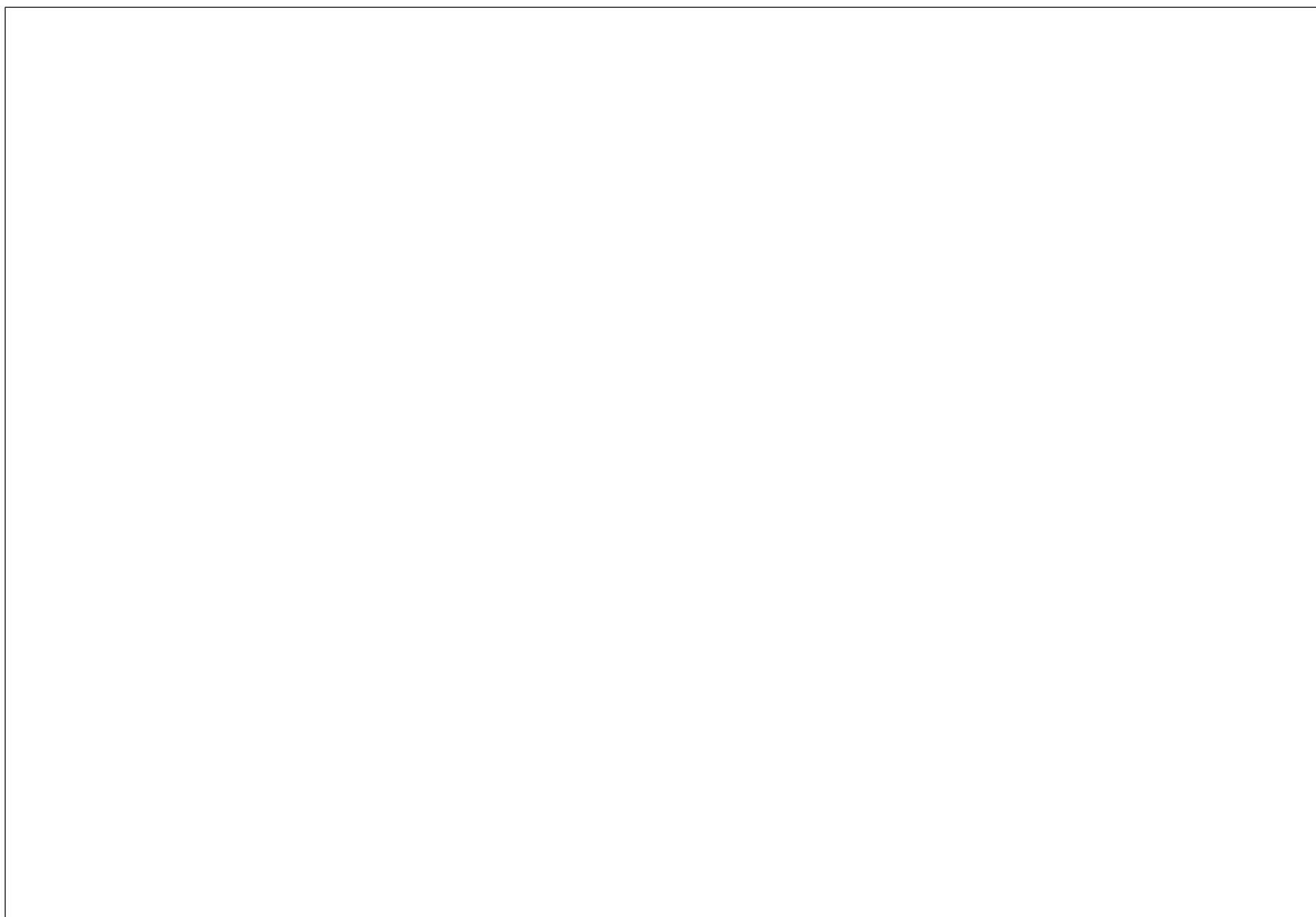
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Achieve International Excellence

Workstation Setup

usual work

occasional work

non-working area

Set up your desk to position frequently used items within a forearm's length and less frequently used items within a stretched out arm's length

❶ Elbows
Above the desk, at 90-110 degrees

❷ Shoulders
Relaxed as opposed to hunched

❸ Wrists
In line with forearms

❹ Hips, Knees, Ankles
At 90 degrees whilst seated

❺ Feet
Flat on the ground or footrest
For prolonged standing, consider a mat

❻ Head
Upright with ears aligned with shoulders

❼ Eyes
Looking at the top third of the screen.
Consider the use of a laptop raiser with your laptop

❽ Seat length
Should be long enough to provide support beneath thighs

❾ Backrest
Angled at 90-110 degrees with adequate lumbar support in line with lower back

❿ Keyboard and Mouse
G and H of keyboard aligned with your nose. Mouse gripped loosely

⓫ Laptop
Used with a riser, external keyboard and external mouse

Health Tips

↘ **20-20-20**
Every 20 minutes, focus on an object 20 metres away,
for 20 seconds

↘ **Take regular breaks**

↘ **Keep hydrated**
Drink plenty of water and limit your caffeine intake

↘ **Avoid eating lunch at your desk**
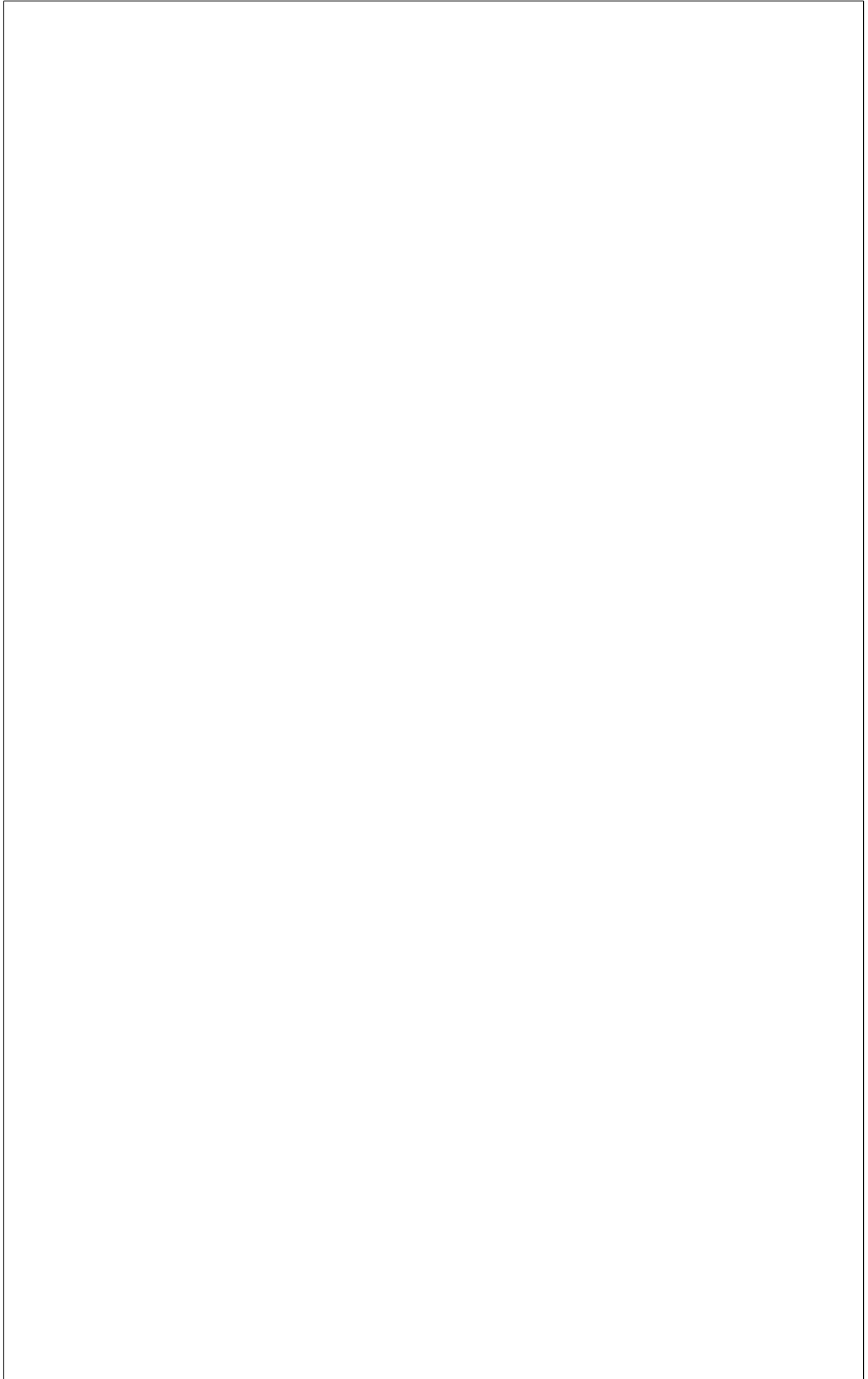
↘ **Exercise regularly**

↘ **Stretch**
Stretching classes can be organised for your work area by emailing **uwahealth-sseh@uwa.edu.au**

Further Assistance

Safety and Health provide ergonomic assessment and advice to UWA staff and post-graduate students with dedicated office space.

To book online: **safety.uwa.edu.au/forms/ergonomic_assessment**
or contact us on 6488 3938

Objects	Hazards	Possible Controls
Chair selection	• Chair is not the appropriate size • Poor back support • Front edge of seat insufficiently rounded and / or padded • User misjudges height of stool or slips or overbalances whilst getting on or off	• Have an ergonomic assessment undertaken • Try chairs of different styles and dimensions until user feels secure, has adequate support and feels comfortable • When purchasing new chairs specify seat pans to have a well padded rounded 'waterfall edge' • Alert all users of high chairs or stools of the need for particular care when getting on or off these
Chair / desk adjustment	• Chair / desk height is incorrectly adjusted • User does not understand how to use the adjusting mechanisms correctly • Adjusting mechanism is not working • Chair has no tilt adjustment for the seat pan • Gas strut leaks and chair won't maintain height setting • Chair/desk are not adjustable or adjustment capability is limited	• Chair height is correctly adjusted when the entire sole of the foot can rest on the floor, and the back of the knee is slightly clear of edge of seat. If this cannot be achieved through chair height adjustment consider the use of a footrest to allow feet to rest flat. • Adjust desk to allow operator to adopt appropriate posture (if desk is adjustable) • Have all staff trained how to adjust their chairs correctly obeying ergonomic principles • Arrange periodic inspection and repair or replace any chairs with faulty adjustment mechanisms • When purchasing new chairs specify seat pans to have an adjustable tilt angle • Arrange periodic check of all chairs / desks for required maintenance • Consider modifying desks or purchasing new desks that are fully adjustable. Also consider the introduction of sit/stand workstations where appropriate
Stability	• Chair can tip over when user leans over too far • Chairs / stools with castors when used on non-carpeted floors may roll away when sitting	• Check that chair is fitted with a 5 star base • Replace office chairs with less than a 5 star base • Ensure chairs or stools to be used on non-carpeted floors are fitted with glides not castors
Armrests	• Narrow clearance between armrest and bottom of desk • Armrests obstruct correct keyboarding position • Armrests prevent chair from sliding under desk	• If appropriate adjust or remove armrests to prevent jamming injuries • When purchasing new chairs, specify adjustable armrests to ensure proper height is achievable • If appropriate remove armrests to allow user to adopt good posture by sitting closer to desk
Desk selection	• Desk is too shallow to allow user sufficient room to conduct tasks • User is unable to access desk appropriately • Desk can not be adjusted appropriately	• Review the tasks to be conducted at the workstation • Select a desk that allows the user enough room to store and use the required equipment for the tasks • Where appropriate supply additional workspace for specific tasks (e.g. mail sorting) • Consider providing adjustable desks or sit/stand workstations where appropiate
Foot rests	• Feet are not able to rest comfortably on floor • Thighs are pressing too hard on edge of seat	• Adjust chair and desk to avoid using a foot rest • Use a footrest which allows feet to be placed flat on its surface with thighs just clear of seat edge

| Objects	Hazards	Possible Controls
Monitor placement	• Computer screen is too high or too low • User wears bifocal glasses • Screen is too close to or too far from eyes • Screen tilt is incorrectly adjusted • Dual screens	• Set monitor so workers can read top of screen without tilting head backwards to do so • Working documents should be located between the screen and keyboard or alongside the screen to ensure the same focal distances for both • Spectacles with full corrective or multifocal lenses should be used • Screen should be placed arms length away from the worker, with the top of the screen just above eye level • Locate the monitor directly in front of the worker to reduce twisting of the neck and torso • Place the screen with a tilt of 15 degrees up from vertical • Locating the two screens side by side to reduce back and neck twisting from one screen to another • Slightly angle the screens towards one another to further reduce twisting • Screen should be placed in front of you proportionally to the use (i.e. if one screen is used 90% of the time it should occupy 90% of the space in front of the operator)
Monitor type	• Monitor flickers at the screen edges	• Consider using LCD monitors as they are free from flicker at the screen edges
Keyboard and mouse height	• Keyboard / mouse is being used at the wrong height	• Arms should be parallel to floor when at rest • Use keyboard in a lowered position (i.e. fold away keyboard feet) • Ensure wrists are in neutral position (i.e. if appropriate use wrist rest)
Keyboard and mouse placement and shape	• User is twisting to use keyboard / mouse • Keyboard is being used too far away from body • Mouse is being used too far away from keyboard • Inappropriate keyboard size and / or shape for the user • Inappropriate mouse size and / or shape for the user's hand	• Keyboard should be used in front of screen or document holder (major viewing surface) • Keyboard used directly in front of user • Locate keyboard as near to the front edge of the desk to reduce reaching • Locate mouse as close as possible to keyboard to reduce reaching • Provide a style of keyboard / mouse which is comfortable for the user • Provide a mouse which fits the size and natural shape of the user's hand • Ensure appropriate surface for smooth operation of mouse
Documents used when keyboarding	• Excessive eye and neck movement from poor document position when keyboarding	• Use an A4 document holder placed level with and close to one side of the screen (for 'touch typists') • Use an A3 document holder above keyboard, and in front of screen (for non 'touch typists')
Personal electronic devices	• Personal electronic devices reduce awareness of surroundings (warning sounds, traffic) • Headphones used to block background noise • Music playing devices may damage hearing	• Consider developing policy about where and when it is appropriate to use personal electronic devices • Including awareness of the dangers of personal electronic devices in induction • Using stereo headphones (circumaural headphones) that cover the entire ear or in-ear headphones (canalphones) to block background noise instead of earbuds or earphones that are not capable of delivering the same dynamic range and consequently often used at a higher volume • Display appropriate signage about responsible use of personal electronic devices
Operator	• Tasks that may cause body fatigue and stressing • Lack of task variety, prolonged time spent in one position • Tasks that may cause eyes to become irritated, strained or blurred	• Conduct a workstation assessment before operator begins work (i.e. desk height, chair adjustment, keyboard / mouse / screen position) • Have appropriate signage / computer applications to remind workers to take breaks and guidance on appropriate stretching exercises • To reduce risks of body fatigue and or stressing from repetitive tasks, implement task variety to reduce the risk • Provide appropriate training to workers to encourage appropriate posture, regular breaks, stretching exercises and eye health management (blinking regularly to lubricate the eye and focusing on objects away from a screen)
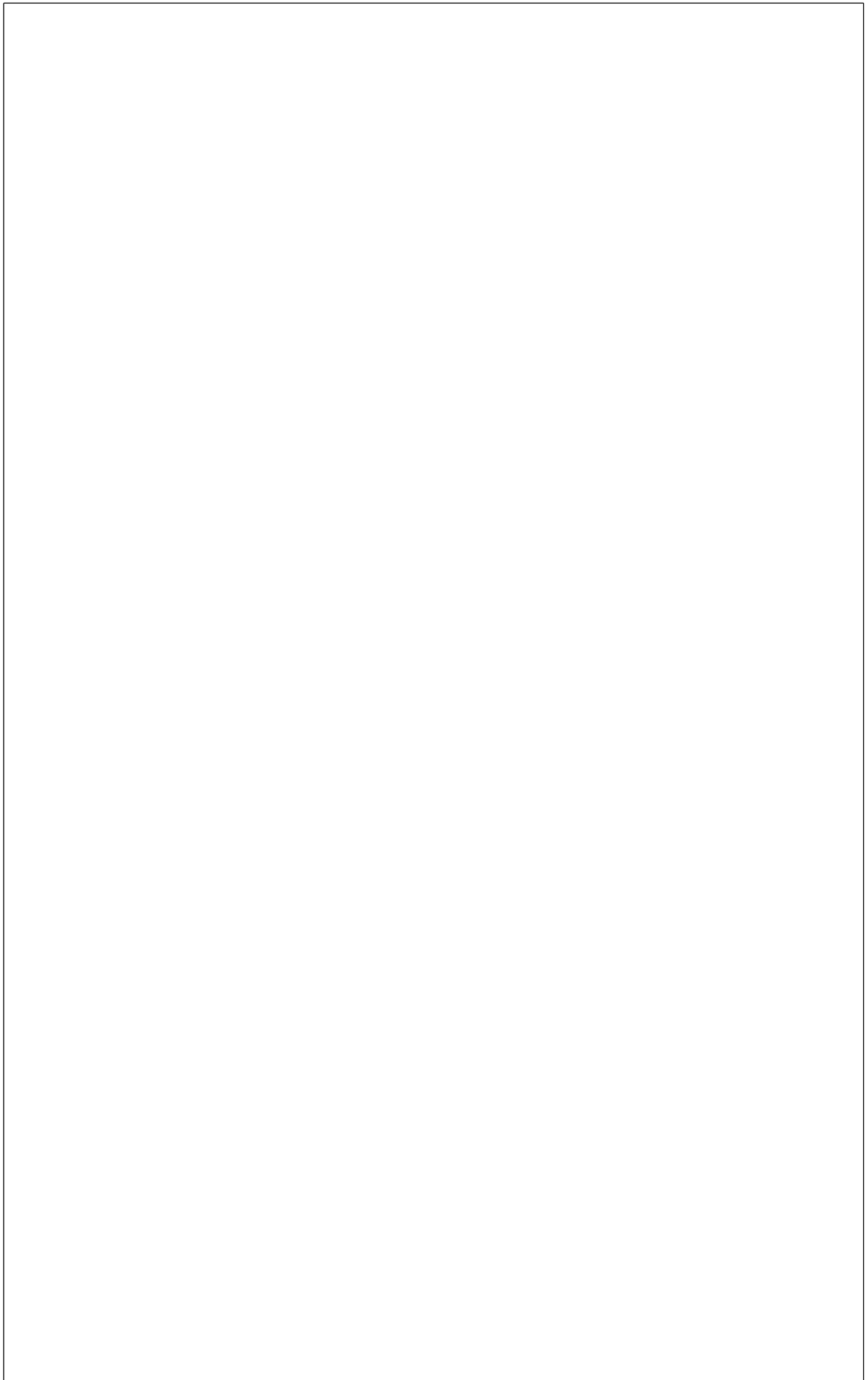
Further information

Regulations

- Work Health and Safety Regulations 2011 (Cth) (WHS Regulations) – Part 3.1 General Working Environment
- Work Health and Safety Regulations 2011 (Cth) (WHS Regulations) – Part 4.2 Hazardous Manual Tasks

Code of Practice

- Work Health and Safety Code of Practice 2011 (Cth) – Hazardous Manual Tasks
- Work Health and Safety Code of Practice 2011 (Cth) – Managing the Work Environment and Facilities
- Work Health and Safety Code of Practice 2011 (Cth) –Preventing and managing fatigue in the workplace

Comcare Guidance

- Officewise: A guide to health and safety in the office
- Call centres: A guide to safe work
- Health and safety topic – Eye health
- Health and safety topics – Manual tasks
- Health and safety topic – Body stressing

Work Health and Safety

Risk	Description	How Risk Was Prevented
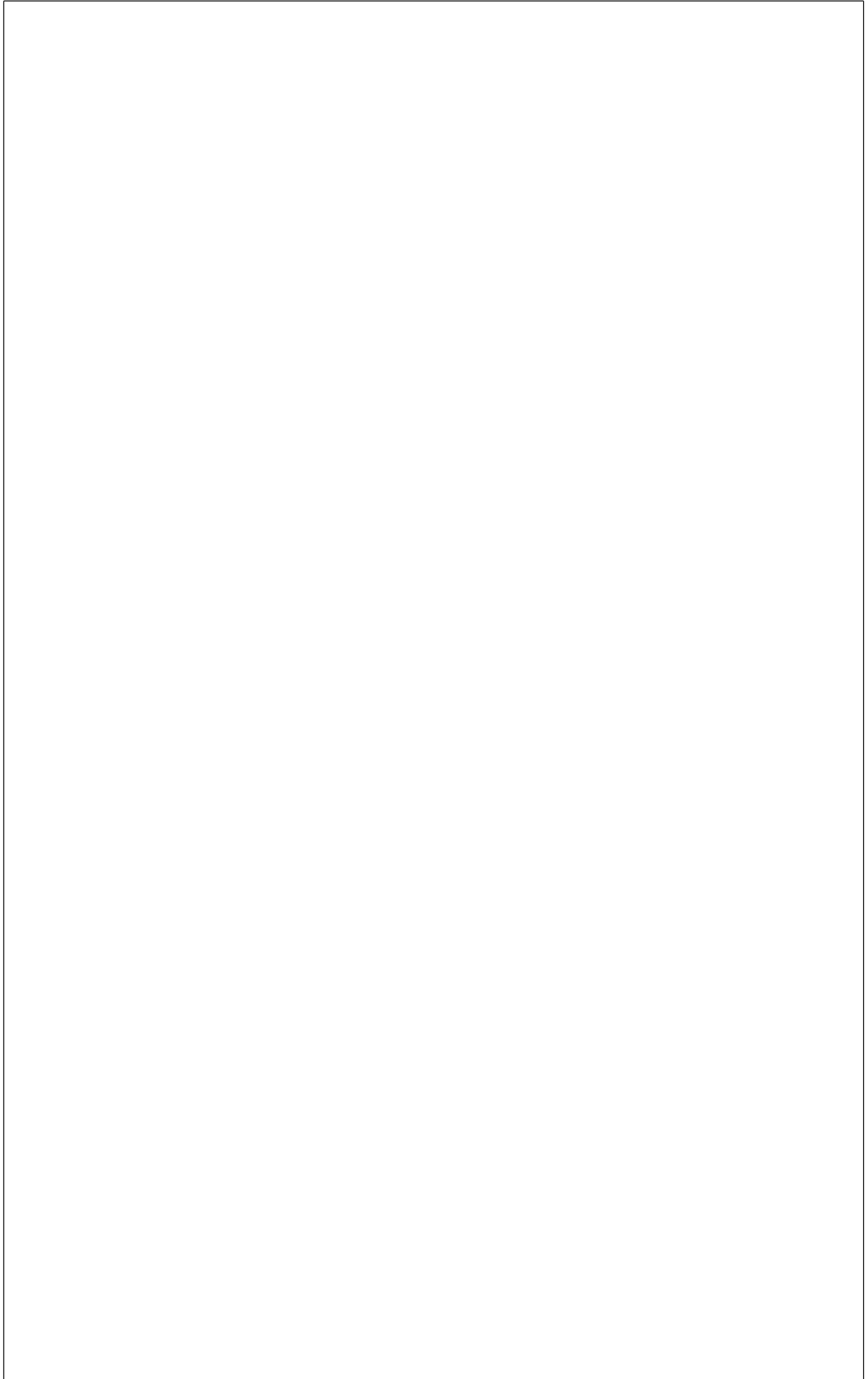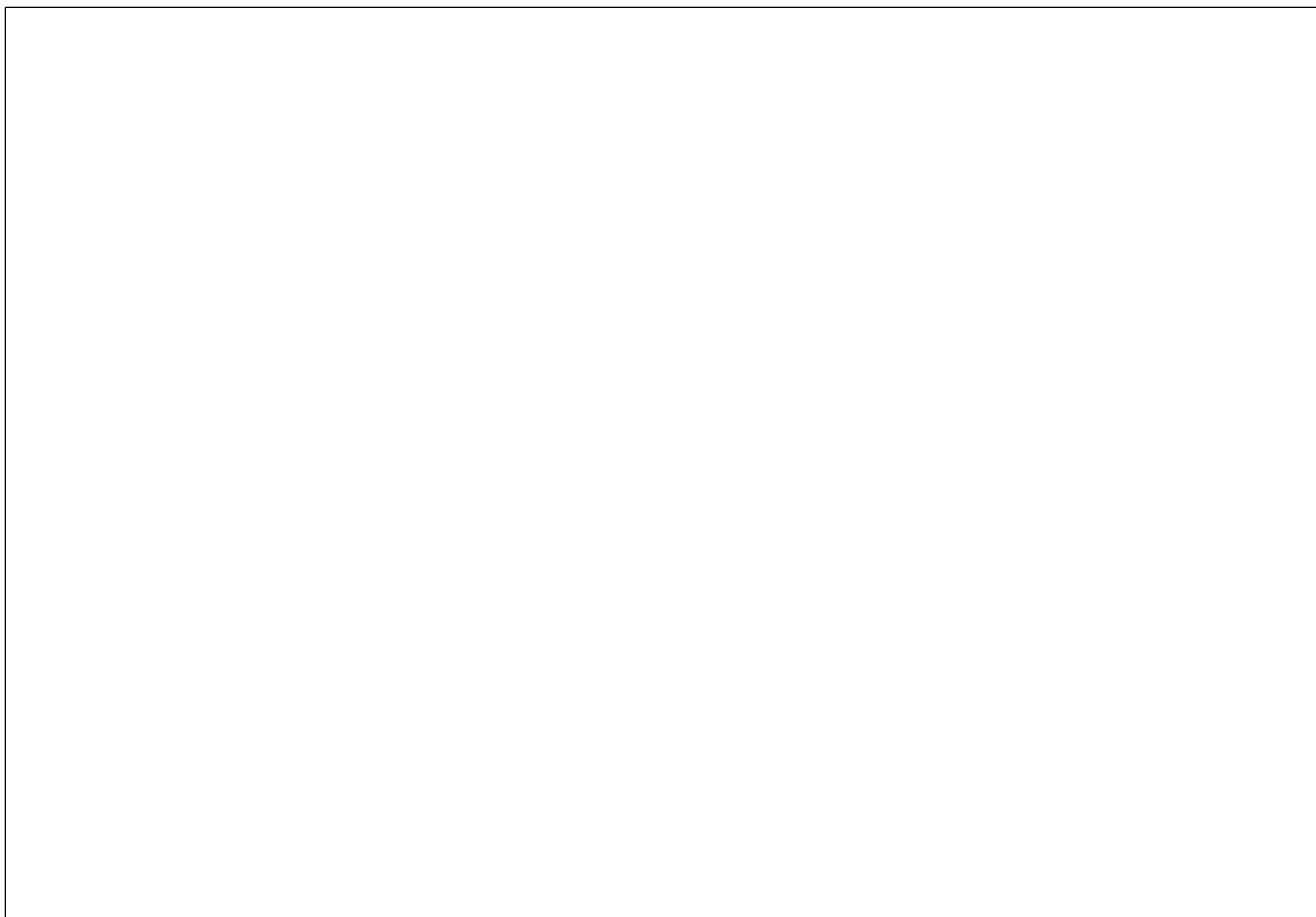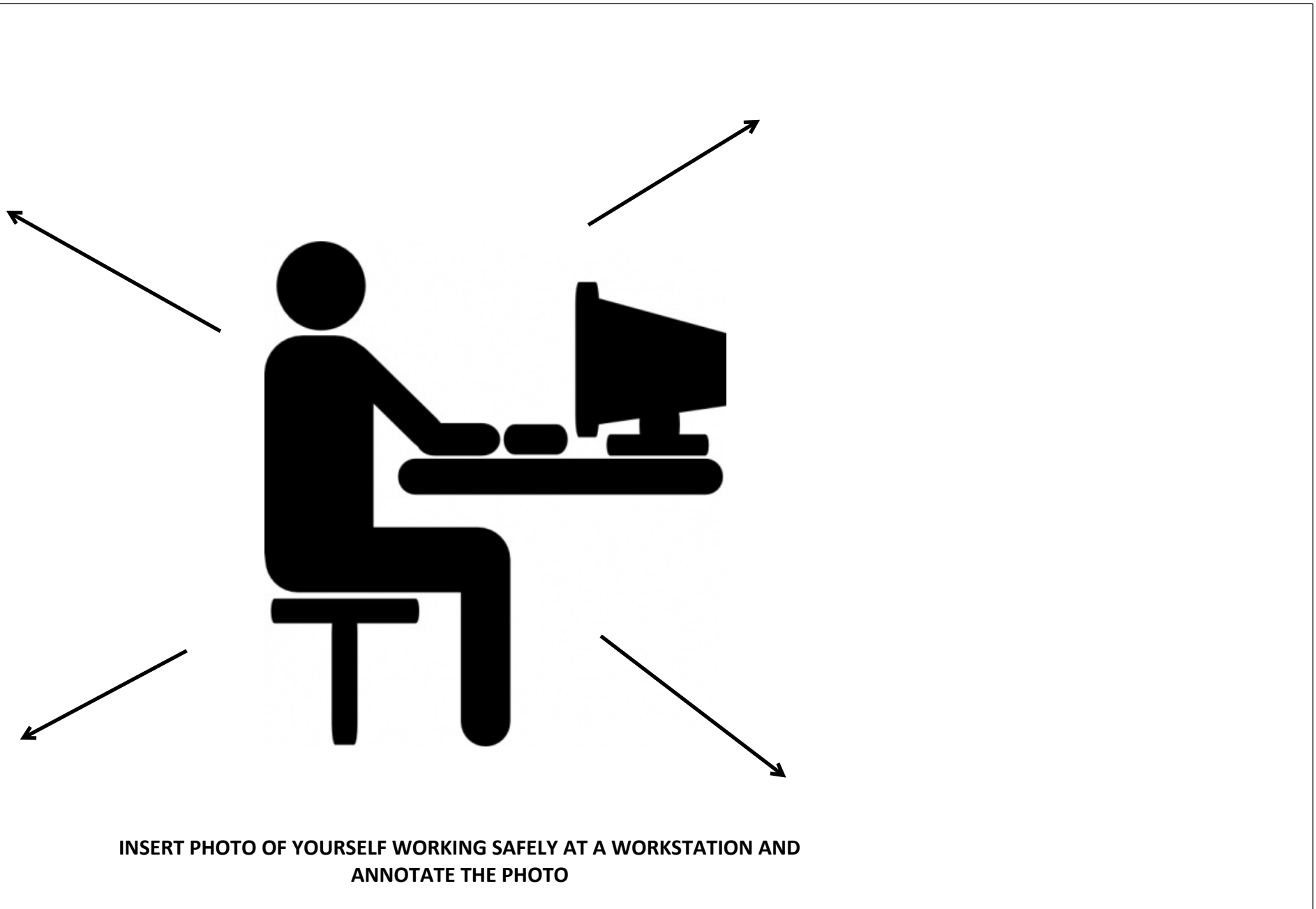
INSERT PHOTO OF YOURSELF WORKING SAFELY AT A WORKSTATION AND ANNOTATE THE PHOTO
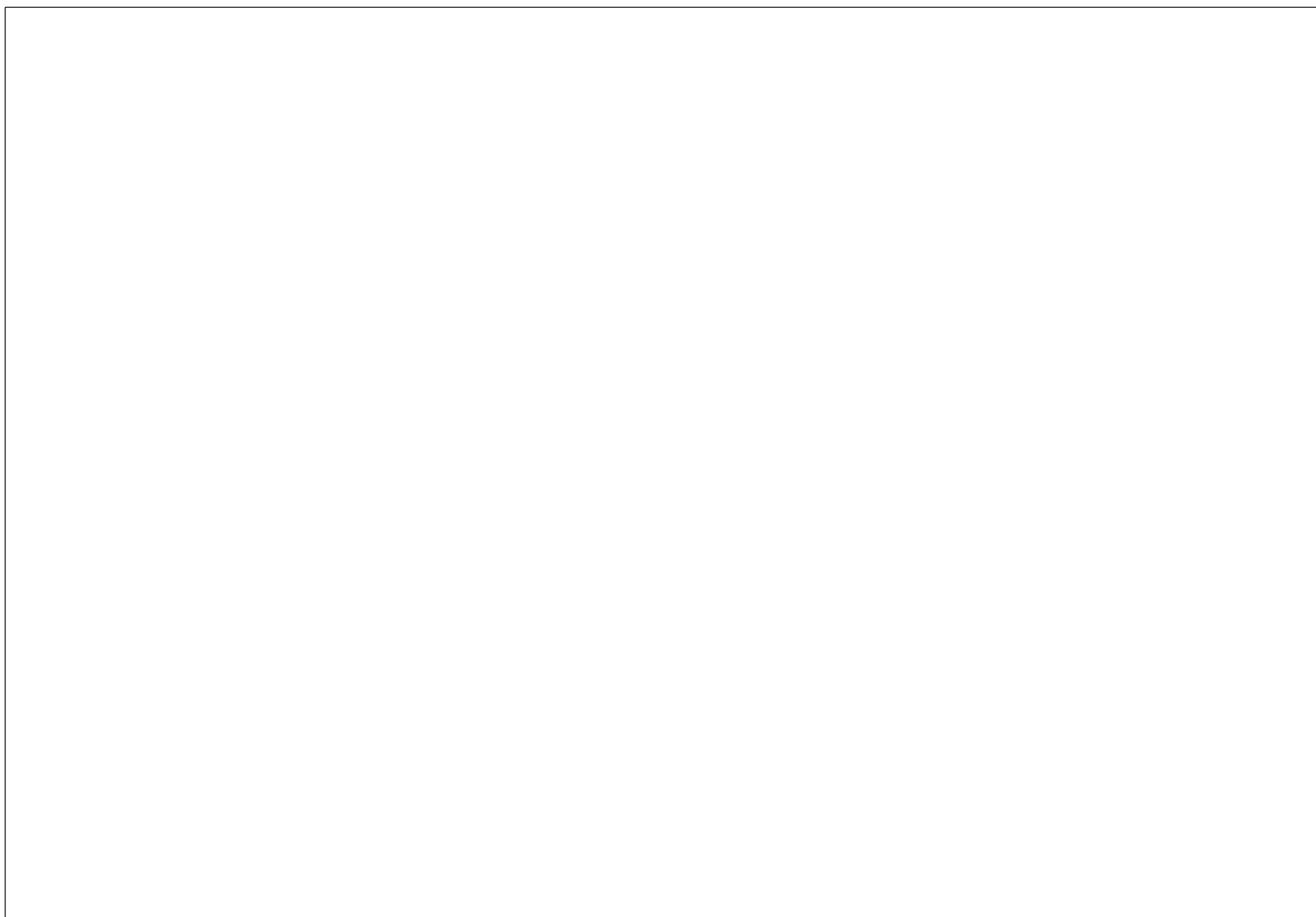
Risk Assessment
Name of Procedure

Description of Procedure

_____

_____

_____

_____

_____

Image of Process

Procedural Step(s)	Possible Hazard(s)	R1	Safety Control(s)	R2

Presentation skills and techniques including ICT

- Summarise the range of computer applications and presentation techniques you have used throughout your project
- Show any calculations you have done

-

Presentation Skills and Techniques including ICT

Screenshot of Skill	What was achieved	How was it achieved	Why it was achieved	Evaluation of achievement

Evaluation of the Major Project

A final evaluation with reference to your Statement of Intent should explain how your project has fulfilled the intended outcomes - you may also reflect on your personal achievement and skill development and perhaps obtain professional evaluation including testimonials and/or evidence of use outside of school.

Evaluation of the Major Project

Screenshot/Photograph	Component of Major Project	Description	Evaluation	Evaluation in Regards to the Statement of Intent

Overall evaluation of major project and evaluation in regards to the statement of intent:

Quality of the product

Students should always aim to achieve a quality product which could be sold commercially.

Quality should relate to all aspects of the design, planning, management, production and evaluation process.

In this section you may wish to direct the examiner to areas of your project which have been recognised by other specialists as being of high quality. Letters from experts could be included in this section.

Quality of the Product

Screenshot/Photograph	Component of Product	Description	Explanation of its Quality

Overall evaluation of the quality of the product:

Evidence of a range of skills and degree of difficulty

Briefly explain here the range of technical skills which you used in your project.

Include here the techniques and skills you used to overcome problems which were encountered in the production of you project.

Explain any hidden complexity of which the examiner may otherwise not be aware – this will help direct the examiner's attention to skills which may not be obvious by simply inspecting your project.

Range of Skills and Degree of Difficulty

Photo/Screenshot	Name of Skill	Description of Skill	Explanation of Difficulty

Overall evaluation of the range of skills and degree of difficulty within the product:

Links between planning and production

Here you must demonstrate evidence that your design, planning and management has been used for the production of your project. This means that your statement of intent, research, ongoing evaluation, time and action plan, finance plan and working drawings must all be accurately reflected in your completed project.

In this section direct the marker's attention by stating how each of the areas mentioned
above are reflected in the finished product.

Links Between Planning and Production

Planning Element	Description	How Planning Element is Reflected in the Major Project	Evaluation of the Planning in the Creation of the Major Project
Statement of Intent			
Research			
Finance Plan			
Ongoing Evaluation			
Time and Action Plans			
Finance Plans			
Working Drawings			

Copy of Sketch	Photo/Screenshot of Prototype	Photo/Screenshot of Final Product	Evaluation of your final product in relationship to planning

Use of appropriate materials, components, processes and technologies
In this section you should list the materials, components, processes and technologies that you used in your project and demonstrate how you appropriately used them

Use of Appropriate Materials, Components, Processes and Technologies

Image Demonstrating Proper Use	Title	Description	Demonstration of Proper Use	Why Was this Chosen

Image Demonstrating Proper Use	Title	Description	Demonstration of Proper Use	Why Was this Chosen

Image Demonstrating Proper Use	Title	Description	Demonstration of Proper Use	Why Was this Chosen

Image Demonstrating Proper Use	Title	Description	Demonstration of Proper Use	Why Was this Chosen

Evidence of solutions to problems in production
This is the only real means of communicating to the markers what practical problem solving took place during design and construction.

Direct the marker's attention to the problems which you solved during the design and production of the project. This can be done with reference to the ongoing evaluation as well as to the finished product.

Students are required to develop solutions to problems discovered.

Note: Multimedia projects that use software incompatible with school software must provide suitable hardware for markers to view the final presentations.

Evidence of Solutions to Problems in Production

Photo/Screenshot of Problem	Description of Problem	Description of Solution	Evaluation of Solution